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**PROFILES OF
MANUFACTURING
ESTABLISHMENTS**

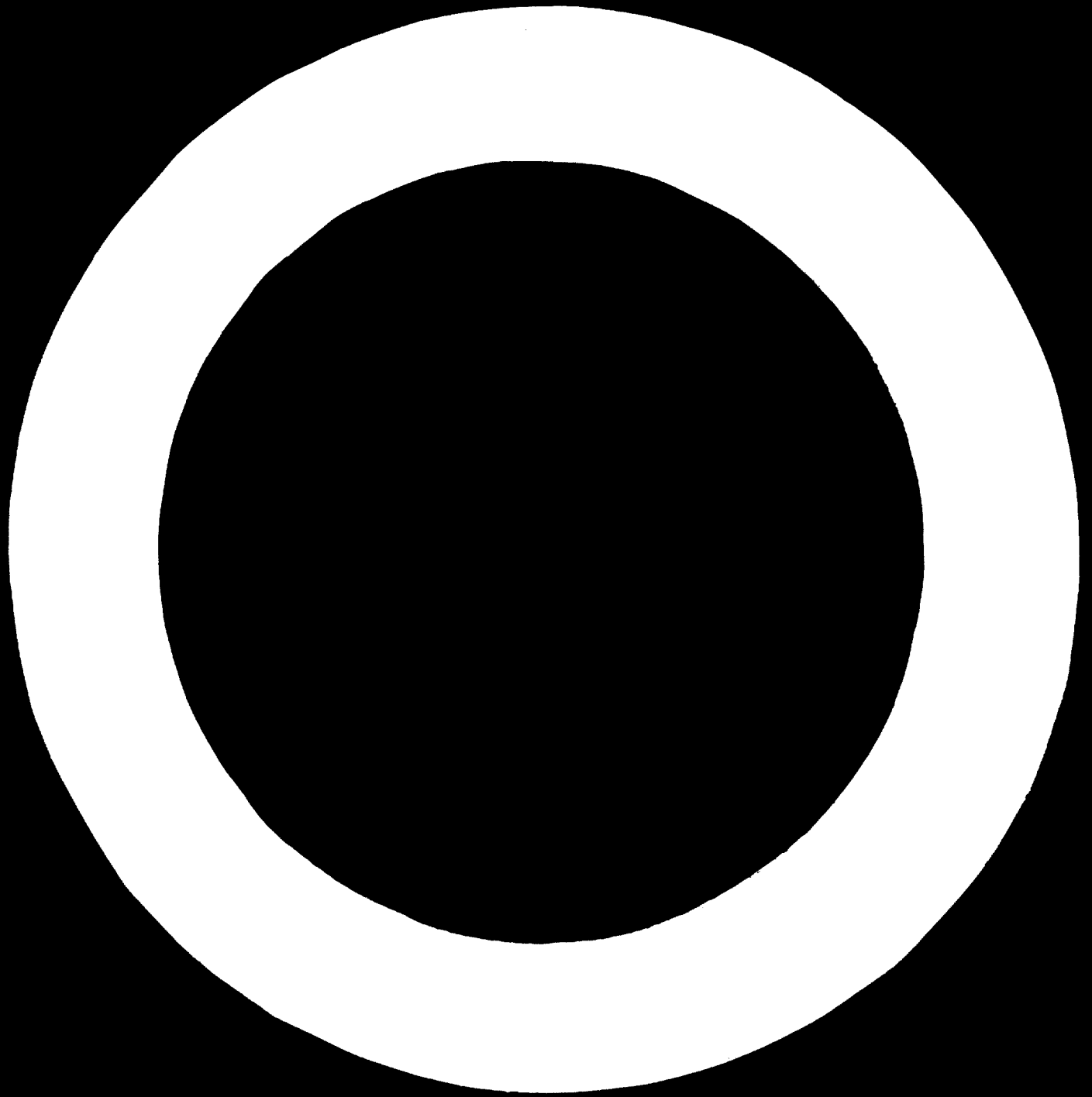
VOLUME II



U.S. GOVERNMENT PRINTING OFFICE

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INTRODUCTION

This is the third volume of the *Profiles of Manufacturing Establishments* to be published by UNIDO. It contains data from several countries other than those covered in Volumes I and II. From the developing country group, East Africa, El Salvador, Iran and Mexico have offered 83 enterprise profiles for this volume. Countries in Western Europe, particularly the regions referred to as "Middle" and "South" Europe, contributed an additional 78 profiles.

The format used for the profiles from East Africa, El Salvador, Mexico and South Europe consists of two pages and is quite similar, though not identical, to that of profiles from France, India, Israel and Japan contained in the earlier volumes. An expanded format, of four pages, is employed for the remaining profiles in this volume.

The new two-page format

The new two-page format in this volume involves some modifications of the earlier one, notably these:

- (a) All data in value terms are shown in US dollar equivalents, instead of in domestic currency units.
- (b) The table on *educational background* of workers, previously cross-classified in three loosely defined skill categories, has been replaced by information regarding *monthly earning rates* of workers, classified by several job categories such as non-operative supervisors (managers), engineers, technicians, accountants, sales officers, clerks and typists, operative supervisors, foremen, machine operators, craftsmen, truck drivers etc. (This is shown on *page two* and not on *page one* as in the previous format.)
- (c) Section II, *Inventories*, now includes information on "desired working capital" where available.
- (d) A new section, VIII. *Characteristics of the industry in the country*, has been added to indicate summary data from the latest industrial census in the country, referring to the number

of establishments, the number of persons employed, average wages and salaries *per annum*, the annual gross value of production per person employed, and the ratio of physical capital assets to annual gross value of production, by size groups of establishments.

- (e) VII. *Expansion: History and plan* in the earlier format has been replaced partly by *History of investment*, which appears as a footnote to I. *Fixed capital assets*, and partly by *Future plan* which is shown in IX. *Supplement* when applicable.
- (f) In the new format, information on working hours of operative workers is shown.
- (g) *Selected coefficients*, which were shown on the second page of the earlier format, are now omitted, since these can be easily calculated from the data given in each profile and do not add to primary information.

The four-page format

This enlarged form is used in Volume III for all the cases from Middle Europe and for Iran. The new four-page format is basically comparable to the new two-page form described above. The main changes are as follows:

- (a) Larger space is allowed for descriptive data concerning products, markets, exports, production capacity and other supplementary information; and
- (b) Section XI. *Desired areas for co-operation with developing countries* on page 4, is to indicate the scope of technical co-operation that the particular enterprise would be prepared to offer to developing countries.

Some changes in layout

Apart from the additions and changes referred to above, some changes have occurred in the layout. The correspondence between the major section of the two-page form and the four-page form is as follows:

<i>Two-page form</i>	<i>Four-page form</i>
<p>I. FIXED CAPITAL ASSETS with: External conditions Detail of process equipment</p> <p>History of investment (footnote)</p> <p>II. INVENTORIES AND WORKING CAPITAL (with desired working capital)</p>	<p>I. FIXED CAPITAL ASSETS with: External conditions</p> <p>Part of VIII. TECHNOLOGICAL CHARACTERISTICS</p> <p>IX. HISTORY AND PLAN</p> <p>III. INVENTORIES (without information on desired working capital)</p>

III. MANNING TABLE

with:

Working time per operative worker

Capacity of operative shops

IV. ANNUAL PRODUCTION

Capacity utilization (footnote)

V. ANNUAL CONSUMPTION

VI. VALUE ADDED

VII. MONTHLY EARNING RATES

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

IV. MANNING TABLE

with:

Working time per operative worker

Part of VIII. TECHNOLOGICAL CHARACTERISTICS

V. ANNUAL PRODUCTION

with:

Description of major products

Market aspects

Exports

Part of VIII. TECHNOLOGICAL CHARACTERISTICS

VII. ANNUAL CONSUMPTION

VI. VALUE ADDED

II. MONTHLY GROSS WAGES AND SALARIES

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

Despite changes in the form of presentation, the definition of the basic economic concepts remains unchanged throughout the three volumes.¹

Latest development with the Profiles programme

Since the publication of Volume I of the *Profiles* in an early part of 1968, this series has found extensive use as a multi-purpose desk reference among technical staff engaging in industry survey and planning in the developing countries. Most typical uses appear to be: (a) in sizing up or checking on information on particular investment opportunities envisaged for project development and promotion; (b) as an aid for evaluating consultant studies and suppliers' offers for industrial investment projects; and (c) as a comparative reference for analysing the efficiency of existing industrial establishments.

However, it should be noted that the goal of such reference data is not to create "instant experts", but rather to provide a certain additional element to the broad battery of skills and information needed by analysts working on industrial policies, programmes and promotion.

There is also an indication that this publication has stimulated an attempt in a number of developing countries to look more closely into the performances and capacities of existing industries for planning

¹ See "Technical notes" in *Profiles of Manufacturing Establishments*, Vol. I (ID/SER.E.4; Sales No. E.67.II.B.17), pp. 5-14. The French, Spanish and Russian translations of the "Technical notes" have been published separately in a supplement to Volume I.

purposes. UNIDO has already received a number of requests from developing countries for technical advice and training in gathering data on the establishment level for their own purposes connected with industrial survey, project planning, diagnosis of national policies, regional integration plans, management clinics etc.

In carrying out these technical assistance projects, efforts are being made to "deepen" the scope of the profiles to meet the specific objectives of data gathering envisaged in each case. At the same time, attention is being paid to the deepening of techniques of inter-firm comparison to suit the given objectives. The field-bound activities emerging along the lines of the *Profiles* are thus increasingly characterized by a multi-disciplinary approach to the diagnosis of industrial activities on the establishment level: i.e. provision of a joint working basis for technologists, engineers, accountants, statisticians and planning economists.

These field-bound *Profiles*' operations, although each serves primarily its own specific local purposes, will be able to generate an important by-product. That is, with proper devices for neutralizing them, the results of local case studies may be pooled in summary forms for general dissemination, wherever feasible. It is likely, therefore, that the future issues of this series will involve various types of profiles in various forms, depending on sources. However, every effort will be made to ensure continuity of this series in terms of its basic objectives: provision of reference micro-data for industrial programming.

INTRODUCTION

Cette publication est le troisième volume des *Profils d'établissements industriels* dont l'ONUDI assure la publication. Les données qu'elle contient émanent de plusieurs pays qui ne sont pas couverts dans les volumes I et II. Parmi le groupe des pays en voie de développement, l'Afrique de l'Est, El Salvador, l'Iran et le Mexique ont fourni pour ce volume 83 profils d'entreprises. Les pays d'Europe occidentale, en particulier ceux qui appartiennent aux régions dites d'«Europe centrale» et d'«Europe méridionale», ont fourni 78 profils supplémentaires.

Les profils de l'Afrique de l'Est, d'El Salvador, du Mexique, et d'Europe méridionale ont été présentés sur deux pages, présentation qui ne diffère que légèrement des profils émanant de la France, de l'Inde, d'Israël et du Japon qui figurent dans les volumes précédents. Les autres profils contenus dans ce volume sont présentés sur quatre pages.

La nouvelle présentation en deux pages

La nouvelle présentation en deux pages adoptée dans le présent volume diffère sur certains points de la précédente, et en particulier sur les points suivants:

- a) Toutes les données exprimées en valeur sont indiquées en leurs équivalents en dollars des Etats-Unis, et non en monnaie nationale;
- b) Le tableau consacré à la *formation scolaire* des travailleurs, précédemment subdivisé en trois qualifications professionnelles mal définies, a été remplacé par des renseignements sur le *taux de rémunération mensuelle* des travailleurs, d'après plusieurs catégories de postes, tels que: cadres non exécutants (gestion), ingénieurs, agents techniques, comptables, agents du service des ventes, employés et dactylos, cadres d'exécution, contremaîtres, conducteurs de machine, ouvriers, chauffeurs de camions, etc. (Contrairement à la présentation précédente, ces renseignements figurent à la page 2 et non à la page 1.)
- c) La section II, «*Stocks*», contient désormais tous les renseignements disponibles sur le «*Fonds de roulement souhaité*».
- d) Une nouvelle section «*VIII. Caractéristiques de l'industrie dans le pays*» a été ajoutée pour indiquer, sous une forme ramassée, les données

Disposition sur deux pages

- I. IMMOBILISATIONS
avec:
Conditions extérieures
Détails sur l'équipement de production

Récapitulation des investissements (note)
- II. STOCKS ET FONDS DE ROULEMENT
(avec fonds de roulement souhaité)

- tirées du dernier recensement industriel du pays considéré, en ce qui concerne le nombre d'établissements, le nombre de personnes employées, les salaires et traitements moyens *annuels*, la valeur annuelle brute de la production par personne employée et le rapport des immobilisations à la valeur annuelle brute de la production; ces renseignements sont fournis par groupes d'établissements classés selon la taille.
- e) La section «*VII. Expansion passée et future*» a été remplacée en partie par «*Récapitulation des investissements*», renseignement figurant en note à la section «*I. Immobilisations*», et en partie par la rubrique «*Plan d'avenir*» figurant, le cas échéant, à la section «*IX. Renseignements supplémentaires*».
 - f) La nouvelle présentation fournit des renseignements sur les heures de travail du personnel d'exécution.
 - g) La rubrique «*Coefficients choisis*», qui figurait à la seconde page de la présentation précédente, a été supprimée. On peut en effet les calculer aisément à partir des données de chaque profil et ils n'ajoutent rien aux renseignements de base.

La présentation sur quatre pages

Cette présentation plus poussée est utilisée dans le volume III pour tous les profils émanant de l'Europe centrale et de l'Iran. Elle est pour l'essentiel comparable à l'autre sous réserve des deux modifications suivantes:

- a) Un plus grand espace est réservé à la description des produits, des marchés, des exportations, de la capacité de production et de divers autres renseignements complémentaires;
- b) A la page 4, la section «*XI. Domaines de coopération souhaités avec les pays en voie de développement*» est destinée à indiquer l'étendue de la coopération technique que l'entreprise considérée serait disposée à accorder à des pays en voie de développement.

Modifications apportées à la disposition

Ces additions et modifications mises à part, quelques changements ont été apportés dans la disposition. La correspondance entre les principales sections des deux présentations est la suivante:

Disposition sur quatre pages

- I. IMMOBILISATIONS
avec:
Conditions extérieures
- Partie de VIII. CARACTERISTIQUES
TECHNIQUES
- IX. EXPANSION PASSEE ET FUTURE
- III. STOCKS
(sans indication de fonds de roulement souhaité)

III. PERSONNEL

avec:

Heures de travail par travailleur employé
directement à la production
Capacité de production des ateliers

IV. PRODUCTION ANNUELLE

Utilisation de la capacité de production (note)

V. CONSOMMATION ANNUELLE

VI. VALEUR AJOUTEE

VII. TAUX DE REMUNERATION MENSUELLE

VIII. CARACTERISTIQUES DE L'INDUSTRIE DANS LE PAYS

Les modifications apportées à la disposition générale ne changent rien aux définitions des principales notions économiques qui restent les mêmes dans les trois volumes¹.

Nouvelle orientation du programme des Profils

Depuis la publication du volume I, au début de 1968, cette série a largement servi d'ouvrage de référence au personnel technique des pays en voie de développement s'occupant des multiples aspects de l'industrie et de la planification. Les utilisations les plus caractéristiques semblent être les suivantes: a) l'appréciation ou le contrôle de renseignements sur telle ou telle possibilité d'investissement envisagée pour le développement ou la promotion de projets; b) l'évaluation des études effectuées par des consultants et des offres émanant de fournisseurs pour des projets d'investissement industriel; c) l'analyse de l'efficacité de divers établissements industriels en utilisant les profils comme moyen de comparaison.

Il convient toutefois de souligner que le but de cet ouvrage de référence n'est nullement de «fabriquer» instantanément des «experts», mais d'apporter un élément d'appoint au large éventail de qualifications et de renseignements indispensables à tout analyste s'occupant de questions de politique, de programmes et de promotion industriels.

Cette série de publications a été à l'origine, dans plusieurs pays en voie de développement, d'analyses plus poussées des résultats et de la capacité de production des industries existantes aux fins de planification. L'ONUDI a déjà reçu de pays en voie de développement un certain nombre de demandes de

¹ Voir «Note technique» du volume I des *Profils d'établissements industriels* (ID/SER.E.4, numéro de vente: E.67.II.B.17), pages 5 à 14. Les traductions française, espagnole et russe de cette note technique ont été publiées séparément, sous forme de supplément au volume I.

IV. PERSONNEI

avec:

Heures de travail par travailleur employé di-
rectement à la production

Partie de VIII. CARACTERISTIQUES TECHNIQUES

V. PRODUCTION ANNUELLE

avec:

Description des principaux produits
Caractéristiques du marché
Exportations

Partie de VIII. CARACTERISTIQUES TECHNIQUES

VII. CONSOMMATION ANNUELLE

VI. VALEUR AJOUTEE

II. SALAIRES ET TRAITEMENTS MENSUELS BRUTS

X. CARACTERISTIQUES DE L'INDUSTRIE DANS LE PAYS

conseils techniques et de directives sur la manière de rassembler les données sur les établissements industriels, afin de leur permettre de résoudre les problèmes que posent les enquêtes industrielles, la planification des projets, les diagnostics sur la politique nationale, les plans d'intégration régionale, les stages pour le personnel de direction, etc.

Pour mener à bien ces projets d'assistance technique, on s'efforce d'«approfondir» la matière des profils, de façon à atteindre les objectifs assignés dans chaque cas au rassemblement des données. Simultanément, on s'attache à approfondir les techniques de comparaison interentreprises pour les adapter aux divers objectifs. De ce fait, l'examen attentif des profils suffit à montrer que les activités sur le plan local qui s'inspirent des profils se caractérisent de plus en plus par une manière pluridisciplinaire d'établir le diagnostic de l'activité au niveau de l'établissement, c'est-à-dire qu'elles fournissent un cadre de référence commun aux techniciens, aux ingénieurs, aux comptables, aux statisticiens et aux planificateurs de l'économie.

Ces travaux qui se font sur place pour établir les *Profils*, tout en étant essentiellement conçus en fonction de leurs objectifs spécifiques, peuvent donner naissance à des sous-produits très intéressants. Pour peu qu'on sache ôter ce qu'il y a en eux de spécifique, on peut extraire des cas d'espèce des éléments communs, les grouper et assurer à cette synthèse une diffusion aussi large que possible. C'est pourquoi il est envisagé de faire figurer dans les prochaines éditions de la série divers types de profils, dont la disposition pourra varier selon l'origine de la documentation. Quoi qu'il en soit, tout sera fait pour assurer la permanence des objectifs essentiels de cette série: fournir des microdonnées de référence aux fins de programmation industrielle.

ВВЕДЕНИЕ

Настоящий текст является третьим томом издания „Профили предприятий обрабатывающей промышленности“, которое публикует ЮНИДО. В нем содержатся сведения, которые были получены от некоторых стран, ранее не упоминавшихся в томах I и II. От группы развивающихся стран Восточная Африка, Сальвадор, Иран и Мексика предоставили для этого тома материалы о 83-х профилях предприятий. Страны Западной Европы, в частности районов, имеюемых „Центральная“ и „Южная“ Европа, предоставили материалы еще о 78 профилях.

Материал о профилях предприятий Восточной Африки, Сальвадора, Мексики и Южной Европы изложен на двух страницах. Этот формат сходен, но не точно совпадает с форматом профилей предприятий Франции, Индии, Израиля и Японии, содержащихся в предыдущих томах. Для остальных профилей, содержащихся в этом томе, используется расширенный формат, состоящий из четырех страниц.

Новый двухстраничный формат

В связи с использованием в этом томе нового двухстраничного формата пришлось внести ряд изменений по сравнению с форматом предыдущего тома, а именно:

- а) Все данные в стоимостном выражении приводятся в долларах США, а не в местной валюте.
- б) Таблица об образовании работников предприятия, ранее распределявшаяся по трем, не очень четко разграниченным категориям специальностей, заменена сведениями о размерах месячного заработка работников, распределенных по нескольким категориям выполняемых работ, таких, как руководители административных служб (управляющие), инженеры, техники, бухгалтера, агенты по сбыту, секретари и машинистки, руководители эксплуатационных служб, мастера, механики, рабочие, шоферы и т.д. (эти данные показаны на второй странице, а не на первой странице, как в предыдущем формате).
- в) Раздел II: „Наличные материально-производственные запасы“, сейчас включает информацию о „желаемом оборотном капитале“, где эти сведения можно было получить.
- г) Добавлен новый раздел VIII: „Характеристика национальной промышленности“, в котором приводятся сводные данные на основании последней промышленной переписи в стране: количество

предприятий, количество работников, средняя годовая зарплата рабочих и служащих, годовая валовая стоимость продукции на каждого работника и отношение физических капитальных активов к головной валовой стоимости продукции — по размерам предприятий.

- д) Раздел VII: „Ход развития: история и план“ в предыдущем формате частично заменен разделом „История инвестирования“, который фигурирует в виде примечания к разделу I: „Основные капитальные средства“, а частично заменен разделом „Планы на будущее“, который приводится в разделе IX: „Дополнение“, где это оказалось возможным.
- е) В новом формате приводится информация о рабочем времени работников эксплуатационных служб.
- ж) „Репрезентативные коэффициенты“, которые приводились на второй странице предыдущего формата, больше не публикуются, поскольку их можно легко вычислить на основе данных, указанных в каждом профиле, и они не прибавляют ничего нового к основным сведениям.

Четырехстраничный формат

Эта расширенная форма используется в томе III для описания всех профилей в странах Центральной Европы и в Иране. Новый четырехстраничный формат в основном сравним с вышеописанным новым двухстраничным форматом. Основные изменения заключаются в следующем:

- а) Больше места отводится для описательной части данных о продуктах, рынках, экспорте, производственной мощности и другой дополнительной информации; и
- б) раздел XI: „Желаемые области сотрудничества с развивающимися странами“ на стр. 4 преследует цель дать указания о характере технического сотрудничества, которое данное предприятие было бы готово предложить развивающимся странам.

Некоторые изменения в расположении материала

Помимо вышеупомянутых добавлений и изменений, были внесены некоторые изменения в расположение материала. Соответствие между основными разделами двухстраничного формата и четырехстраничного формата видно из приводимого ниже сопоставления:

- I. **ОСНОВНЫЕ КАПИТАЛЬНЫЕ СРЕДСТВА**
включая:
Внешние условия
Подробные данные о технологическом оборудовании
История инвестирования (примечание)
- II. **НАЛИЧНЫЕ МАТЕРИАЛЬНО-ПРОИЗВОДСТВЕННЫЕ ЗАПАСЫ И ОБОРОТНЫЙ КАПИТАЛ**
включая: желаемый оборотный капитал
- III. **ШТАТНОЕ РАСПИСАНИЕ**
включая:
Рабочее время на каждого работника эксплуатационной службы
Мощность рабочих цехов
- IV. **ГОДОВОЕ ПРОИЗВОДСТВО**

Использование производственной мощности (примечание)
- V. **ГОДОВОЕ ПОТРЕБЛЕНИЕ**
- VI. **ПРИБАВОЧНАЯ СТОИМОСТЬ**
- VII. **СТАВКИ МЕСЯЧНОЙ ЗАРПЛАТЫ**
- VIII. **ХАРАКТЕРИСТИКИ НАЦИОНАЛЬНОЙ ПРОМЫШЛЕННОСТИ**

- I. **ОСНОВНЫЕ КАПИТАЛЬНЫЕ СРЕДСТВА**
включая:
Внешние условия
Часть VIII. **ТЕХНОЛОГИЧЕСКИЕ ХАРАКТЕРИСТИКИ**
- IX. **ИСТОРИЯ И ПЛАН**
- III. **НАЛИЧНЫЕ МАТЕРИАЛЬНО-ПРОИЗВОДСТВЕННЫЕ ЗАПАСЫ**
(без данных о желаемом оборотном капитале)
- IV. **ШТАТНОЕ РАСПИСАНИЕ**
включая:
Рабочее время на каждого работника эксплуатационной службы
Часть VIII. **ТЕХНОЛОГИЧЕСКИЕ ХАРАКТЕРИСТИКИ**
- V. **ГОДОВОЕ ПРОИЗВОДСТВО**
включая:
Описание основных продуктов
Рыночные аспекты
Экспорт
Часть VIII. **ТЕХНОЛОГИЧЕСКИЕ ХАРАКТЕРИСТИКИ**
- VII. **ГОДОВОЕ ПОТРЕБЛЕНИЕ**
- VI. **ПРИБАВОЧНАЯ СТОИМОСТЬ**
- II. **МЕСЯЧНАЯ ВАЛОВАЯ ЗАРПЛАТА РАБОЧИХ И СЛУЖАЩИХ**
- X. **ХАРАКТЕРИСТИКИ НАЦИОНАЛЬНОЙ ПРОМЫШЛЕННОСТИ**

Несмотря на изменения в форме изложения материала, определения основных экономических понятий во всех трех томах остаются без изменений¹⁾.

Наиболее данные о программе издания „Профилей“

С тех пор как в начале 1968 г. был опубликован том I „Профилей“, специалисты, занимающиеся вопросами исследований и планирования промышленного производства в развивающихся странах, широко используют это издание в качестве многоцелевого настольного справочника. По-видимому, наиболее часто этот справочник используется для следующих целей: а) для проверки информации и определения размера конкретных инвестиционных возможностей,

предусмотренных в связи с разработкой и осуществлением промышленных проектов; б) в качестве пособия для оценки проводимых консультантами исследований и предложений поставщиков в связи с проектами инвестиций в области промышленности; и в) в качестве сравнительного справочника для анализа эффективности действующих промышленных предприятий.

Однако следует подчеркнуть, что эти справочные данные не преследуют цели создавать „экспертов мгновенной выучки“, а скорее служить некоторым дополнением к тому арсеналу знаний и информации, которые требуются аналитикам, занимающимся разработкой промышленной политики, программ и содействием промышленному развитию.

Имеются также некоторые указания на то, что эта публикация побудила ряд развивающихся стран более внимательно анализировать работу и производительность существующих промышленных предприятий в целях планирования. ЮНИДО уже получила от развивающихся стран ряд заявок на предоставление технических консультаций и подготовку кадров в обла-

¹⁾ См. „Технические примечания“ в „Профилях предприятий обрабатывающей промышленности“, том I (ID/SER. E/4; в продаже под No. E. 67. II. B. 17), стр. 5–14 английского текста). Переводы „Технических примечаний“ на французский, испанский и русский языки опубликованы отдельно в дополнении к тому I.

сти сбора данных на уровне предприятий для их собственных целей, связанных с промышленными обследованиями, планированием проектов, прогнозированием национальной политики, планами региональной интеграции, совещаниями специалистов по неотложным вопросам управления и т. д.

При осуществлении этих проектов технической помощи прилагаются усилия для дальнейшего „углубления“ содержания „Профилей“ в целях выполнения конкретных задач по сбору данных, которые предусматриваются в каждом отдельном случае. Одновременно уделяется внимание углублению методов сравнения между различными фирмами в целях выполнения данных задач. Деятельность на местах в том виде, как она вырисовывается в „Профилях“, таким образом, все больше характеризуется многосторонним подходом к анализу промышленной деятельности на уровне предприятия, т. е. созданием общей рабочей основы

для технологов, инженеров, бухгалтеров, статистиков и экономистов-плановиков.

Эти операции, которые проводятся на местах на основе „Профилей“, и каждая из которых служит главным образом своим собственным конкретным местным целям, смогут привести к другим важным последствиям: результаты изучения показательных местных случаев после переработки их в анонимную форму можно будет обобщить и опубликовать в кратком виде для общего распространения, когда это возможно. Поэтому представляется возможным, что будущие выпуски этой серии будут содержать разные типы „Профилей“ в различных формах в зависимости от источника информации. Однако будут приняты все меры к тому, чтобы сохранить неотступное преследование основной цели „Профилей“ — предоставление справочных микроданных для программирования в области промышленности.

INTRODUCCION

Este es el tercer volumen de los *Perfiles de Establecimientos Manufactureros* que publica la ONUDI. Contiene datos de varios países, distintos de los que figuran en los volúmenes I y II. Del grupo de países en desarrollo, África oriental, El Salvador, Irán y México han enviado 83 perfiles de empresas para este volumen. Los países de Europa occidental, y en particular las regiones denominadas Europa central y Europa meridional, han enviado otros 78 perfiles.

El formato utilizado para los perfiles de África oriental, El Salvador, México y Europa meridional consta de dos páginas y es muy semejante, aunque no idéntico, al de los perfiles de Francia, India, Israel y Japón contenidos en los volúmenes anteriores. Para los restantes perfiles de este volumen se utiliza un formato mayor, de cuatro páginas.

El nuevo formato de dos páginas

El nuevo formato de dos páginas utilizado en este volumen contiene algunas modificaciones respecto al anterior. Las principales son las siguientes:

- a) Todas las sumas de dinero se expresan en su equivalencia en dólares, en lugar de hacerlo en la moneda de país.
- b) El cuadro relativo a la *formación escolar* de los trabajadores, que anteriormente se clasificaba en tres categorías no muy bien definidas de calificaciones profesionales, ha sido sustituido por información sobre los índices de ingresos mensuales de los trabajadores, clasificados por varias categorías de trabajos, como supervisores no operarios (directores), ingenieros, técnicos, contables, agentes de ventas, oficinistas y mecanógrafos, supervisores operarios, capataces, operadores de máquinas, artesanos, conductores de camiones, etc. (Esto figura en la *segunda página* y no en la *primera* como en el formato anterior.)
- c) La sección II, «Existencias», incluye ahora información sobre «capital de operaciones deseado», cuando se dispone de datos.
- d) Se ha añadido una nueva sección «VIII. Características de la industria en el país» para presentar datos resumidos del último censo industrial del país, relativos al número de

Formato de dos páginas

- I. CAPITAL FIJO
con:
Condiciones externas
Equipo de fabricación detallado

Inversiones pasadas (nota de pie de página)

establecimientos, el número de personas empleadas, los sueldos y salarios medios por año, el valor bruto anual de la producción por persona empleada y la relación entre el capital físico y el valor bruto anual de la producción, por grupos de establecimientos según su tamaño.

- e) Lo que era la sección VII, «*Expansión pasada y futura*», en el formato anterior ha sido sustituida, en parte, por «*Inversiones pasadas*», que figuran como nota de pie de página en la sección I «*Capital fijo*» y, en parte, por «*Plan futuro*» que figura en la sección IX «*Informaciones suplementarias*», cuando procede.
- f) En el nuevo formato, se da información sobre horas de trabajo de los trabajadores operarios.
- g) Los «*Coefficientes seleccionados*», que figuran en la segunda página del formato anterior, se omiten ahora, ya que pueden calcularse fácilmente a partir de los datos dados en cada perfil y no añaden nada a la información primaria.

El formato de cuatro páginas

Este formato ampliado se utiliza en el volumen III para todos los casos de Europa central y para Irán. El nuevo formato de cuatro páginas es básicamente análogo al nuevo formato de dos páginas descrito anteriormente. Los principales cambios son los siguientes:

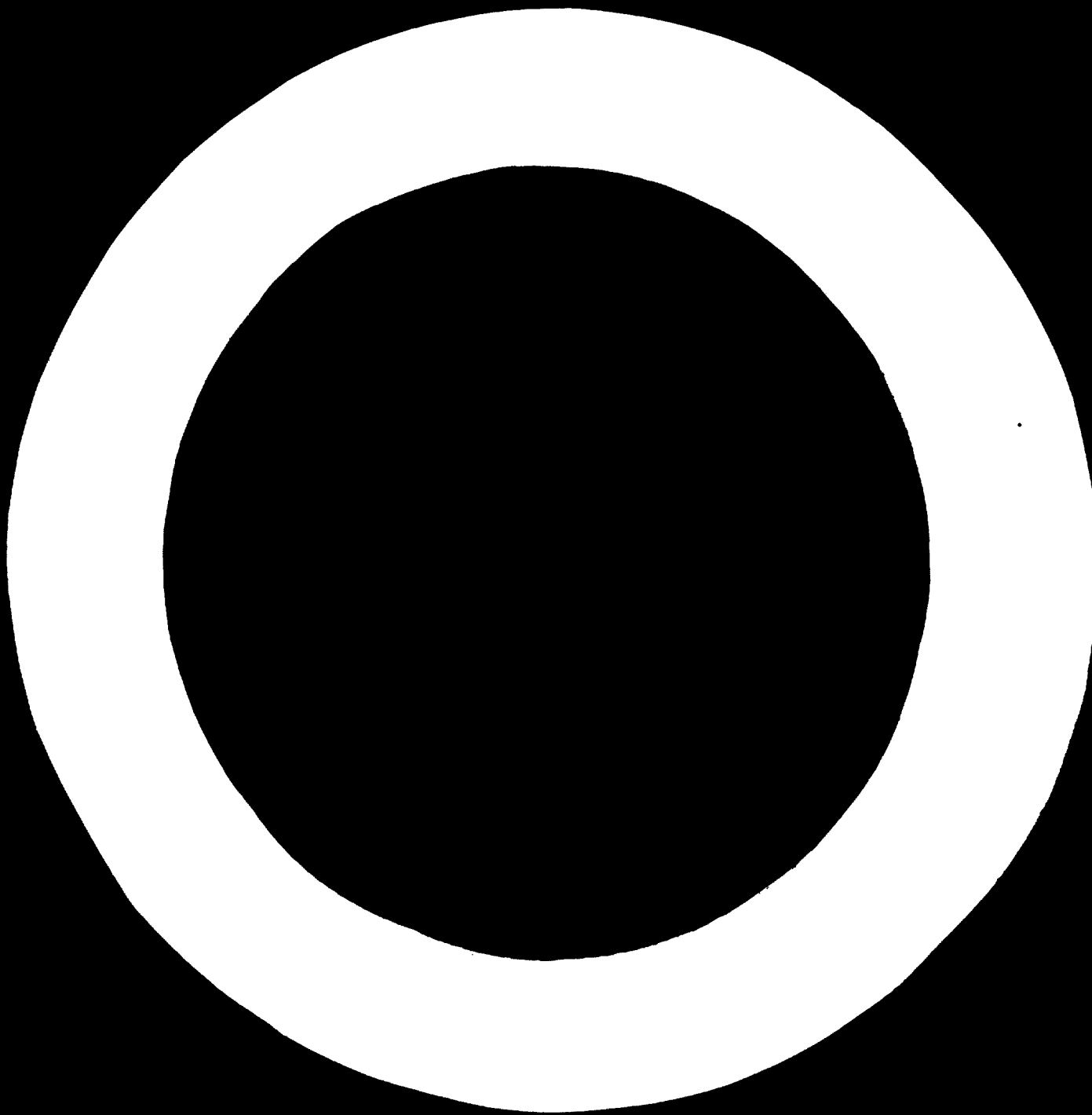
- a) Se dedica más espacio a los datos descriptivos sobre productos, mercados, exportaciones, capacidad de producción y otras informaciones suplementarias; y
- b) La sección XI, «*Esferas en que es deseable la cooperación con los países en desarrollo*», que figura en la página 4, tiene por objeto indicar el alcance de la cooperación técnica que las empresas particulares están dispuestas a ofrecer a los países en desarrollo.

Algunos cambios de presentación

Además de las adiciones y los cambios mencionados anteriormente, se han introducido algunos cambios en la presentación. La correspondencia entre las secciones más importantes del formato de dos páginas y las del formato de cuatro páginas es como sigue:

Formato de cuatro páginas

- I. CAPITAL FIJO
con:
Condiciones externas
Parte de VIII. CARACTERISTICAS
TECNOLOGICAS
IX. PASADO Y FUTURO



- II. EXISTENCIAS Y CAPITAL DE OPERACIONES
(con capital de operaciones deseado)
- III. PLANTILLA
con:
Tiempo de trabajo por operario
Capacidad de los talleres
- IV. PRODUCCION ANUAL

Utilización de las instalaciones (nota de pie de página)
- V. CONSUMO ANUAL
- VI. VALOR AÑADIDO
- VII. INDICES DE INGRESOS MENSUALES
- VIII. CARACTERISTICAS DE LA INDUSTRIA EN EL PAIS

A pesar de los cambios de presentación, la definición de los conceptos económicos básicos permanece inalterada en los tres volúmenes.¹

Ultima evolución del programa de los Perfiles

Desde la publicación del volumen I de los *Perfiles* a principios de 1968, la serie ha sido muy utilizada como documento de referencia de usos múltiples por personal técnico dedicado a estudios y planificación industriales en los países en desarrollo. Al parecer, los usos más típicos han sido: *a)* para buscar y comprobar información sobre oportunidades particulares de inversión destinadas al desarrollo y promoción de proyectos; *b)* como ayuda para evaluar los estudios de consultores y las ofertas de los proveedores para proyectos de inversión industrial; *c)* como referencia comparativa para analizar la eficacia de los establecimientos industriales existentes.

Hay que advertir, sin embargo, que el objetivo de estos datos de referencia no es la creación «instantánea» de expertos, sino añadir un elemento más al amplio cúmulo de calificaciones profesionales e informaciones que necesitan los analistas que trabajan en cuestiones de política, programación y promoción industriales.

Parece ser también que esta publicación ha estimulado a algunos países en desarrollo a examinar más atentamente el rendimiento y la capacidad de las industrias existentes, a efectos de planificación. La ONUDI ha recibido ya de países en desarrollo algunas solicitudes de asesoramiento técnico y capacitación

¹ Véanse las "notas técnicas" en el suplemento al volumen I de *Profiles of Manufacturing Establishments* (ID/SER.E/4/Suppl.), páginas XLIV-LV, donde se encuentran traducidas al español, francés y ruso.

- III. EXISTENCIAS
(sin información sobre capital de operaciones deseado)
- IV. PLANTILLA
con:
Tiempo de trabajo por operario
- Parte de VIII. CARACTERISTICAS TECNOLOGICAS
- V. PRODUCCION ANUAL
con:
Descripción de los principales productos
Aspectos del mercado
Exportaciones
- Parte de VIII. CARACTERISTICAS TECNOLOGICAS
- VII. CONSUMO ANUAL
- VI. VALOR AÑADIDO
- II. SUELDOS Y SALARIOS BRUTOS MENSUALES
- X. CARACTERISTICAS DE LA INDUSTRIA EN EL PAIS

en la recopilación de datos a nivel de los establecimientos para fines relacionados con estudios industriales, planificación de proyectos, diagnóstico de políticas nacionales, planes de integración regional, clínicas de gestión, etc.

Al prestar esa asistencia técnica, se ha procurado que los perfiles sean suficientemente detallados para satisfacer los objetivos concretos de la recopilación de datos previstos en cada caso. Al mismo tiempo, se intenta profundizar en las técnicas de comparación entre empresas para adaptarse a los objetivos propuestos. De este modo, las actividades sobre el terreno que revelan las líneas de los *Perfiles* se caracterizan cada vez más por un criterio multidisciplinario para el diagnóstico de las actividades industriales a nivel de los establecimientos, es decir, por una base de trabajo común para los tecnólogos, ingenieros, contables, estadísticos y economistas planificadores.

Estas operaciones sobre el terreno relacionadas con los *Perfiles*, aun persiguiendo cada una fundamentalmente unos fines concretos en el plano nacional, podrían tener un efecto secundario importante. Ese efecto es el siguiente: con métodos adecuados para neutralizarlos, los resultados de los estudios nacionales de casos pueden combinarse en formas resumidas para la difusión general, cuando proceda. Es probable, por tanto, que las futuras publicaciones de esta serie comprendan varios tipos de perfiles en formas diversas, según las fuentes. Sin embargo, se hará todo lo posible para asegurar la continuidad de la serie ateniéndose a su objetivo básico: proporcionar microdatos de referencia para la programación industrial.

CONSOLIDATED LIST OF ESTABLISHMENTS

in Volumes I to III

<i>Country</i>	<i>Classification</i>	<i>Major products</i>	<i>Vol. No.</i>	<i>Page</i>
SLAUGHTERING, PREPARATION AND PRESERVING OF MEAT				
East Africa	: 201/203-(1)	Slaughtering and beef canning	III	820
El Salvador	: 201-(1)	Sausages and ham	III	822
Middle Europe:	201-(1)	Slaughtering of cattle, pigs, calves and sheep	III	824
MANUFACTURE OF DAIRY PRODUCTS				
Mexico	: 202-(1)	Cheese, butter, cream, etc.	III	828
Middle Europe:	202-(1)	Whole milk powder, cream powder, skimmed milk powder and chocolate preparation	III	830
Middle Europe:	202-(2)	Soft cheese and heavy cream	III	834
Middle Europe:	202-(3)	Fresh milk, butter, cheese, whey, curd, etc.	III	838
France	: 202-(1)	Milk, sterilized and pasteurized, yoghurt, fresh cream and cheese	I	16
France	: 202-(2)	Milk, sterilized, pasteurized and powdered, butter, etc.	I	18
France	: 202-(3)	Pasteurized milk, butter, cream, etc.	I	20
France	: 202-(4)	Powdered milk, cheese, casein, etc.	II	364
India	: 202-(1)	Milk, pasteurized and powdered, ice cream, butter and ghee.	I	22
India	: 202-(2)	Pasteurized milk, butter, ghee, cream, etc.	I	24
Israel	: 202-(1)	Sterilized milk, cream, hard curds, butter, etc.	I	26
Israel	: 202-(2)	Curds, cheese, sour cream, butter, ice cream, etc.	I	28
Israel	: 202-(3)	Ice cream	I	30
Yugoslavia	: 202-(1)	Milk, powdered, condensed and evaporated, powdered egg, etc.	I	32
Yugoslavia	: 202-(2)	Powdered milk and egg, cheese, butter, etc.	I	33
Yugoslavia	: 202-(3)	Yoghurt, butter, cheese, ice cream, etc.	I	34
Yugoslavia	: 202-(4)	Butter, cheese and other dairy products	II	366
FOOD CANNING				
Mexico	: 203-(1)	Bottled olives, capers, olive oil, powdered soups and vinegar	III	842
Mexico	: 203/204-(2)	Canned vegetables, fruits and fruit juices	III	844
Middle Europe:	203-(1)	Fruits and vegetables canning and bottling	III	846
Middle Europe:	203-(2)	Canned fruits and vegetables	III	850
Middle Europe:	203/201-(3)	Canned meat, fruits and vegetables; jams, fruit juices, frozen vegetables and farinaceous products	III	854
India	: 203-(1)	Fruits and vegetables canning	I	36
Israel	: 203-(1)	Fruits and vegetables canning	I	38
Israel	: 203-(2)	Fruits and vegetables canning	I	40
Japan	: 203/4-(1)	Fish and fruits canning	I	42
Japan	: 203/4-(2)	Fish and fruits canning	I	44
Japan	: 203/4-(3)	Fish canning	I	46
Yugoslavia	: 204-(1)	Fish canning and dried fish flour	II	368
Yugoslavia	: 203/1-(2)	Vegetable and meat processing and packing (including canning)	II	369
Yugoslavia	: 203/211-(3)	Vegetables canning, fruits processing and alcoholic beverages	II	370
MANUFACTURE OF GRAIN MILL PRODUCTS				
East Africa	: 205-(1)	Wheat flour	III	858
East Africa	: 205-(2)	Wheat flour, maize flour, rice, etc.	III	860
Mexico	: 205-(1)	Wheat flour and by-products	III	862

<i>Country</i>	<i>Classification</i>	<i>Major products</i>	<i>Vol. No.</i>	<i>Page</i>
		MANUFACTURE OF GRAIN MILL PRODUCTS (cont.)		
Middle Europe:	205-(1)	Wheat semolina, flour and bran; rye flour, meal, pollards and bran		
Middle Europe:	205-(2)	Wheat and rye flour	III	864
Middle Europe:	205-(3)	Wheat and rye flour	III	868
India :	205-(1)	Wheat flour (and bran)	III	872
India :	205-(2)	Wheat flour (and bran)	I	48
Israel :	205-(1)	Wheat flour (and bran)	I	50
Israel :	205-(2)	Wheat flour (and bran)	I	52
Israel :	205-(3)	Wheat flour (and bran)	I	54
Israel :	205-(4)	Wheat flour (and bran)	I	56
Japan :	205-(1)	Wheat flour (and bran)	II	372
Japan :	205-(2)	Wheat flour (and bran)	I	58
Yugoslavia :	205-(1)	Wheat flour (and bran)	I	60
Yugoslavia :	205-(2)	Wheat flour (and bran)	I	62
Yugoslavia :	205-(3)	Wheat and corn flour and flour products	I	63
Yugoslavia :	205-(4)	Wheat flour and flour products	I	64
			II	374
		SUGAR REFINERIES		
Mexico :	207-(1)	Cane sugar refinery	III	876
Mexico :	207-(2)	Cane sugar refinery	III	878
France :	207-(1)	Beet sugar refineries	I	66
France :	207(2)	Beet sugar refineries	I	68
India :	207-(1)	Cane sugar refineries	I	70
India :	207-(2)	Cane sugar refineries	I	72
Israel :	207-(1)	Beet sugar refineries	II	376
Japan :	207-(1)	Cane sugar refineries	I	74
Japan :	207-(2)	Cane sugar refineries	I	76
Yugoslavia :	207-(1)	Beet sugar refineries	I	78
Yugoslavia :	207-(2)	Beet sugar refineries	I	79
Yugoslavia :	207-(3)	Beet sugar refineries	I	80
Yugoslavia :	207-(4)	Beet sugar refineries	II	378
Yugoslavia :	207-(5)	Beet sugar refineries	II	379
Yugoslavia :	207-(6)	Beet sugar refineries (with sugar spirit and liquor producing factories)	II	380
		MANUFACTURE OF MISCELLANEOUS FOOD PREPARATIONS		
El Salvador :	209-(1)	Animal feeds	III	880
El Salvador :	209/203-(2)	Macaroni and similar products, powdered soups	III	882
		SOFT DRINKS AND CARBONATED WATER INDUSTRIES		
East Africa :	214-(1)	Soft drinks and soda water	III	884
		SPINNING, WEAVING AND FINISHING TEXTILES		
East Africa :	231-(1)	Spun rayon fabrics	III	886
El Salvador :	231-(1)	Rayon and synthetic-fibre fabrics	III	888
El Salvador :	231-(2)	Cotton fabrics and gray goods	III	890
Mexico :	231-(1)	Woollen yarn, fabrics, blankets, etc.	III	892
Mexico :	231-(2)	Synthetic-fibre fabrics	III	894
Mexico :	231-(3)	Cotton and synthetic-fibre fabrics	III	896
Mexico :	231-(4)	Sacks and cordages of hard-fibres (palms, kenaff, hemp, etc.)	III	898
Middle Europe:	231-(1)	Men's cloth	III	900
Middle Europe:	231-(2)	Rayon lining, rayon and synthetic fabrics, ribbons	III	904
Middle Europe:	231-(3)	Woollen and synthetic yarns	III	908
Middle Europe:	231-(4)	Linen yarns and threads	III	912
Middle Europe:	231-(5)	Yarns and threads, tyre cord	III	916
South Europe :	231-(1)	Secondary processing of nylon yarn	III	920
France :	231-(1)	Wool and synthetic yarn and fabrics	I	82
France :	231-(2)	Cotton thread and yarn	I	84

<i>Country</i>	<i>Classification</i>	<i>Major products</i>	<i>Vol. No.</i>	<i>Page</i>
SPINNING, WEAVING AND FINISHING TEXTILES (cont.)				
France	: 231-(3)	Flax yarn	I	86
France	: 231-(4)	Wool and synthetic fibre yarn and thread	II	382
France	: 231-(5)	Cotton yarn	II	384
India	: 231-(1)	Cotton yarn and cloth, towels, tents and other made-up goods	I	88
India	: 231-(2)	Cotton yarn, cloth and made-up textiles	I	90
India	: 231-(3)	Jute bags, hessian cloth and other jute mill products	I	92
India	: 231-(4)	Jute yarn, cloth and bags	I	94
India	: 231-(5)	Cotton yarn, cloth, sheets, sarees, etc.	I	96
India	: 231-(6)	Cotton yarn, cloth, sarees, sheets, tents, etc.	I	98
India	: 231-(7)	Cotton yarn, cloth, dhoties, sheets, shirtings, etc.	II	386
India	: 231-(8)	Cotton yarn, cloth, dhoties, sheets, etc.	II	388
India	: 231-(9)	Woollen yarn, fabrics, towels, blankets, etc.	II	390
India	: 231-(10)	Woollen yarn, fabrics, flannel, voile, etc.	II	392
India	: 231-(11)	Worsted yarn and fabrics	II	394
Israel	: 231-(1)	Nylon yarn	I	100
Israel	: 231-(2)	Nylon yarn (banlon)	I	102
Israel	: 231-(3)	Nylon yarn and rayon tyre fabrics	I	104
Israel	: 231-(4)	Synthetic and woollen yarn	I	106
Israel	: 231-(5)	Cotton yarn	II	396
Israel	: 231-(6)	Cotton yarn and fabrics	II	398
Israel	: 231-(7)	Woollen yarn, fabrics and dyeing	II	400
Israel	: 231-(8)	Woollen yarn, fabrics and dyeing	II	402
Israel	: 231/243-(9)	Combed wool fabrics and trousers	II	404
Israel	: 231/243-(10)	Wool fabrics and trousers	II	406
Japan	: 231-(1)	Woollen and worsted fabrics	I	108
Japan	: 231-(2)	Woollen and silk fabrics	I	110
Yugoslavia	: 231-(1)	Cotton and synthetic yarn, thread and fabrics	I	112
Yugoslavia	: 231-(2)	Cotton, synthetic and cellulosic-fibre fabrics and knit-mill products	I	113
Yugoslavia	: 231-(3)	Cotton yarn and thread	I	114
Yugoslavia	: 231-(4)	Fabrics, cotton and synthetic fibres	I	115
Yugoslavia	: 231-(5)	Woollen, synthetic and cellulosic yarn and fabrics, and knitwear	I	116
Yugoslavia	: 231-(6)	Cotton yarn	II	408
Yugoslavia	: 231-(7)	Cotton yarn	II	409
Yugoslavia	: 231-(8)	Cotton fabrics	II	410
Yugoslavia	: 231-(9)	Woollen yarn and fabrics	II	411
Yugoslavia	: 231-(10)	Woollen fabrics	II	412
Yugoslavia	: 231-(11)	Rayon and synthetic fibre fabrics	II	413
Yugoslavia	: 231-(12)	Hemp, jute and sisal goods (ropes, cordage, sacks, etc.) ...	II	414
Yugoslavia	: 231-(13)	Woollen yarn and fabrics	II	415
Yugoslavia	: 231/243-(14)	Rayon- and synthetic-fibre fabrics and ready-made apparel ..	II	416
Yugoslavia	: 231-(15)	Cotton yarn and fabrics	II	417
Yugoslavia	: 231-(16)	Wool and man-made fibre yarn and fabrics	II	418
KNITTING MILLS AND WEARING APPAREL				
East Africa	: 232-(1)	Knitted socks	III	924
East Africa	: 243-(1)	Garments and shirts	III	926
El Salvador	: 232-(1)	Underwear for men and women, clothing for children	III	928
El Salvador	: 243-(1)	Shirts	III	930
Mexico	: 243-(1)	Shirts, trunk-hoses, etc.	III	932
Middle Europe	: 232-(1)	Knitting wool and knitwear	III	934
Middle Europe	: 243-(1)	Brassieres and suspender belts	III	938
Middle Europe	: 243-(2)	Men's coats, suits, jackets, trousers and vests	III	942
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Israel :	232-(1)	Stockings and tights	II	430
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Middle Europe :	251-(2)	Chip board	III	984
Middle Europe :	260-(1)	Steel and wooden furniture	III	988
France :	251-(1)	Plywood panels	II	456
France :	251-(2)	Particle board	II	458
India :	251-(1)	Wooden parts, accessories for jute and cotton mills (shuttles, card staves, bobbins, etc.)	II	460
India :	251-(2)	Veneer and plywood	II	462
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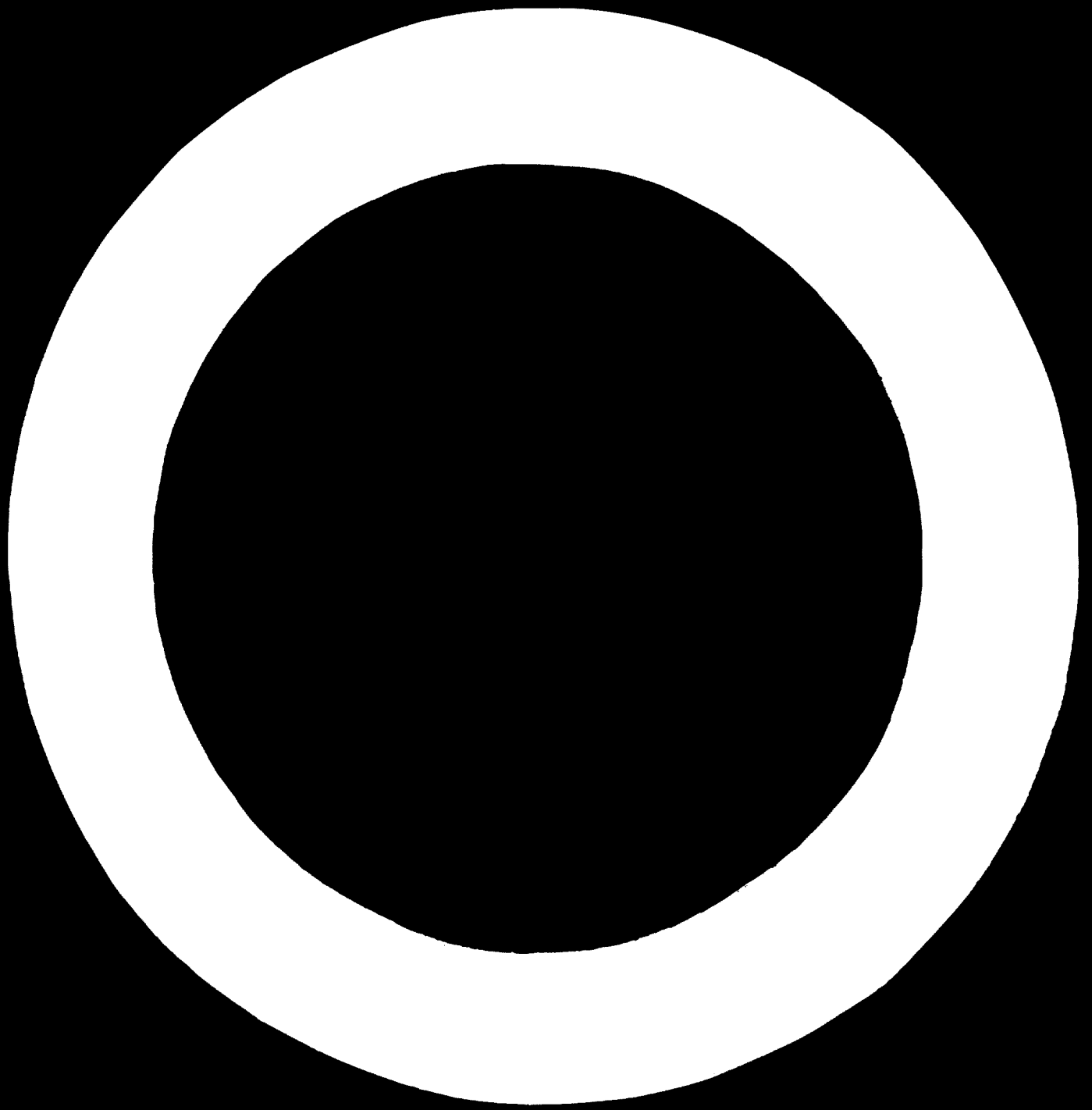
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India	: 291 241-(1)	Leather tannery (with a shoe and other leather goods producing factory)	II	490
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Iran	: 300-(1)	Tyres, tubes, flaps and other rubber products	III	1010
Mexico	: 300-(1)	Natural and synthetic rubber tyres, tubes and floor coverings	III	1014
Middle Europe:	300-(1a)	Tyres, V-belts and conveyor belts	III	1016
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France	: 300-(1)	Shoe soles, floor coverings, retreated tyres, etc.	II	500
India	: 300-(1)	Rubber tubes and tyres	II	502
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India	: 300-(4)	Rubber tubes and tyres	II	508

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France	: 311(C.F.)-(1)	Ammonium nitrate (from natural and refinery gas)	I	132
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Yugoslavia	: 311(C.F.)-(1)	Superphosphate and mixed fertilizers	I	136
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France	: 311-(1)	Plasticizers, stabilizers, synthetic dyestuff and other inorganic chemicals	I	138
India	: 311-(1)	Phosphoric acid, salts of mercury, copper and zinc, oxalic acid and other basic inorganic chemicals	I	140
India	: 311-(2)	Viscose staple fibre	II	526
India	: 311-(3)	Vat dyes	II	528
India	: 311-(4)	Acetic acid, polyethylene, butyl acetate, ethylacetate, etc.	II	530
Israel	: 311-(1)	Pesticides, chlorine, caustic soda, plastic products, etc.	I	142
Israel	: 311-(2)	Ethylene, polyethylene and carbon black	I	144
Israel	: 311-(3)	Polyvinyl chloride and caustic soda	I	146
Israel	: 311-(4)	Synthetic fibre (acrylan)	I	148
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Japan	: 311-(1)	Acetylene gas (from carbide)	I	150
Japan	: 311-(2)	Pitch coke, carbon black, cumarone resin and tar enamel	I	152
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Yugoslavia	: 311-(1)	Fluid chlorine, chloric acid, sodium hydroxide and other soda chemicals	I	154
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VEGETABLE AND ANIMAL OILS AND FATS				
East Africa	: 312 319-(1)	Soap, detergents and edible oils	III	1060
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India	: 312-(1)	Hydrogenated vegetable oil	II	542
India	: 312-(2)	Hydrogenated vegetable oil	II	544
Israel	: 312 9-(1)	Vegetable oils, soap, lecithin and cosmetics	II	546
Israel	: 312 9-(2)	Vegetable oils, soap, lecithin, etc.	II	548
Israel	: 312 9-(3)	Vegetable oils, soap, detergents and cosmetics	II	550
Japan	: 312-(1)	Rapeseed oil	II	552
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MANUFACTURE OF PAINTS, VARNISHES AND LACQUERS				
Mexico	: 313-(1)	Paints and synthetic resins	III	1068
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France	: 313-(1)	Paints and other coating material	I	158
France	: 313-(2)	Varnishes	II	562
India	: 313-(1)	Paints, varnishes and related products	I	160
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Israel	: 313-(1)	Paints and thinners	II	568
Israel	: 313-(2)	Paints and thinners	II	570
Japan	: 313-(1)	Paints, synthetic-resin enamels, varnishes and thinners	II	572
Japan	: 313-(2)	Synthetic-resin enamels and paint thinners	II	574
Yugoslavia	: 313-(1)	Paints, varnishes, lacquers, insecticides, plastic glues, etc. ...	I	164
MANUFACTURE OF MATCHES, MEDICAL PREPARATIONS, SOAP AND DETERGENTS, ETC.				
Iran	: 319-(1)	Detergents	III	1078
Iran	: 319-(2)	Pharmaceuticals	III	1082
Mexico	: 319-(1)	Soap, detergents and glycerine	III	1086
Mexico	: 319-(2)	Human and veterinary medical preparations (antibiotics and other materials)	III	1088
Mexico	: 319-(3)	Wax matches and friction matches	III	1090
Middle Europe:	319-(1)	Soaps, detergents and cosmetics	III	1092
Middle Europe:	319-(2)	Pharmaceutical products (vasoconstrictoria, antiemetica, analgetica, drops, etc.) and cosmetics (skin creams, skin tonics, lotion, etc.)	III	1096
Middle Europe:	319,350-(3)	Matches (also produces fasteners, and other metal fabrications for die casting and injection moulding)	III	1100
South Europe	: 319-(1)	Organic compounds - intermediate pharmaceuticals	III	1104
India	: 319-(1)	Matches	I	166
India	: 319-(2)	Tinctures, galenicals, injectable vitamins and other medicines	I	168
India	: 319-(3)	Matches	II	576
India	: 319-(4)	Matches	II	578
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India	: 319-(6)	Medical preparations (vitamins, antibiotics, ointments, syrup, etc.)		
India	: 319-(7)	Medical preparations (vitamins, hormones, injectables, tinctures, etc.)	II	582
India	: 319-(8)	Medical preparations (ambromycin, synthomycetin, etc.)	II	584
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Japan	: 319-(2)	Matches	I	172
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Yugoslavia	: 319-(4)	Soap and other laundry and toilet preparations	I	180
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Yugoslavia	: 319-(6)	Soap and other laundry and toilet preparations	II	601
			II	602
PETROLEUM REFINERIES				
Middle Europe:	321-(1)	Lubricating oils and greases	III	1106
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Iran	: 332-(1)	Window glass, tumblers, bottles, crystal wares, etc.	III	1110
Mexico	: 331-(1)	Bricks and other construction materials	III	1114
Mexico	: 332-(1)	Flat glass, flat and curved wind screens for cars, mirrors, etc.		
Mexico	: 332-(2)	Glassware (containers)	III	1116
Middle Europe:	331-(1)	Bricks, ceramic tiles, stoneware and stove tiles	III	1118
Middle Europe:	331-(2)	Fire bricks (solid, hollow, etc.)	III	1120
Middle Europe:	332-(1)	Glass bottles, wide-mouthed glass containers, lighting glasses, etc.	III	1124
France	: 332-(1)	Glass bottles	III	1128
India	: 331-(1)	Firebricks, insulating bricks, sewage pipes and mortars	II	604
India	: 331-(2)	Firebricks and blocks, mortars and refined clay	II	606
India	: 331-(3)	Firebricks	II	608
India	: 331-(4)	Glasswool, refractory products and stoneware pipes	II	610
Israel	: 331-(1)	Tiles (white and coloured)	II	612
Israel	: 332-(1)	Glassware (cups, bottles, etc.)	II	614
Yugoslavia	: 331-(1)	Ceramic tiles, sanitary ceramics and other ceramics for household	II	616
Yugoslavia	: 331-(2)	Bricks and tiles	II	618
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East Africa	: 334-(1)	Portland cement	III	1132
Iran	: 334-(1)	Cement	III	1134
Middle Europe:	334-(1)	Cement and binding agents	III	1138
Middle Europe:	334-(2)	Cement and cement-lime mixture	III	1142
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Yugoslavia	: 334 339-(1)	Cement and asbestos-cement products	II	625
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Middle Europe:	339-(1)	Sintered magnesite (refractory material and mortars) and magnesite bricks	III	1154
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France	: 339-(1)	Glass fibres (silicon fibres for textiles, poles, wicks, balls, etc.)	II	630
France	: 339-(2)	Concrete products (small girders, plasterwork for prefabricated floorboard, concrete blocks and conduits)	II	632
France	: 339-(3)	Concrete products (blocks, boards, pipes, paving materials, etc.)	II	634
India	: 339-(1)	Asbestos-cement products (sheets, boards, pipes, etc.)	II	636
India	: 339-(2)	Asbestos-cement products (sheets, boards, pipes, etc.)	II	638
India	: 339-(3)	Asbestos-cement products (sheets, boards, pipes, etc.)	II	640
Israel	: 339-(1)	Asbestos-cement products (sheets, pipes and moulded forms)	II	642
Israel	: 339-(2)	Concrete products (pipes, railway sleepers, poles and bricks)	II	644
Israel	: 339-(3)	Prefabricated concrete building materials and bricks	II	646
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Israel	: 339-(5)	Concrete paving material	II	650
Japan	: 339-(1)	Concrete products	II	652
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Yugoslavia	: 339-(1)	Concrete products (poles, sleepers, slabs, blocks, etc.)	II	656
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Yugoslavia	: 339-(3)	Concrete products (sleepers, poles, slabs, etc.)	II	658
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		ROLLING, DRAWING AND CASTING OF FERROUS METALS		
Mexico	: 341-(1)	Rolled, drawn, forged and cast metal products	III	1162
France	: 341-(1)	Metal forgings and fabricated tools	I	200
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India	: 341-(1)	Iron and steel foundry, with metal-working and finishing shops producing cane crushers and electric motors	I	204
India	: 341-(2)	Welded tubes, seamless tubes and cold-rolled strips	I	206
India	: 341-(3)	Iron foundry for machines and parts (hand cranes, pulley blocks, elevator trucks, travelling trollies, etc.)	I	208
India	: 341-(4)	Iron and steel foundry, with machining shop producing implements, structural goods, bolts and nuts, etc.	I	210
Israel	: 341 350-(1)	Iron foundry, with metal-working shops producing plumbing and sanitary fixtures, concrete mixers, pumps, etc.	I	212
Japan	: 341-(1)	Steel castings and meehanite cast iron	I	214
Japan	: 341-(2)	Specialized iron and steel foundry	I	216
Japan	: 341-(3)	Iron foundry (machine beds, engine beds, etc.)	I	218
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Japan	341-(7)	Cast steel pipes and tubes	II	660
Yugoslavia	341-(1)	Cast grey and tempered iron; also machine tools, fittings, cooking ranges, etc.	II	662
			I	224
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Mexico	342-(1)	Production of refined antimonial lead	III	1164
Middle Europe	342-(1)	Aluminium foils	III	1166
France	342-(1)	Aluminium rolling and drawing products (plates, sheets, coils, foils, billets, etc.)		
France	342-(2)	Copper and brass tubes	I	226
France	342-(3)	Copper and brass strips	I	228
France	342-(4)	Copper and brass tubes	I	230
France	342-(5)	Non-ferrous metal castings	I	232
France	342-(6)	Copper-aluminium castings	II	664
India	342-(1)	Rolled products of copper, copper alloys, aluminium and aluminium alloys	II	666
India	342-(2)	Aluminium ingots	I	234
India	342-(3)	Aluminium and copper sheets, strips, discs, circles and wires	I	236
Israel	342-(1)	Aluminium rolling (foils, sheets, strips and discs)	II	668
Israel	342, 350-(2)	Aluminium pipes and profiles; also windows and doors manufactured thereof	I	238
Japan	342-(1)	Copper and brass bars, rods, wire, pipes and tubes	I	240
Yugoslavia	342-(1)	Zinc and brass rolling and drawing (sheets, strips, bars, wire, tubes, etc.)	I	242
Yugoslavia	342-(2)	Zinc, copper, and other non-ferrous metal drawing and casting	I	244
Yugoslavia	342-(3)	Rolling, drawing and die-pressing of aluminium and alloys (sheets, strips, bars, wire tubes, sections, etc.)	I	245
Yugoslavia	342-(4)	Drawn non-ferrous metal products (insulated wires, copper and copper alloy products, aluminium and steel ropes, etc.)	I	246
			II	670
MANUFACTURE OF METAL PRODUCTS OTHER THAN MACHINERY AND TRANSPORT EQUIPMENT				
East Africa	350-(1)	Wire nails	III	1170
East Africa	350-(2)	Manufacture of enamelware (household wares)	III	1172
El Salvador	350-(1)	Copper and aluminium wires	III	1174
Mexico	350-(1)	Steel angles, bolts, nuts, steel wire rods, tanks, props, etc.	III	1176
Mexico	350-(2)	Cables, wires and wire products	III	1178
Mexico	350-(3)	Tin cans	III	1180
Mexico	350-(4)	Steel mould-shots (produced from steel wire)	III	1182
Middle Europe	350-(1)	Cans, cans with press-on-lids and other disposable containers	III	1184
Middle Europe	350-(2)	Enamelled copper wire	III	1188
Middle Europe	350, 360-(3)	Steel structurals of various types, resonance vibrating machines, tube conveyors, belt conveyors and conveyor-rollers	III	1192
Middle Europe	350, 360-(4)	Boilers, steel bridges, hydraulic steel superstructures, theatre stage equipment, apparatuses, tanks, penstocks, pressure vessels, cranes, ropeways, inclined lifts, steel and grey iron castings, etc.	III	1196
Middle Europe	350, 360-(5)	Irrigation and agricultural equipment, steel profiles	III	1200
France	350-(1)	Metal stampings, tools and signalling devices	I	248
France	350-(2)	Steel and aluminium wires and cables (manufactured from wire rods)	I	250
France	350-(3)	Fabricated metal parts for automobiles and household articles	I	252
France	350-(4)	Radiators of various types	I	254
France	350-(5)	Window and door fixtures	I	256

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MANUFACTURE OF METAL PRODUCTS OTHER THAN MACHINERY AND TRANSPORT EQUIPMENT (cont.)				
France	: 350-(6)	Wire (galvanized, copper-sheathed, tempered, dressed, etc.) and wire products (fencing grills, welded nets, etc.)	I	258
France	: 350-(7)	Boilers, electronic fixtures, fittings and photographic apparatus	II	672
France	: 350-(8)	Metal frames, locksmitheries, joinery, zinc and copper wares, etc.	II	674
France	: 350-(9)	Sheet metal cuttings and stampings (for automobile and tractor parts)	II	676
France	: 350-(10)	Bolts, nuts, screws and washers	II	678
France	: 350-(11)	Bath tubs and tanks of cast iron	II	680
France	: 350-(12)	Office furniture and metal casks	II	682
France	: 350-(13)	Metal cuttings, stampings and tools	II	684
France	: 350-(14)	Sprinklers, teapots, buckets and other farm and household metalware	II	686
India	: 350-(1)	Screws, rivets, hinges and other builders' hardware	I	260
India	: 350-(2)	Tin boxes and containers	I	262
India	: 350-(3)	Fabricated structurals, storage vessels, pipes, etc. (with installation services)	I	264
India	: 350-(4)	Fabricated structurals (with installation services)	I	266
India	: 350-(5)	Household metalwares (aluminium)	I	268
India	: 350-(6)	Metal containers, metal caps and other metalware	II	688
India	: 350-(7)	Metal containers, crown corks and other metal products	II	690
India	: 350-(8)	Bolts, nuts and screws	II	692
India	: 350-(9)	Bolts, nuts, screws, rivets, nails, etc.	II	694
India	: 350-(10)	Household metalware (utensils, circles, rivets, strips, etc.)	II	696
Israel	: 350-(1)	Pipe fittings and other iron and steel foundry products	I	270
Israel	: 350-(2)	Wire, nail and rivets	I	272
Israel	: 350-(3)	Wire, wire mesh and other wire products	I	274
Israel	: 350-(4)	Window frames and doors of aluminium profiles	I	276
Israel	: 350-(5)	Irrigation pipes and accessories, aluminium profiles and doors and window frames made thereof	I	278
Israel	: 350-(6)	Solar heat absorbers and storage furniture	II	698
Japan	: 350-(1)	Steel drums	I	280
Japan	: 350-(2)	Dust shoots, screen plates, flexible tubes, door hangers and chairs (mostly steel but partly plastic)	I	282
Japan	: 350-(3)	Metal valves and fire hydrants	I	284
Japan	: 350-(4)	Cans, caps and other containers (tin and aluminium)	I	286
Japan	: 350-(5)	Pails, buckets, basins, etc. (both metal and plastic)	I	288
Japan	: 350-(6)	Fabricated steel structurals	I	290
Japan	: 350-(7)	Sashes, steel and aluminium	I	292
Japan	: 350-(8)	Window shutters (both heavy and light types)	I	294
Japan	: 350-(9)	Wire rope, steel strand and steel wire	I	296
Japan	: 350-(10)	Steel wires	II	700
Japan	: 350-(11)	Wire springs and flat springs	II	702
Japan	: 350-(12)	Tin-plate products (cans, etc.)	II	704
Japan	: 350-(13)	Machine screws, bolts and nuts	II	706
Japan	: 350-(14)	Bolts and nuts	II	708
Japan	: 350-(15)	Bolts, nuts, screws, rivets, etc.	II	710
Yugoslavia	: 350-(1)	Metal containers and barrels	I	298
Yugoslavia	: 350-(2)	Enamelware, vessels, radiators, boilers, etc.	I	299
Yugoslavia	: 350-(3)	Agricultural hand tools (hand-forging products)	I	300
Yugoslavia	: 350-(4)	Agricultural hand tools (cast and forged products)	I	301
Yugoslavia	: 350-(5)	Fabricated steel structurals, reservoirs, industrial cranes, refrigeration equipment, etc.	I	302
Yugoslavia	: 350-(6)	Steel chains (and agricultural machines parts)	II	712
Yugoslavia	: 350-(7)	Cast and forged agricultural hand tools	II	713
Yugoslavia	: 350-(8)	Cooking ranges and tin-plate containers	II	714
Yugoslavia	: 350-(9)	Radiators and boilers	II	715
Yugoslavia	: 350-(10)	Screw propellers	II	716

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MANUFACTURE OF METAL PRODUCTS OTHER THAN MACHINERY AND TRANSPORT EQUIPMENT (cont.)				
Yugoslavia	: 350-(11)	Cooking, heating and other household equipment and fittings	II	717
Yugoslavia	: 350-(12)	Metal furniture	II	718
Yugoslavia	: 350-(13)	Spiral products, school equipment and other metal and plastic products	II	719
Yugoslavia	: 350-(14)	Castings and fittings for water conduits and textile machine parts	II	720
Yugoslavia	: 350-(15)	Screw propellers and wire products	II	721
Yugoslavia	: 350-(16)	Fittings, flanges and other hardwares	II	722
MANUFACTURE OF MACHINERY, NON-ELECTRICAL				
Iran	: 360-(1)	Household refrigerators, water coolers and a variety of heating and cooling apparatuses	III	1204
Iran	: 360-(2)	Refrigerators, coolers, heaters, etc.	III	1208
Mexico	: 360-(1)	Cranes and stamping presses	III	1212
Mexico	: 360-(2)	Tractors, seeders, cultivators, harrows and other agricultural implements	III	1214
Mexico	: 360-(3)	Agricultural tractors	III	1216
Mexico	: 360-(4)	Agricultural machinery, trucks and tractors	III	1218
Middle Europe:	360-(1)	Pumps, motors, switchgear	III	1220
Middle Europe:	360-(2)	Chopper-blowers, combine harvesters, potato harvesters, maize attachments, etc.	III	1224
Middle Europe:	360-(3)	Machinery and equipment for plastic processing industry	III	1228
Middle Europe:	360-(4)	Forging machines, crankshaft milling machines and drilling machines	III	1232
Middle Europe:	360-(5)	Universal machine tools, woodworking machines, lathe chucks, hardness testing devices	III	1236
Middle Europe:	360-(6)	Turret and chuck lathes	III	1240
Middle Europe:	360-(7)	Ball supports, ball cages, standard ball bearings, etc.	III	1244
France	: 360-(1)	Ball bearings	I	304
France	: 360-(2)	Latnes, with accessories and spare parts	I	306
France	: 360-(3)	Milling machines	II	724
France	: 360/381-(4)	Diesel engines (marine and industrial)	II	726
France	: 360-(5)	Pumps and related equipment and fixtures	II	728
France	: 360-(6)	Centrifugal pumps and compressors	II	730
France	: 360-(7)	Controlling and regulating equipment for turbines	II	732
France	: 360-(8)	Presses	II	734
India	: 360-(1)	Centrifugal pumps	I	308
India	: 360-(2)	Centrifugal machines, crystallizers, crab winches, etc.	I	310
India	: 360-(3)	Cranes, winches, sand mixers and other construction equipment	I	312
India	: 360-(4)	Cranes, concrete mixers, pipes, etc.	I	314
India	: 360-(5)	Cultivators, dusters, threshers and other agricultural machines and implements	I	316
India	: 360-(6)	Cranes, trolleys, elevating trucks and other material-handling equipment	I	318
India	: 360/341-(7)	Diesel engines, power looms, agricultural pumps and machine tools castings	II	736
India	: 360-(8)	Agricultural trailers, harrows, ploughs, etc.	II	738
India	: 360-(9)	Lathes, planers, band saws and rolled products	II	740
India	: 360-(10)	Sewing machines (complete and parts)	II	742
India	: 360-(11)	Shearing machines and power presses	II	744
India	: 360-(12)	Threshers, winnowers, cultivators and Persian wheels	II	746
India	: 360-(13)	Dies, jigs and fixtures	II	748
India	: 360-(14)	Lathes	II	750
India	: 360-(15)	Metal structurals, storage vessels, electrical hoists, band saws, sugar machinery and paper machinery	II	752
India	: 360-(16)	Pumps and switches	II	754
Israel	: 360-(1)	Hydraulic pumps and cylinders	I	320

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MANUFACTURE OF MACHINERY, NON-ELECTRICAL (cont.)				
Israel	: 360-(2)	Hay balers, grain drills, planters, grading machines, etc. . . .	I	322
Israel	: 360-(3)	Seeders, cultivators and pickers	I	324
Israel	: 360-(4)	Pumps	II	756
Japan	: 360-(1)	Ball bearings, machine parts, pumps and powder metallurgy products	I	326
Japan	: 360-(2)	Powered tillers, sprayers, pumps, bush-cutters, etc.	I	328
Japan	: 360-(3)	Pumps of various types	I	330
Japan	: 360-(4)	Agricultural implements (tractor plows, loaders, harrows, etc.)	II	758
Japan	: 360-(5)	Agricultural implements, (hillers, weeders, rotors and rakes)	II	760
Japan	: 360-(6)	Feed cutters	II	762
Yugoslavia	: 360-(1)	Pumps and agricultural machines	I	332
Yugoslavia	: 360-(2)	Combines, lorries, milling machines, and other agricultural equipment and parts	I	333
Yugoslavia	: 360-(3)	Lathes and boring equipment	I	334
Yugoslavia	: 360-(4)	Compressors, pneumatic tools, car lights and other spare parts for automobiles	I	335
Yugoslavia	: 360-(5)	Ball bearings	I	336
Yugoslavia	: 360-(6)	Water turbines, suction pumps, diesel motors and other industrial machines and apparatus	II	764
Yugoslavia	: 360-(7)	Diesel engines and tractors	II	765
Yugoslavia	: 360-(8)	Sewing machines	II	766
Yugoslavia	: 360-(9)	Elevators, staircases and other metal structures	II	767
MANUFACTURE OF ELECTRICAL MACHINERY, APPARATUS, APPLIANCES AND SUPPLIES				
Iran	: 370-(1)	Plastic insulated electrical cables	III	1248
Iran	: 370-(2)	Television and radio sets and gramophones	III	1252
Iran	: 370-(3)	Television sets	III	1256
Mexico	: 370-(1)	Electric lamps	III	1260
Mexico	: 370-(2)	Non-ferrous wires, conductors and cables	III	1262
Middle Europe:	370-(1)	Stationary small-scale batteries for telephone exchanges and starter batteries for motor vehicles	III	1264
Middle Europe:	370-(2)	Power transmission cables and lines, telecommunication cables and lines, cable fittings	III	1268
Middle Europe:	370-(3)	Refrigerators, freezers, automatic washing machines, electric motors, etc.	III	1272
Middle Europe:	370-(4)	Bulbs, fluorescent lamps, radio valves, molybden wires, etc.	III	1276
Middle Europe:	370-(5)	Plastic coated cables, plastic coated lines, jumper wires and strands	III	1280
Middle Europe:	370-(6)	Bare and insulated wires and rods of non-ferrous metals	III	1284
Middle Europe:	370-(7)	Rolled copper wires (coils)	III	1288
South Europe :	370-(1)	Electrical control units and parts for household domestic appliance industry	III	1292
France	: 370-(1)	Electric motors, industrial and non-industrial	II	768
France	: 370-(2)	Electric pliers, other apparatus, machines and parts	II	770
India	: 370-(1)	Electric switchboards, distribution boards, cartridge fuses and industrial motors	II	772
India	: 370-(2)	Transformers, switchgears, capacitors, motors, generators and other heavy electrical machinery	II	774
India	: 370-(3)	Electric motors	II	776
India	: 370-(4)	P.V.C.- and paper-insulated electric cables	II	778
India	: 370-(5)	Paper-insulated electric cables	II	780
India	: 370-(6)	Paper-insulated electric cables	II	782
India	: 370-(7)	Rubber- and P.V.C.-insulated electric cables and flexibles	II	784
India	: 370-(8)	Rubber- and P.V.C.-insulated electric cables and flexibles	II	786
India	: 370-(9)	Electric light bulbs	II	788
Israel	: 370-(1)	Electric motors	II	790
Israel	: 370-(2)	Electric light bulbs	II	792
Israel	: 370-(3)	Electric light bulbs	II	794

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MANUFACTURE OF ELECTRICAL MACHINERY, APPARATUS, APPLIANCES AND SUPPLIER (cont.)				
Japan	: 370-(1)	Insulated electric cables and wires	II	796
Yugoslavia	: 370-(1)	Electric motors	II	798
Yugoslavia	: 370-(2)	Electric motors, generators, transformers, switchboards and furnaces	II	799
Yugoslavia	: 370-(3)	Electric light bulbs, small batteries and motors	II	800
Yugoslavia	: 370-(4)	Electric light bulbs and fluorescent tubes	II	801
Yugoslavia	: 370-(5)	Electric wires and cables	II	802
Yugoslavia	: 370-(6)	Electric fuses, switches, sockets, plugs, lamps and other electrical insulation materials and parts for household appliances	II	803
Yugoslavia	: 370-(7)	Electric cookers, heaters, refrigerators, washing machines, etc.	II	804
Yugoslavia	: 370-(8)	Household electric boilers and ovens	II	805
MANUFACTURE AND ASSEMBLY OF BUSES, TRUCKS AND TRUCK-TRAILERS				
Iran	: 383-(1)	Assembly of buses, mini-buses and passenger cars	III	1296
Mexico	: 383-(1)	Automobiles and trucks (light and heavy duty)	III	1300
Middle Europe:	383-(1)	Prototype internal combustion engines, electronic measuring units, research and test engines, test benches, design of factory layouts, etc.	III	1302
France	: 383-(1)	Assembly of buses and motor coaches	I	338
India	: 383-(1)	Assembly of trucks, vans, buses and cars; with manufacture of chassis and some spare parts	I	340
Israel	: 383-(1)	Bus bodies and drivers' cabins	I	342
Israel	: 383-(2)	Bus bodies and drivers' cabins	I	344
Israel	: 383-(3)	Assembly of trucks and buses	I	346
Japan	: 383-(1)	Bus bodies	I	348
Yugoslavia	: 383-(1)	Assembly of lorries and buses, with manufacture of engines and bodies	I	350
MANUFACTURE OF MOTORCYCLES AND BICYCLES				
Mexico	: 385-(1)	Production of motorcycles and bicycles	III	1306
Middle Europe:	385-(1)	Bicycles	III	1308
India	: 385-(1)	Bicycles	I	352
India	: 385-(2)	Bicycles	I	354
India	: 385-(3)	Bicycles	I	356
India	: 385-(4)	Motorcycles and scooters (complete and spare parts)	II	806
India	: 385-(5)	Bicycles	II	808
Japan	: 385-(1)	Bicycles	II	810
Japan	: 385-(2)	Bicycles	I	358
Japan	: 385-(3)	Bicycles	II	812
Yugoslavia	: 385-(1)	Bicycles	II	814
Yugoslavia	: 385-(2)	Bicycles and scooters	I	360
Yugoslavia	: 385-(3)	Motor scooters	II	816
INDUSTRY GROUPS NOT ELSEWHERE SPECIFIED				
El Salvador	: 399-(1)	Plastic table sets	III	1312
India	: 389-(1)	Wagons, with semi-finished steel products from rolling mills and foundry shop	I	362
Yugoslavia	: 393-(1)	Clocks and water gauges	II	817
Yugoslavia	: 399-(1)	Pencils, pens and other office supplies	II	818

LISTE GENERALE DES ETABLISSEMENTS

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<i>Pays</i>	<i>Classification</i>	<i>Principaux produits</i>	<i>Numéro du volume</i>	<i>Page</i>
ABATTAGE DU BÉTAIL, FABRICATION DES PRÉPARATIONS ET CONSERVES DE VIANDE				
Afrique de l'Est	: 201/203-(1)	Abattage de bœufs et mise en boîte	III	820
El Salvador	: 201-(1)	Saucisses et jambons	III	822
Europe centrale	: 201-(1)	Abattage de bœufs, de porcs, de veaux et de moutons	III	824
INDUSTRIE DU LAIT				
Mexique	: 202-(1)	Fromage, beurre, crème, etc.	III	828
Europe centrale	: 202-(1)	Lait entier en poudre, crème en poudre, lait écrémé en poudre et préparation du chocolat	III	830
Europe centrale	: 202-(2)	Fromage à pâte molle et crème épaisse	III	834
Europe centrale	: 202-(3)	Lait frais, beurre, fromage, petit lait, caillé, etc.	III	838
France	: 202-(1)	Lait, stérilisé et pasteurisé, yogourt, crème fraîche et fromage	I	16
France	: 202-(2)	Lait, stérilisé, pasteurisé et en poudre, beurre, etc.	I	18
France	: 202-(3)	Lait, beurre, crème pasteurisés, etc.	I	20
France	: 202-(4)	Lait en poudre, fromage, caséine, etc.	II	364
Inde	: 202-(1)	Lait, pasteurisé et en poudre, crème glacée, beurre et ghee	I	22
Inde	: 202-(2)	Lait, beurre, ghee, crème pasteurisés, etc.	I	24
Israël	: 202-(1)	Lait, crème, caillé, beurre stérilisés, etc.	I	26
Israël	: 202-(2)	Caillé, fromage, crème aigre, beurre, crème glacée, etc.	I	28
Israël	: 202-(3)	Crème glacée	I	30
Yougoslavie	: 202-(1)	Lait, en poudre, condensé et évaporé, œufs en poudre, etc.	I	32
Yougoslavie	: 202-(2)	Lait et œufs en poudre, fromage, beurre, etc.	I	33
Yougoslavie	: 202-(3)	Yogourt, beurre, fromage, crème glacée, etc.	I	34
Yougoslavie	: 202-(4)	Beurre, fromage et autres produits laitiers	II	366
FABRICATION DE CONSERVES ALIMENTAIRES				
Mexique	: 203-(1)	Olives et câpres en flacons, huile d'olive, potages en poudre et vinaigre	III	842
Mexique	: 203/204-(2)	Légumes, fruits et jus de fruits en boîtes	III	844
Europe centrale	: 203-(1)	Mise en boîtes et en flacons de fruits et de légumes	III	846
Europe centrale	: 203-(2)	Fruits et légumes en boîtes	III	850
Europe centrale	: 203/201-(3)	V viande, fruits et légumes en boîtes; confiture, jus de fruits, fruits congelés et produits farineux	III	854
Inde	: 203-(1)	Conserves de fruits et de légumes	I	36
Israël	: 203-(1)	Conserves de fruits et de légumes	I	38
Israël	: 203-(2)	Conserves de fruits et de légumes	I	40
Japon	: 203/4-(1)	Conserves de poissons et de fruits	I	42
Japon	: 203/4-(2)	Conserves de poissons et de fruits	I	44
Japon	: 203/4-(3)	Conserves de poissons	I	46
Yougoslavie	: 204-(1)	Conserves de poissons et farine de poisson séché	II	368
Yougoslavie	: 203/1-(2)	Traitement et conditionnement des légumes et des viandes (y compris mise en conserve)	II	369
Yougoslavie	: 203/211-(3)	Conserves de légumes, traitement des fruits et des boissons alcoolisées	II	370
TRAVAIL DES GRAINS				
Afrique de l'Est	: 205-(1)	Farine de froment	III	858
Afrique de l'Est	: 205-(2)	Farine de froment, farine de maïs, riz, etc.	III	860

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TRAVAIL DES GRAINS (suite)				
Mexique	: 205-(1)	Farine de froment et sous-produits	III	862
Europe centrale	: 205-(1)	Semoule, farine et son de froment; farine fine, farine grossière, repasses et son de seigle	III	864
Europe centrale	: 205-(2)	Farine de froment et de seigle	III	868
Europe centrale	: 205-(3)	Farine de froment et de seigle	III	872
Inde	: 205-(1)	Farine de froment (et son)	I	48
Inde	: 205-(2)	Farine de froment (et son)	I	50
Israël	: 205-(1)	Farine de froment (et son)	I	52
Israël	: 205-(2)	Farine de froment (et son)	I	54
Israël	: 205-(3)	Farine de froment (et son)	I	56
Israël	: 205-(4)	Farine de froment (et son)	I	372
Japon	: 205-(1)	Farine de froment (et son)	II	58
Japon	: 205-(2)	Farine de froment (et son)	I	60
Yougoslavie	: 205-(1)	Farine de froment (et son)	I	62
Yougoslavie	: 205-(2)	Farine de froment (et son)	I	63
Yougoslavie	: 205-(3)	Farine de froment et de maïs et produits de la farine ..	I	64
Yougoslavie	: 205-(4)	Farine de froment et produits de la farine	II	374
RAFFINERIES DE SUCRE				
Mexique	: 207-(1)	Raffinerie de sucre de canne	III	876
Mexique	: 207-(2)	Raffinerie de sucre de canne	III	878
France	: 207-(1)	Raffineries de sucre de betterave	I	66
France	: 207-(2)	Raffineries de sucre de betterave	I	68
Inde	: 207-(1)	Raffineries de sucre de canne	I	70
Inde	: 207-(2)	Raffineries de sucre de canne	I	376
Israël	: 207-(1)	Raffineries de sucre de betterave	II	72
Japon	: 207-(1)	Raffineries de sucre de canne	I	74
Japon	: 207-(2)	Raffineries de sucre de canne	I	76
Yougoslavie	: 207-(1)	Raffineries de sucre de betterave	I	78
Yougoslavie	: 207-(2)	Raffineries de sucre de betterave	I	79
Yougoslavie	: 207-(3)	Raffineries de sucre de betterave	I	80
Yougoslavie	: 207-(4)	Raffineries de sucre de betterave	II	378
Yougoslavie	: 207-(5)	Raffineries de sucre de betterave	II	379
Yougoslavie	: 207-(6)	Raffineries de sucre de betterave (et fabriques de spiritueux et liqueurs à base de sucre)	II	380
INDUSTRIES ALIMENTAIRES DIVERSES				
El Salvador	: 209-(1)	Aliments du bétail	III	880
El Salvador	: 209/203-(2)	Pâtes alimentaires, potages en poudre	III	882
INDUSTRIE DES BOISSONS HYGIÉNIQUES ET EAUX GAZEUSES				
Afrique de l'Est	: 214-(1)	Boissons hygiéniques et sodas	III	884
FILATURE, TISSAGE ET FINISSAGE DES TEXTILES				
Afrique de l'Est	: 231-(1)	Tissus de rayonne	III	886
El Salvador	: 231-(1)	Tissus de rayonne et de fibres synthétiques	III	888
El Salvador	: 231-(2)	Cotonnades et articles écrus	III	890
Mexique	: 231-(1)	Filés, tissus et couvertures de laine, etc.	III	892
Mexique	: 231-(2)	Tissus de fibres synthétiques	III	894
Mexique	: 231-(3)	Tissus de coton et de fibres synthétiques	III	896
Mexique	: 231-(4)	Sacs et cordages de fibres dures (palmiers, kenaff, chanvre, etc.)	III	898
Europe centrale	: 231-(1)	Vêtements pour hommes	III	900
Europe centrale	: 231-(2)	Doublures de rayonne, tissus de rayonne et de fibres synthétiques, rubans	III	904
Europe centrale	: 231-(3)	Filés de laine et de fibres synthétiques	III	908
Europe centrale	: 231-(4)	Filés et fils de lin	III	912
Europe centrale	: 231-(5)	Filés et fils, câblé pour pneumatiques	III	916
Europe méridionale:	231-(1)	Traitement secondaire des filés de nylon	III	920

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Europe centrale	: 319-(2)	Produits pharmaceutiques (vaso-constricteurs, anti-émétiques, analgésiques, gouttes, etc.) et cosmétiques (crèmes de beauté, produits astringents, lotions, etc.) ..	III	1096
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Inde	: 319-(11)	Savons de toilette et savons pour la lessive	II	592
Israël	: 319-(1)	Allumettes	I	170
Israël	: 319-(2)	Préparations médicinales	II	594
Israël	: 319-(3)	Préparations médicinales	II	596
Israël	: 319-(4)	Savons en poudre, produits sulfonés et détergents	II	598
Japon	: 319-(1)	Antibiotiques et diverses autres préparations médicinales	I	172
Japon	: 319-(2)	Allumettes	I	174
Japon	: 319-(3)	Allumettes et bois d'allumettes	I	176
Yougoslavie	: 319-(1)	Substances pharmaceutiques, insecticides et cosmétiques	I	178
Yougoslavie	: 319-(2)	Pénicilline, streptomycine et autres antibiotiques	I	179
Yougoslavie	: 319-(3)	Allumettes	I	180

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FABRICATION D'ALLUMETTES, PRODUITS MÉDICINAUX, SAVONS ET DÉTERGENTS, ETC. (suite)				
Yougoslavie	: 319-(4)	Savon et autres préparations pour la toilette et la lessive	II	600
Yougoslavie	: 319-(5)	Savon et autres préparations pour la toilette et la lessive	II	601
Yougoslavie	: 319-(6)	Savon et autres préparations pour la toilette et la lessive	II	602
RAFFINERIES DE PÉTROLE				
Europe centrale	: 321-(1)	Huiles et graisses lubrifiantes	III	1106
FABRICATION DE BRIQUES ET DE TUILES ET INDUSTRIES DU VERRI				
Iran	: 332-(1)	Verre à vitres, gobelets, bouteilles, articles en cristal, etc.	III	1110
Mexique	: 331-(1)	Briques et autres matériaux de construction	III	1114
Mexique	: 332-(1)	Verre plat, pare-brise plats et incurvés pour automobiles, miroirs, etc.	III	1116
Mexique	: 332-(2)	Articles en verre (récipients)	III	1118
Europe centrale	: 331-(1)	Briques, carreaux de céramique, articles en grès et carrelages pour poêles	III	1120
Europe centrale	: 331-(2)	Briques en argile réfractaire (pleines, creuses, etc.)	III	1124
Europe centrale	: 332-(1)	Bouteilles en verre, récipients en verre à large ouverture, verres de lampe, etc.	III	1128
France	: 332-(1)	Bouteilles en verre	II	604
Inde	: 331-(1)	Briques de terre réfractaire, briques isolantes, canalisations, tuyauteries d'égout et mortiers	II	606
Inde	: 331-(2)	Briques et blocs de terre réfractaire, mortiers et argile raffinée	II	608
Inde	: 331-(3)	Briques de terre réfractaire	II	610
Inde	: 331-(4)	Laine de verre, articles en terre réfractaire et canalisations en grès	II	612
Israël	: 331-(1)	Tuiles (blanches et de couleur)	II	614
Israël	: 332-(1)	Verrerie (tasses, bouteilles, etc.)	II	616
Yougoslavie	: 331-(1)	Tuiles de céramique, articles sanitaires en céramique et autres articles en céramique pour usage domestique	II	618
Yougoslavie	: 331-(2)	Briques et tuiles	II	619
Yougoslavie	: 331-(3)	Briques en argile réfractaire et autres matériaux réfractaires	II	620
Yougoslavie	: 331-(4)	Briques	II	621
Yougoslavie	: 332-(1)	Verre plat et verrerie	II	622
Yougoslavie	: 332-(2)	Récipients en verre	II	623
Yougoslavie	: 332-(3)	Articles en verre	II	624
FABRICATION DES CIMENTS (LIANTS HYDRAULIQUES)				
Afrique de l'Est	: 334-(1)	Ciment de Portland	III	1132
Iran	: 334-(1)	Ciment	III	1134
Europe centrale	: 334-(1)	Ciment et produits liants	III	1138
Europe centrale	: 334-(2)	Ciment et mélanges chaux-ciment	III	1142
Europe centrale	: 334-(3)	Ciment de Portland et clicker	III	1146
Europe centrale	: 334-(4)	Ciment et produits liants pour mortiers	III	1150
France	: 334-(1)	Ciment	I	182
France	: 334-(2)	Ciment	I	184
Inde	: 334-(1)	Ciment	I	186
Inde	: 334-(2)	Ciment	I	188
Inde	: 334-(3)	Ciment	I	190
Inde	: 334-(4)	Ciment	I	192
Inde	: 334-(5)	Ciment	I	194
Israël	: 334-(1)	Ciment	I	196
Israël	: 334-(2)	Ciment	I	198
Yougoslavie	: 334,339-(1)	Ciment et ouvrages en amiante-ciment	II	625
Yougoslavie	: 334-(2)	Ciment	II	626
Yougoslavie	: 334-(3)	Ciment	II	627
Yougoslavie	: 334-(4)	Ciment	II	628

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OUVRAGES EN BÉTON, EN AMIANTE ET EN GYPSE, ETC.				
Europe centrale	: 339-(1)	Magnésite frittée (matière réfractaire et mortiers) et briques de magnésite	III	1154
Europe centrale	: 339-(2)	Ouvrages en béton	III	1158
France	: 339-(1)	Fibres de verre (fibres de silicones pour textiles, poteaux, mèches, balles, etc.)	II	630
France	: 339-(2)	Ouvrages en béton (poutrelles, formes pour parquets préfabriqués et tuyaux de béton)	II	632
France	: 339-(3)	Ouvrages en béton (blocs, panneaux, tuyaux, matériaux de pavage, etc.)	II	634
Inde	: 339-(1)	Ouvrages en amiante-ciment (plaques, dalles, tuyaux, etc.)	II	636
Inde	: 339-(2)	Ouvrages en amiante-ciment (plaques, dalles, tuyaux, etc.)	II	638
Inde	: 339-(3)	Ouvrages en amiante-ciment (plaques, dalles, tuyaux, etc.)	II	640
Israël	: 339-(1)	Ouvrages en amiante-ciment (plaques, tuyaux et formes moulées)	II	642
Israël	: 339-(2)	Ouvrages en béton (tuyaux, traverses pour voies ferrées, poteaux et briques)	II	644
Israël	: 339-(3)	Matériaux de construction préfabriqués en béton et briques	II	646
Israël	: 339-(4)	Ouvrages en gypse-ciment (briques isolantes (son et chaleur) et éléments préfabriqués en béton)	II	648
Israël	: 339-(5)	Pavage en béton	II	650
Japon	: 339-(1)	Ouvrages en béton	II	652
Japon	: 339-(2)	Ouvrages en béton	II	654
Yougoslavie	: 339-(1)	Ouvrages en béton (poteaux, traverses, dalles, blocs, etc.)	II	656
Yougoslavie	: 339-(2)	Ouvrages en béton (poteaux, traverses, tuyaux, dalles, etc.)	II	657
Yougoslavie	: 339-(3)	Ouvrages en béton (traverses, poteaux, dalles, etc.)	II	658
Yougoslavie	: 339-(4)	Ouvrages en amiante-ciment (dalles, conduites forcées, tuyaux, etc.)	II	659
LAMINAGE, ÉTIRAGE ET MOULAGE DES MÉTAUX FERREUX				
Mexique	: 341-(1)	Ouvrages en métal laminé, étiré, forgé et moulé	III	1162
France	: 341-(1)	Pièces de forge et outils	I	200
France	: 341-(2)	Étirage (fil d'acier inoxydable)	I	202
Inde	: 341-(1)	Fonderie de fer et d'acier, avec ateliers de transformation et finition des ouvrages en métaux, fabriquant des broyeurs de canne à sucre et des moteurs électriques. .	I	204
Inde	: 341-(2)	Tubes soudés, tubes sans soudure et bandes laminées à froid	I	206
Inde	: 341-(3)	Fonderie de fer pour machines et pièces détachées (grues à bras, palans, chariots élévateurs, chariots roulants, etc.)	I	208
Inde	: 341-(4)	Fonderie de fer et d'acier, avec ateliers d'usinage fabriquant des instruments, des pièces pour le bâtiment, des boulons et des écrous, etc.	I	210
Israël	: 341/350-(1)	Fonderie de fer, avec atelier de transformation de métaux fabriquant des articles pour plombiers et du matériel sanitaire, des bétonnières, des pompes, etc.	I	212
Japon	: 341-(1)	Moulage d'acier et fonte Méchanite	I	214
Japon	: 341-(2)	Fonderie de fer et d'acier spécialisée	I	216
Japon	: 341-(3)	Fonderie de fer (châssis de machines, de moteurs, etc.)	I	218
Japon	: 341-(4)	Fonte malléable pour automobiles	I	220
Japon	: 341-(5)	Moulage de fer et d'acier (moules à lingots, supports, presses à matricer et pompes)	I	222
Japon	: 341-(6)	Tôles, tuyaux et rails d'acier	II	660

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Japon	: 341-(7)	Tuyaux et tubes en acier moulé	II	662
Yougoslavie	: 341-(1)	Fonte grise et trempée, machines-outils, accessoires fourneaux de cuisine, etc.	I	224
LAMINAGE, ÉTIRAGE ET MOULAGE DES MÉTAUX NON FERREUX				
Mexique	: 342-(1)	Production de plomb antimonial	III	1164
Europe centrale	: 342-(1)	Feuilles d'aluminium	III	1166
France	: 342-(1)	Articles en aluminium laminé et étiré (tôles fines et fortes, rouleaux, feuilles, billettes, etc.)	I	226
France	: 342-(2)	Tubes de cuivre et de laiton	I	228
France	: 342-(3)	Rubans de cuivre et de laiton	I	230
France	: 342-(4)	Tubes de cuivre et de laiton	I	232
France	: 342-(5)	Pièces moulées de métaux non ferreux	II	664
France	: 342-(6)	Pièces moulées en cuivre-aluminium	II	666
Inde	: 342-(1)	Pièces laminées en cuivre, alliages de cuivre, aluminium et alliages d'aluminium	I	234
Inde	: 342-(2)	Lingots d'aluminium	I	236
Inde	: 342-(3)	Tôles, bandes, disques, cercles et fils d'aluminium et de cuivre	II	668
Israël	: 342-(1)	Laminage de l'aluminium (feuilles, tôles, bandes et disques)	I	238
Israël	: 342/350-(2)	Tuyaux et profilés d'aluminium; fenêtres et portes en aluminium ..	I	240
Japon	: 342-(1)	Barres, baguettes, fils, tuyaux et tubes de cuivre et de laiton	I	242
Yougoslavie	: 342-(1)	Laminage et étirage du zinc et du laiton (feuilles, ban- des, barres, fils, tubes, etc.)	I	244
Yougoslavie	: 342-(2)	Étirage et moulage du zinc, du cuivre et d'autres métaux non ferreux	I	245
Yougoslavie	: 342-(3)	Laminage, étirage et moulage sous pression de l'alu- minium et de ses alliages (plaques, bandes, barres, fils, tubes, sections, etc.)	I	246
Yougoslavie	: 342-(4)	Pièces en métaux non ferreux (fils isolés, pièces en cuivre et alliages de cuivre, câbles d'acier et d'aluminium, etc.)	II	670
FABRICATION D'OUVRAGES EN MÉTAUX, À L'EXCLUSION DES MACHINES ET DU MATÉRIEL DE TRANSPORT				
Afrique de l'Est	: 350-(1)	Pointes	III	1170
Afrique de l'Est	: 350-(2)	Fabrication d'articles émaillés (appareils ménagers) ...	III	1172
El Salvador	: 350-(1)	Fils de cuivre et d'aluminium	III	1174
Mexique	: 350-(1)	Cornières, boulons, écrous en acier, fil machine, ré- servoirs, étais, etc.	III	1176
Mexique	: 350-(2)	Câbles, fils et articles en fils métalliques	III	1178
Mexique	: 350-(3)	Boîtes en fer-blanc	III	1180
Mexique	: 350-(4)	Grenaille d'acier moulée (fabriquée avec du fil d'acier).	III	1182
Europe centrale	: 350-(1)	Boîtes, boîtes avec couvercles à pression et autres ré- cipients à jeter après usage	III	1184
Europe centrale	: 350-(2)	Fils de cuivre émaillé	III	1188
Europe centrale	: 350/360-(3)	Constructions en acier de types divers, machines à vibrer par résonance, convoyeurs à tube, convoyeurs à courroie et convoyeurs à rouleaux	III	1192
Europe centrale	: 350/360-(4)	Chaudières, ponts en acier, superstructures en acier pour installations hydrauliques, machineries pour scènes de théâtre, appareillages, réservoirs, vannes, conduites forcées, autoclaves, grues, transporteurs par câbles, convoyeurs inclinés, pièces moulées en acier et en fonte grise, etc.	III	1196
Europe centrale	: 350/360-(5)	Équipements pour l'irrigation et l'agriculture, profilés en acier	III	1200
France	: 350-(1)	Articles matricés, outils et appareils de signalisation ..	I	248
France	: 350-(2)	Fils et câbles d'acier et d'aluminium (fabriqués à partir de fil machine)	I	250

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France	: 350-(3)	Pièces métalliques pour automobiles et articles de ménage	I	252
France	: 350-(4)	Radiateurs de types divers	I	254
France	: 350-(5)	Accessoires pour portes et fenêtres	I	256
France	: 350-(6)	Fils (galvanisés, gainés de cuivre, trempés, revêtus, etc.) et articles en fils (grillage pour clôture, treillis soudés, etc.)	I	258
France	: 350-(7)	Chaudières, appareillage électronique, accessoires et matériel de photographie	II	672
France	: 350-(8)	Cadres métalliques, serrurerie, menuiserie, ustensiles en zinc et en cuivre, etc.	II	674
France	: 350-(9)	Pièces découpées et matricées pour automobiles et tracteurs	II	676
France	: 350-(10)	Boulons, écrous, vis et rondelles	II	678
France	: 350-(11)	Baignoires et réservoirs de fonte	II	680
France	: 350-(12)	Meubles de bureau et fûts métalliques	II	682
France	: 350-(13)	Pièces découpées et matricées et outils métalliques	II	684
France	: 350-(14)	Arrosoirs, théières, baquets et autres articles métalliques pour la ferme et le ménage	II	686
Inde	: 350-(1)	Vis, rivets, gonds et autres articles de quincaillerie du bâtiment	I	260
Inde	: 350-(2)	Boîtes et récipients en étain	I	262
Inde	: 350-(3)	Construction, réservoirs d'emmagasinage, tuyaux, etc. (et services de pose)	I	264
Inde	: 350-(4)	Constructions (et services de pose)	I	266
Inde	: 350-(5)	Ustensiles de ménage en métal (aluminium)	I	268
Inde	: 350-(6)	Récipients, couvercles et autres objets métalliques	II	688
Inde	: 350-(7)	Récipients, bondes filetées et autres articles métalliques	II	690
Inde	: 350-(8)	Boulons, écrous et vis	II	692
Inde	: 350-(9)	Boulons, écrous, vis, rivets, clous, etc.	II	694
Inde	: 350-(10)	Articles métalliques à usage domestique (ustensiles, cercles, rivets, bandes, etc.)	II	696
Israël	: 350-(1)	Accessoires de tuyauterie et autres articles en fonte de fer et d'acier	I	270
Israël	: 350-(2)	Fils, clous et rivets	I	272
Israël	: 350-(3)	Fils, grillage et autres articles en fils métalliques	I	274
Israël	: 350-(4)	Bâtis de fenêtres et de portes en profilés d'aluminium	I	276
Israël	: 350-(5)	Tuyaux d'irrigation et accessoires, profilés d'aluminium et bâtis de portes et fenêtres en profilés d'aluminium	I	278
Israël	: 350-(6)	Accumulateurs de chaleur solaire et meubles de rangement	II	698
Japon	: 350-(1)	Tambours d'acier	I	280
Japon	: 350-(2)	Vide-ordures, écrans, tuyaux souples, gonds et chaises (en acier surtout, mais aussi partiellement en matière plastique)	I	282
Japon	: 350-(3)	Valves et bouches d'incendie	I	284
Japon	: 350-(4)	Boîtes et couvercles et récipients divers (en étain et en aluminium)	I	286
Japon	: 350-(5)	Seaux, baquets, cuvettes, etc. (en métal et en matière plastique)	I	288
Japon	: 350-(6)	Constructions en acier	I	290
Japon	: 350-(7)	Châssis en acier et en aluminium	I	292
Japon	: 350-(8)	Persiennes lourdes et légères	I	294
Japon	: 350-(9)	Câbles métalliques, torons et fils d'acier	I	296
Japon	: 350-(10)	Fils d'acier	II	700
Japon	: 350-(11)	Ressorts à boudin et ressorts plats	II	702
Japon	: 350-(12)	Articles en fer-blanc (boîtes, etc.)	II	704
Japon	: 350-(13)	Vis, boulons et écrous pour machines	II	706
Japon	: 350-(14)	Boulons et écrous	II	708

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Japon	: 350-(15)	Boulons, écrous, vis, rivets, etc.	II	710
Yougoslavie	: 350-(1)	Récipients et barils métalliques	I	298
Yougoslavie	: 350-(2)	Articles émaillés, récipients, radiateurs, chaudières, etc.	I	299
Yougoslavie	: 350-(3)	Outils agricoles à main (forgés à la main)	I	300
Yougoslavie	: 350-(4)	Outils agricoles à main (roulés et forgés)	I	301
Yougoslavie	: 350-(5)	Constructions en acier, réservoirs, grues industrielles, matériel de réfrigération, etc.	I	302
Yougoslavie	: 350-(6)	Chaînes d'acier (et pièces pour machines agricoles)	II	712
Yougoslavie	: 350-(7)	Outils agricoles à main (roulés et forgés)	II	713
Yougoslavie	: 350-(8)	Fourneaux de cuisine et récipients en fer-blanc	II	714
Yougoslavie	: 350-(9)	Radiateurs et chaudières	II	715
Yougoslavie	: 350-(10)	Hélices	II	716
Yougoslavie	: 350-(11)	Matériel et accessoires pour la cuisine et le chauffage et pour d'autres usages domestiques	II	717
Yougoslavie	: 350-(12)	Meubles métalliques	II	718
Yougoslavie	: 350-(13)	Articles spiralés, matériel scolaire et autres articles en métal ou en matière plastique	II	719
Yougoslavie	: 350-(14)	Pièces moulées et raccords pour canalisations d'eau et pièces pour machines textiles	II	720
Yougoslavie	: 350-(15)	Hélices et articles en fil de fer	II	721
Yougoslavie	: 350-(16)	Raccords, brides et autres articles de quincaillerie	II	722
CONSTRUCTION DE MACHINES, À L'EXCLUSION DE MACHINES ÉLECTRIQUES				
Iran	: 360-(1)	Réfrigérateurs à usage ménager, refroidisseurs d'eau, appareils de chauffage et de refroidissement	III	1204
Iran	: 360-(2)	Réfrigérateurs, appareils de refroidissement et de chauffage, etc.	III	1208
Mexique	: 360-(1)	Grues et presses à estamper	III	1212
Mexique	: 360-(2)	Tracteurs, semoirs, cultivateurs, herbes et autres instruments agricoles	III	1214
Mexique	: 360-(3)	Tracteurs agricoles	III	1216
Mexique	: 360-(4)	Machines agricoles, camions et tracteurs	III	1218
Europe centrale	: 360-(1)	Pompes, moteurs, dispositifs de commutation	III	1220
Europe centrale	: 350-(2)	Hacheuses-souffleuses, moissonneuses-batteuses, aracheuses de pommes de terre, matériel pour le maïs, etc.	III	1224
Europe centrale	: 360-(3)	Machines et équipement pour le traitement des matières plastiques	III	1228
Europe centrale	: 360-(4)	Machines à forger, machines à meuler à vilebrequin et machines à forer	III	1232
Europe centrale	: 360-(5)	Machines-outils universelles, machines à travailler le bois, mandrins de tours, dispositifs pour essais de dureté	III	1236
Europe centrale	: 360-(6)	Tours à revolver et à mandrin	III	1240
Europe centrale	: 360-(7)	Sièges de billes, cages à billes, roulements à billes courants, etc.	III	1244
France	: 360-(1)	Roulements à billes	I	304
France	: 360-(2)	Tours avec accessoires et pièces de rechange	I	306
France	: 360-(3)	Fraiseuses	II	724
France	: 360/381-(4)	Moteurs diesel (pour la marine et pour l'industrie)	II	726
France	: 360-(5)	Pompes et accessoires pour pompes	II	728
France	: 360-(6)	Pompes et compresseurs centrifuges	II	730
France	: 360-(7)	Matériel de contrôle et de réglage des turbines	II	732
France	: 360-(8)	Presses	II	734
Inde	: 360-(1)	Pompes centrifuges	I	308
Inde	: 360-(2)	Centrifugeuses, cristalliseurs, treuils à manivelle, etc.	I	310
Inde	: 360-(3)	Grues, treuils, mélangeurs de sable et autre matériel pour la construction	I	312
Inde	: 360-(4)	Grues, bétonnières, tuyaux, etc.	I	314

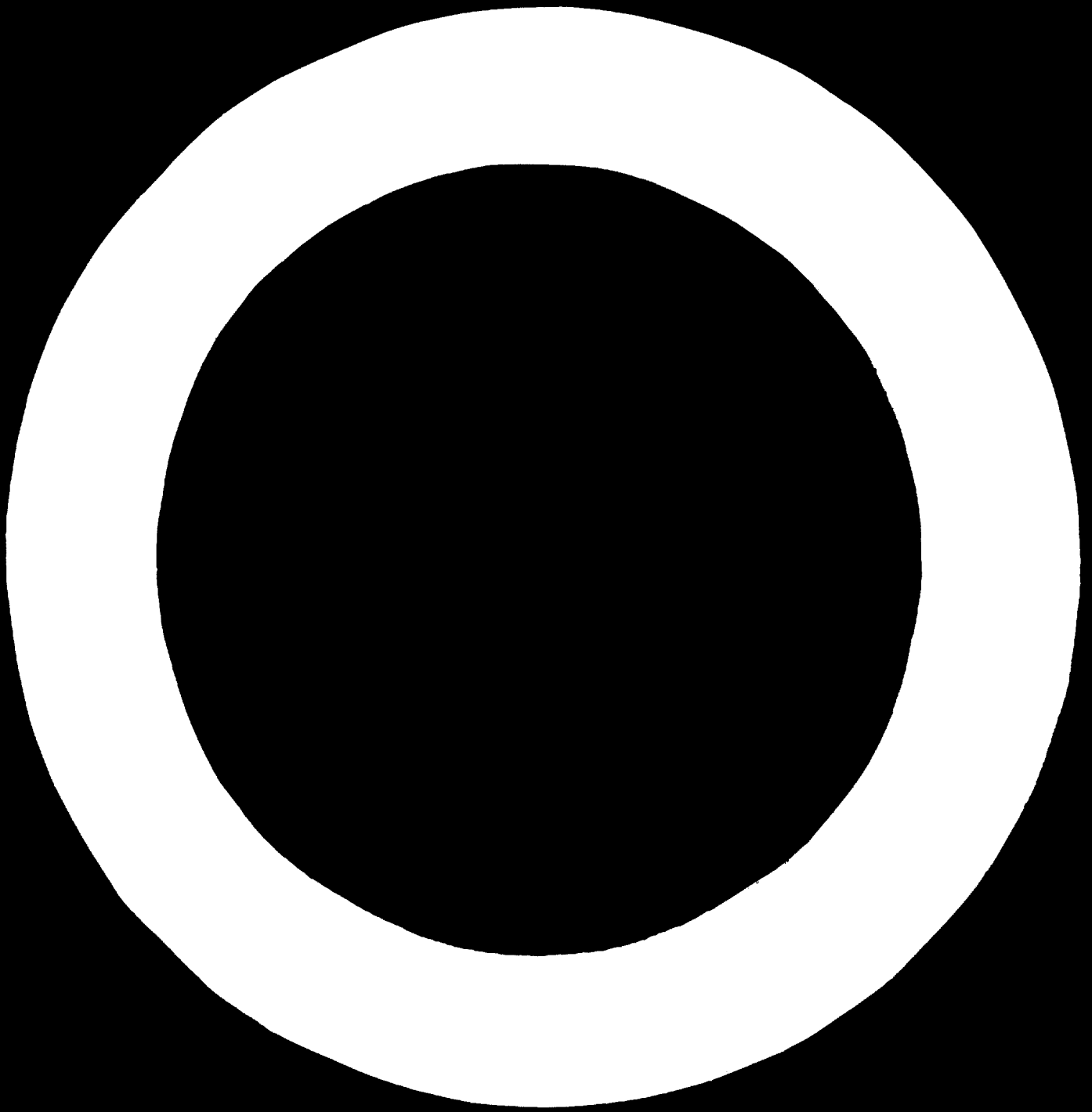
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Inde	: 360-(5)	Cultivateurs, collecteurs à poussière, batteuses et autres machines et instruments agricoles	I	316
Inde	: 360-(6)	Grües, chariots, chariots élévateurs et autre matériel de manutention	I	318
Inde	: 360/341-(7)	Moteurs diesel, métiers mécaniques, pompes agricoles et pièces moulées pour machines-outils	II	736
Inde	: 360-(8)	Remorques agricoles, herses, charrues, etc.	II	738
Inde	: 360-(9)	Tours, raboteuses, scies à ruban et articles laminés ...	II	740
Inde	: 360-(10)	Machines à coudre (complètes et pièces détachées)....	II	742
Inde	: 360-(11)	Machines à cisailer et presses mécaniques	II	744
Inde	: 360-(12)	Batteuses, vanneuses, cultivateurs et norias	II	746
Inde	: 360-(13)	Matrices, gabarits et accessoires	II	748
Inde	: 360-(14)	Tours	II	750
Inde	: 360-(15)	Constructions métalliques, réservoirs d'emmagasinage, treuils électriques, scies à ruban, machines pour raffineries de sucre et machines pour papeterie	II	752
Israël	: 360-(1)	Pompes hydrauliques et cylindres	I	320
Israël	: 360-(2)	Botteleuses de foin, semoirs en ligne, planteurs, trieuses, etc.	I	322
Israël	: 360-(3)	Semoirs, cultivateurs mécaniques et machines à récolter	I	324
Japon	: 360-(1)	Pompes	II	756
Japon	: 360-(2)	Roulements à billes, pièces pour machines, pompes et produits de la métallurgie des poudres	I	326
Japon	: 360-(3)	Charrues à moteur, pulvérisateurs, pompes, débroussailluses, etc.	I	328
Japon	: 360-(4)	Pompes de types divers	I	330
Japon	: 360-(5)	Matériel agricole (charrues tractées, chargeuses, herses, etc.)	II	758
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Yougoslavie	: 360-(1)	Coupe-fourrage	II	762
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Yougoslavie	: 360-(6)	Roulements à billes	II	336
Yougoslavie	: 360-(7)	Turbines hydrauliques, pompes à suction, moteurs diesel et autres machines et appareils à usage industriel	II	764
Yougoslavie	: 360-(8)	Moteurs diesel et tracteurs	II	765
Yougoslavie	: 360-(9)	Machines à coudre	II	766
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Iran	: 370-(2)	Récepteurs de radio et de télévision, phonographes ...	III	1252
Iran	: 370-(3)	Récepteurs de télévision	III	1256
Mexique	: 370-(1)	Ampoules électriques	III	1260
Mexique	: 370-(2)	Fils, conducteurs et câbles en métaux non ferreux ...	III	1262
Europe centrale	: 370-(1)	Accumulateurs fixes pour centraux téléphoniques et batteries pour véhicules à moteur	III	1264
Europe centrale	: 370-(2)	Câbles et lignes de transport d'énergie, câbles et lignes de télécommunication, accessoires pour câbles	III	1268
Europe centrale	: 370-(3)	Réfrigérateurs, congélateurs, machines à laver automatiques, moteurs électriques, etc.	III	1272
Europe centrale	: 370-(4)	Ampoules, tubes fluorescents, lampes de radio, fils en molybdène, etc.	III	1276

CONSTRUCTION DE MACHINES, APPAREILS ET FOURNITURES ÉLECTRIQUES (suite)

Europe centrale	: 370-(5)	Câbles sous matière plastique, lignes sous matière plastique, fils et câbles de couplage	III	1280
Europe centrale	: 370-(6)	Fils nus et isolés et tiges en métaux non ferreux	III	1284
Europe centrale	: 370-(7)	Fils de cuivre laminés (bobines)	III	1288
Europe méridionale	: 370-(1)	Dispositifs de commande électrique et pièces détachées pour l'industrie des appareils ménagers	III	1292
France	: 370-(1)	Moteurs électriques, à usage industriel ou non	II	768
France	: 370-(2)	Pincés électriques, autres appareils, machines et pièces détachées	II	770
Inde	: 370-(1)	Pupitres de commande, tableaux de distribution, fusibles à cartouches et moteurs à usage industriel	II	772
Inde	: 370-(2)	Transformateurs, dispositifs de commutation, condensateurs, moteurs, générateurs et autre matériel électrique lourd	II	774
Inde	: 370-(3)	Moteurs électriques	II	776
Inde	: 370-(4)	Câbles électriques sous papier ou chlorure de polyvinyle	II	778
Inde	: 370-(5)	Câbles électriques sous papier	II	780
Inde	: 370-(6)	Câbles électriques sous papier	II	782
Inde	: 370-(7)	Câbles et flexibles électriques sous caoutchouc ou chlorure de polyvinyle	II	784
Inde	: 370-(8)	Câbles et flexibles électriques sous caoutchouc ou chlorure de polyvinyle	II	786
Inde	: 370-(9)	Ampoules électriques	II	788
Israël	: 370-(1)	Moteurs électriques	II	790
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Japon	: 370-(1)	Câbles et fils électriques isolés	II	796
Yougoslavie	: 370-(1)	Moteurs électriques	II	798
Yougoslavie	: 370-(2)	Moteurs électriques, générateurs, transformateurs, pupitres de commande et chaudières	II	799
Yougoslavie	: 370-(3)	Ampoules électriques, petites batteries et moteurs	II	800
Yougoslavie	: 370-(4)	Ampoules électriques et tubes fluorescents	II	801
Yougoslavie	: 370-(5)	Câbles et fils électriques	II	802
Yougoslavie	: 370-(6)	Fusibles, commutateurs, douilles, fiches de connection, lampes, matériel isolant et pièces détachées pour appareils ménagers	II	803
Yougoslavie	: 370-(7)	Cuisinières électriques, radiateurs, réfrigérateurs, machines à laver, etc.	II	804
Yougoslavie	: 370-(8)	Chaudières et fours électriques à usage domestique	II	805

CONSTRUCTION ET MONTAGE D'AUTOBUS, CAMIONS ET REMORQUES POUR CAMIONS

Iran	: 383-(1)	Montage d'autobus, de minibus et d'automobiles	III	1296
Mexique	: 383-(1)	Automobiles et camions (petits et gros poids lourds)	III	1300
Europe centrale	: 383-(1)	Prototypes de moteurs à combustion interne, dispositifs électroniques de mesure, moteurs pour la recherche et les essais, bancs d'essais, conception d'usines, etc.	III	1302
France	: 383-(1)	Montage d'autobus et de véhicules à moteur	I	338
Inde	: 383-(1)	Montage de camions, camionnettes, autobus et voitures automobiles; fabrication de châssis et de certaines pièces de rechange	I	340
Israël	: 383-(1)	Carrosseries d'autobus et cabines de conduite	I	342
Israël	: 383-(2)	Carrosseries d'autobus et cabines de conduite	I	344
Israël	: 383-(3)	Montage de camions et d'autobus	I	346
Japon	: 383-(1)	Carrosseries d'autobus	I	348
Yougoslavie	: 383-(1)	Montage de camions et d'autobus et fabrication de moteurs et de carrosseries	I	350



<i>Pays</i>	<i>Classification</i>	<i>Principaux produits</i>	<i>Numéro du volume</i>	<i>Page</i>
CONSTRUCTION DE CYCLES				
Mexique	: 385-(1)	Production de motocycles et de cycles	III	1306
Europe centrale	: 385-(1)	Bicyclettes	III	1308
Inde	: 385-(1)	Bicyclettes	I	352
Inde	: 385-(2)	Bicyclettes	I	354
Inde	: 385-(3)	Bicyclettes	I	356
Inde	: 385-(4)	Motocycles et scooters (entiers et pièces détachées) ...	II	806
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Japon	: 385-(1)	Bicyclettes	I	358
Japon	: 385-(2)	Bicyclettes	II	812
Japon	: 385-(3)	Bicyclettes	II	814
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Yougoslavie	: 385-(2)	Bicyclettes et scooters	I	361
Yougoslavie	: 385-(3)	Moto-scooters	II	816
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El Salvador	: 399-(1)	Napperons en matière plastique	III	1312
Inde	: 389-(1)	Wagons et produits d'acier semi-finis des laminoirs et des installations de fonderie	I	362
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Yougoslavie	: 399-(1)	Crayons, plumes et autres fournitures de bureau	II	818

СОВДНЫЙ ПЕРЕЧЕНЬ ПРЕДПРИЯТИЙ
указанных в томах I—III

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УБОЙ, ОБРАБОТКА И КОНСЕРВИРОВАНИЕ МЯСА				
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Сальвадор	: 201-(1)	Колбасные изделия и ветчина	III	822
Центральная Европа	: 201-(1)	Убой крупного рогатого скота, свиней, телят и овец	III	824
ПРОИЗВОДСТВО МОЛОЧНЫХ ПРОДУКТОВ				
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Центральная Европа	: 202-(1)	Изготовление цельного сухого молока, крем-концентратов, сухого обезжиренного молока и шоколада	III	830
Центральная Европа	: 202-(2)	Мягкий сыр и высокожирные сливки	III	834
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Франция	: 202-(2)	Стерилизованное, пастеризованное и сухое молоко, масло и т. д.	I	1
Франция	: 202-(3)	Пастеризованное молоко, масло, сливки и т. д.	I	2
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Индия	: 202-(2)	Пастеризованное молоко, масло, топленое масло, сливки и т. д.	I	2
Израиль	: 202-(1)	Стерилизованное молоко, сливки, сухой творог, масло и т. д.	I	2
Израиль	: 202-(2)	Творог, сыр, сметана, масло, мороженое и т. д.	I	2
Израиль	: 202-(3)	Мороженое	I	3
Югославия	: 202-(1)	Сухое, сгущенное и стерилизованное молоко, яичный порошок и т. д.	I	3
Югославия	: 202-(2)	Сухое молоко и яичный порошок, сыр, масло и т. д.	I	3
Югославия	: 202-(3)	Йогурт, масло, сыр, мороженое и т. д.	I	3
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Центральная Европа	: 203-(2)	Плодоваяодные и овощные консервы	III	850
Центральная Европа	: 203/201-(3)	Мясные, плодоваяодные и овощные консервы; джем, плодоваяодные соки, мороженые овощи и мучнистые продукты	III	854
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Страна	Классификация	Основные продукты	Том №	Страница
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Югославия	: 203/211-(3)	Консервирование овощей, обработка фруктов и производство спиртных напитков	II	369
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Центральная Европа	: 205-(1)	Пшеничная крупчатка, мука и отруби; ржаная мука, мука простого помола, мелкие и крупные отруби	III	864
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Индия	: 205-(2)	Пшеничная мука (и отруби)	I	50
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Израиль	: 205-(3)	Пшеничная мука (и отруби)	I	56
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Индия	: 207-(1)	Тростниковосахарные заводы	I	70
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Израиль	: 207-(1)	Свеклосахарные заводы	II	376
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Югославия	: 207-(2)	Свеклосахарные заводы	I	78
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ПРЯДЕНИЕ, ТКАЧЕСТВО И АППАРЕТУРА ТЕКСТИЛЬНЫХ ИЗДЕЛИЙ

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Мексика	: 231-(2)	Ткани из синтетического волокна	III	894
Мексика	: 231-(3)	Хлопчатобумажные и синтетические ткани	III	896
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Европа	: 231-(1)	Ткань для мужской одежды	III	900
Центральная				
Европа	: 231-(2)	Подкладка из искусственного шелка, искусственная шелко- вая и прочая синтетическая ткань, ленты	III	904
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Европа	: 231-(3)	Аппаратная и синтетическая пряжа	III	908
Центральная				
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Европа	: 231-(5)	Пряжа и нить, шинный корд	III	916
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Индия	: 231-(5)	Хлопчатобумажная пряжа, ткань, простыни, сари и т. д. ...	I	96
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Страна	Классификация	Основные продукты	Том №	Страница
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<i>Страна</i>	<i>Классификация</i>	<i>Основные продукты</i>	<i>Том №</i>	<i>Страница</i>
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PREFACE

This is the third issue of the *Profiles* series. The preparation of the material for this Volume, as well as for Volumes I and II published earlier, received extra-budgetary financial support of the Government of Sweden. UNIDO wishes to express once again its sincere appreciation of this valuable support.

The continued work for this series was made possible also with the help of those national development institutions and individual enterprise authorities who were receptive to the objectives of the series and willingly contributed the material needed for the compilation of the *Profiles*.

UNIDO wishes to express its thanks particularly to the Federation of Industrialists and the Federal Chamber of Commerce of Austria for the hospitable climate they created in support of the *Profiles*' operations in the Central European regions. Our special thanks go also to such agencies as the Salvadorian Institute of Industrial Development, El Salvador (INSAFI), the Industrial Studies and Development Centre at Dar es Salaam, United Republic of Tanzania, and the office of ECLA (the Economic Commission for Latin America) in Mexico among others, whose active co-operation was crucial in extending the coverage of this project to the respective regions.

AVANT-PROPOS

La présente publication est la troisième de la série des *Profils*. Comme pour les volumes I et II, ses auteurs ont bénéficié, pour le rassemblement de la documentation, d'une aide financière hors budget du Gouvernement suédois, auquel l'ONUDI tient à exprimer de nouveau sa vive gratitude.

Si la publication de cette série a pu être poursuivie, c'est aussi parce que ses auteurs ont reçu l'aide des instituts nationaux de développement et des entreprises qui, favorables au but recherché, ont eu l'obligeance de leur communiquer la documentation nécessaire.

L'ONUDI tient à remercier tout particulièrement ici la Fédération des industriels et la Chambre de commerce fédérale d'Autriche de la cordiale hospitalité dont elles ont fait preuve et qui a grandement facilité les travaux nécessaires à l'établissement des *Profils* dans les régions d'Europe centrale. Elle adresse aussi ses remerciements à l'Institut du développement industriel d'El Salvador (INSAFI), au Centre d'études industrielles et du développement de Dar es-Salaam (République-Unie de Tanzanie), au bureau de la CEPAL (Commission économique pour l'Amérique latine), à Mexico, et à divers autres organismes dont la coopération active a été indispensable pour étendre ce projet aux différentes régions.

ПРЕДИСЛОВИЕ

Этот том является третьим выпуском издания „Профилы“. Подготовка материалов для настоящего тома так же, как и для ранее опубликованных томов I и II, была проведена за счет внебюджетной финансовой помощи, предоставленной правительством Швеции. ЮНИДО вновь выражает свою искреннюю признательность за эту ценную помощь.

Продолжение работы по изданию „Профилей“ стало возможным также благодаря помощи тех национальных учреждений, занимающихся вопросами развития, и тех руководителей отдельных предприятий, которые сочувственно отнеслись к целям настоящего издания и охотно предоставили необходимый материал для составления „Профилей“.

ЮНИДО выражает свою благодарность, в частности Федерации промышленников и Федеральной торговой палате Австрии, за созданную ими благоприятную атмосферу поддержки деятельности по „Профилям“ в различных районах Центральной Европы. ЮНИДО также выражает особую благодарность различным учреждениям, в том числе Сальвадорскому институту промышленного развития (INSAFI), Центру промышленных исследований и развития в Дар-эс-Саламе (Объединенная Республика Танзания) и бюро ЭКЛА (Экономическая комиссия для Латинской Америки) в Мексике. Их активная помощь сыграла решающую роль в подготовке материалов „Профилей“ о соответствующих районах.

PREFACIO

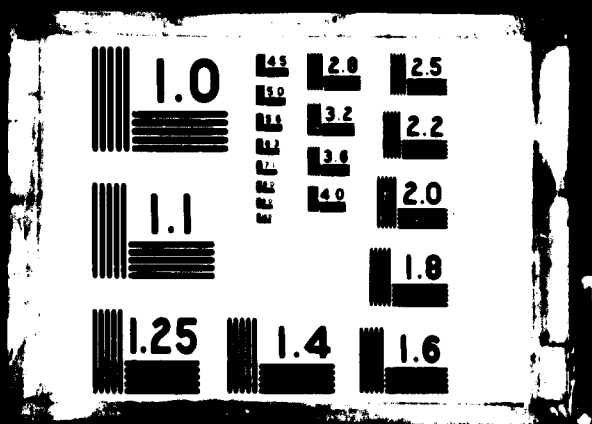
La presente publicación es el tercer volumen de la serie *Perfiles*. La documentación para este volumen, así como para los volúmenes I y II publicados anteriormente, ha podido prepararse gracias al apoyo financiero extrapresupuestario del Gobierno de Suecia. La ONUDI desea reiterar su sincero agradecimiento por esa valiosa asistencia.

Asimismo, el trabajo para la elaboración de esta serie ha sido posible gracias a la ayuda de las instituciones nacionales de desarrollo y del personal directivo de las empresas que han visto con simpatía los objetivos que persigue la serie y han facilitado gustosos el material necesario para la recopilación de los *Perfiles*.

La ONUDI desea dar las gracias en particular a la Federación de Industriales y a la Cámara Federal de Comercio de Austria por el clima acogedor que han creado para la preparación de los *Perfiles* en las regiones de Europa central. Expresamos también nuestro especial agradecimiento a organismos tales como el Instituto Salvadoreño de Fomento Industrial, El Salvador (INSAFI), el Centro de Estudios Industriales y de Desarrollo, de Dar es-Salam, República Unida de Tanzania, y la oficina de la CEPAL (Comisión Económica para América Latina) en México, entre otros, cuya activa cooperación ha sido decisiva para extender este proyecto a las regiones respectivas.

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Страна	Классификация	Основные продукты	Том №	Страница
Индия	: 300-(5)	Резиновые камеры и покрышки	II	510
Израиль	: 300-(1)	Резиновые камеры и покрышки	II	512
Югославия	: 300-(1)	Резиновые камеры, покрышки и другие резиновые изделия	II	514
Югославия	: 300-(2)	Резиновые камеры, покрышки, обувь и другие резиновые изделия	II	515
Югославия	: 300-(3)	Резиновые камеры, покрышки и другие изделия	II	516

ХИМИЧЕСКИЕ УДОБРЕНИЯ И ОСНОВНЫЕ ПРОМЫШЛЕННЫЕ ХИМИКАЛИИ

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Центральная Европа	: 311 (C.F.)-(1)	Удобрения, органические и неорганические химикалии, продукты для защиты растений, фармацевтические препараты, клеящие вещества	III	1026
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Мексика	: 311-(2)	Углекислый натрий, каустик и хлористый натрий	III	1032
Мексика	: 311-(3)	Ацетоны, кетионы и ацетаты	III	1034
Мексика	: 311-(4)	Искусственный шелк в нитях, короткое искусственное волокно, целлофан и шпильный жгут из искусственного волокна	III	1036
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Центральная Европа	: 311-(2b)	Растворители, неорганические и органические реактивы и т.д.	III	1052
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Франция	: 311 (C.F.)-(1)	Аммиачная селитра (из природного и нефтезаводского газа)	I	132
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ПРОИЗВОДСТВО И СБОРКА АВТОБУСОВ, ГРУЗОВЫХ АВТОМОБИЛЕЙ И ПРИЦЕПОВ

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ГРУППЫ ПРОИЗВОДСТВ, НЕ ПОДПАДАЮЩИЕ ПОД ПРИНЯТУЮ КЛАССИФИКАЦИЮ

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Francia	: 202-(1)	Leche esterilizada y pasteurizada, yogur, crema fresca y quesos	I	1
Francia	: 202-(2)	Leche esterilizada, pasteurizada y en polvo, mantequilla, etc.	I	1
Francia	: 202-(3)	Leche pasteurizada, mantequilla, crema, etc.	I	2
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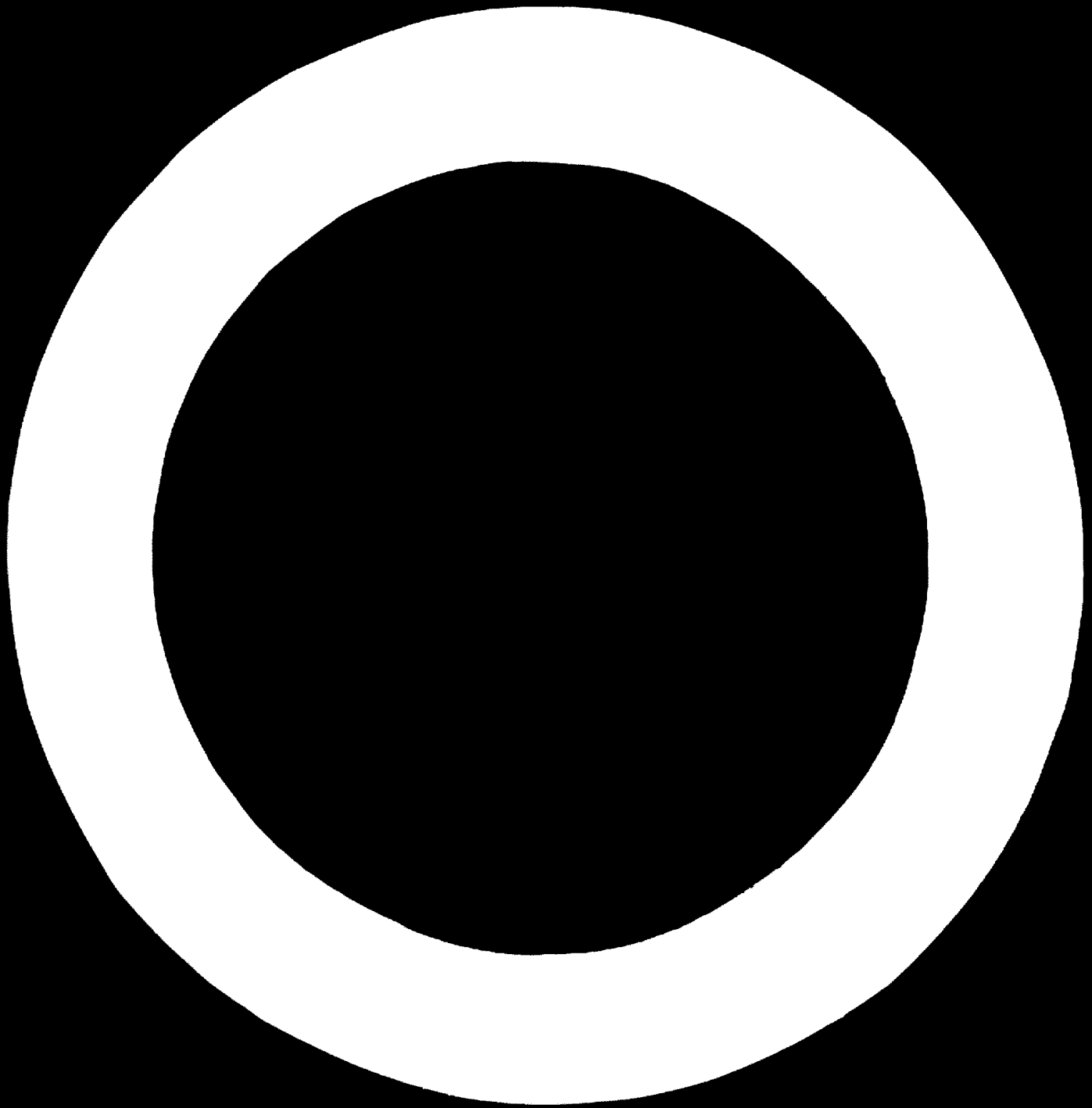
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India	: 360-(9)	Tornos, cepilladoras, sierras de cinta y productos laminados	II	740
India	: 360-(10)	Máquinas de coser (y piezas para máquinas de coser)	II	742
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India	: 360-(12)	Trilladoras, aventadoras, cultivadoras y norias	II	746
India	: 360-(13)	Moldes, matrices y accesorios	II	748
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India	: 383-(1)	Montaje de camiones, furgonetas, autobuses y automóviles, y fabricación de chasis y de algunas piezas de repuesto	I	340
Israel	: 383-(1)	Carrocerías de auto y cabinas de conductor	I	342
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India	: 385-(1)	Bicicletas	I	352
India	: 385-(2)	Bicicletas	I	354
India	: 385-(3)	Bicicletas	I	356
India	: 385-(4)	Motocicletas y motonetas (completas y piezas de re- puesto)	II	806
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Japón	: 385-(3)	Bicicletas	II	814
Yugoslavia	: 385-(1)	Bicicletas	I	360
Yugoslavia	: 385-(2)	Bicicletas y motonetas	I	361
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Yugoslavia	: 393-(1)	Relojes y contadores de agua	II	817
Yugoslavia	: 399-(1)	Lápices, plumas y otros materiales de oficina	II	818



MAJOR PRODUCTS: Slaughtering and beef canning. By-products are fat, soups, hides, etc. In 1966 total value of production amounted to approximately US\$7.7 million on 1-shift operation (by-products: 3 shifts).

REPORTING UNIT: A one-establishment enterprise under mixed private and governmental ownership; foreign participation: 49%; founded in 1950.

I. FIXED CAPITAL ASSETS (in 000 US \$)		Year of compl.	Orig. purchase value	Replacement value
(End of 1966)				
1. Primary process equipment				
total:			1,301	
- Process equipment			1,301	
- Hand tools and apparatuses				
- Cost of installation			incl.	
2. Primary industrial building				
total:			1,315	
(total floor space: .. m ²)				
3. Auxiliary facilities				
total:			106	
- Water, steam, electricity, cooling and storing				
- Transportation facilities (total load: .. t)			106	
- Administrative facilities				
- Laboratory facilities				
TOTAL PHYSICAL FIXED CAPITAL ASSETS (incl. land):				
			2,722	
4. Other fixed capital assets				
total:			131	
- Land (total acreage: .. m ²)				
- Land improvements			131	
		Year of inst.	Orig. purchase value	Replacement value

DETAIL OF 1.1. (supplier):

Killing and trimming dept.
- Knocking boxes, etc. } Imported from United Kingdom, Federal Republic of Germany, Belgium and France.

Canning dept.
- Seaming machines
- six "402" machines \$70,000 each } Total: US \$ 1,301,000 including transport and installation costs.

Sterilising dept.
- Carton closing machines

By-product dept.
- Soupstake
- Clarifying apparatus, etc.

History of investment.
The construction of the factory was started in 1950; the first trial as well as commercial production in 1951. Continued investments have been made every year since 1951 under 3-year investment plans provided by the overseas parent company.

Foreign participation.
The overseas parent company provides skilled personnel (management) on the basis of an agreement; this is, however, considered as a disadvantage from the standpoint of localisation of managerial personnel. The products are sold with international brand names, backed up by a large overseas marketing network.

Annual production programmes are given by the parent company. Currently there is a training programme for local workers.

GENERATING EQUIPMENT:		
- Electric motors: (124)	544 kW	Generating equipment: - installed capacity: - kW

TRANSPORT: Long distance (road transport): poor, because of the long rains; local area: fair.

UTILITIES: Electricity, water and gas all fair.

COMMUNITY: Residential, health and recreational, educational, all fair.

II. INVENTORY AND WORKING CAPITAL (in 000 US \$)		Actual value	Actual value
(End of 1966)			
1. Inventories			
total:		1,197	
- Production materials			
- Other input materials		1,197	
- Work-in-process			
- Finished products			
2. Liquid assets			
total:			1,016
- Cash (hand/bank)			934
- Market sec. & bonds			-
- Short-term investment			-
- Prepaid expenses			-
- Accounts receivable			95
3. Desired working capital		No. of months	Value
total:			1,820
- Production materials (net)			
- Other input materials for sterilisation			1,820
- Work-in-process			
- Finished products			
- Wages and salaries			

III. MANNING TABLE (1966 average)				
	Total	1st shift	2nd shift	3rd shift
TOTAL EMPLOYED:	1,062	992	35	35
1. Primary operative shops	788	283	435	35
- Killing and trimming	215	36	180	-
- Canning	195	170	25	-
- Steriliser	165	15	150	-
- By-products	210	60	90	35

	Total	1st shift	2nd shift	3rd shift
2. Auxiliary operative units	172	172	-	-
- Repair and maintenance and utilities control	61	61	-	-
- Product and material storage	10	10	-	-
- Off-site transport	20	20	-	-
- Guards, cleaners, etc.	30	30	-	-
- Compound office (bush clearing, sanitation, general estate maintenance)	41	41	-	-
- Mechanical shop	-	-	-	-
3. Auxiliary non-operative units	102	102	-	-
- Production management	27	27	-	-
- Research and development	4	4	-	-
- Sales unit	-	-	-	-
- Accounting	-	-	-	-
- General administration	24	24	-	-
- Training for localisation programme	47	47	-	-

CAPACITY OF OPERATIVE SHOPS:	
* Season February - November.	
Actual number of days varies.	

SLAUGHTERING CAPACITY (cattle): During the high season (February - November): 800 heads/day (24 hours); 500 heads on Saturday. However, cattle supply limitation is said to be approximately 130,000 heads per annum.

The capacity of the canning and other departments is linked to the slaughtering capacity.

WORKING TIME FOR OPERATIVE SHOPS:	
- Normal hours/day: 8	hours
- Normal days/year: 8	days
- Actual hours/year: *	hours

Страна	Классификация	Основные продукты	Том №	Страница
Мексика	: 319-(2)	Медицинские препараты для людей и животных (антибиотики и другие вещества)	III	1088
Мексика	: 319-(3)	Восковые и обычные спички	III	1090
Центральная Европа	: 319-(1)	Мыло, моющие и косметические средства	III	1092
Центральная Европа	: 319-(2)	Фармацевтические продукты (сосудосуживающие, противорвотные и болеутоляющие средства, капли и т.д.) и косметические средства (кремы и тонирующие средства для кожи, лосьоны и т.д.)	III	1096
Центральная Европа	: 319/350-(3)	Спички (также производит крепежные изделия и другие металлические принадлежности для литья в постоянные формы и инъекционного прессования)	III	1100
Южная Европа	: 319-(1)	Органические соединения — промежуточные фармацевтические препараты	III	1104
Индия	: 319-(1)	Спички	I	166
Индия	: 319-(2)	Тинктура, галеновые препараты, витамины для инъекций и другие лекарственные средства	I	168
Индия	: 319-(3)	Спички	II	576
Индия	: 319-(4)	Спички	II	578
Индия	: 319-(5)	Спички	II	580
Индия	: 319-(6)	Медицинские препараты (витамины, антибиотики, мази, сиропы и т.д.)	II	582
Индия	: 319-(7)	Медицинские препараты (витамины, гормоны, всprыскиваемые препараты, тинктура и т.д.)	II	584
Индия	: 319-(8)	Медицинские препараты (абрамицин, синтомицин и т.д.)	II	586
Индия	: 319-(9)	Медицинские препараты (бруцин, эфедрин, стрихнин и т.д.)	II	588
Индия	: 319-(10)	Мыло, глицерин и жирная кислота	II	590
Индия	: 319-(11)	Хозяйственное и туалетное мыло	II	592
Израиль	: 319-(1)	Спички	I	170
Израиль	: 319-(2)	Медицинские препараты	II	594
Израиль	: 319-(3)	Медицинские препараты	II	596
Израиль	: 319-(4)	Мыльный порошок, сульфокислота и моющие средства	II	598
Япония	: 319-(1)	Антибиотики и другие различные медицинские препараты	I	172
Япония	: 319-(2)	Спички	I	174
Япония	: 319-(3)	Спички и спичечная соломка	I	176
Югославия	: 319-(1)	Фармацевтические материалы, инсектициды и другие косметические средства	I	178
Югославия	: 319-(2)	Пенициллин, стрептомицин и другие антибиотики	I	179
Югославия	: 319-(3)	Спички	I	180
Югославия	: 319-(4)	Мыло и другие моющие и туалетные средства	II	600
Югославия	: 319-(5)	Мыло и другие моющие и туалетные средства	II	601
Югославия	: 319-(6)	Мыло и другие моющие и туалетные средства	II	602

НЕФТЕПЕРЕРАБАТЫВАЮЩИЕ ЗАВОДЫ

Центральная Европа	: 321-(1)	Смазочные масла и консистентная смазка	III	1106
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КИРПИЧ, ЧЕРЕПИЦА, СТЕКЛО И ИЗДЕЛИЯ ИЗ СТЕКЛА

Иран	: 332-(1)	Оконное стекло, высокие стаканы, бутылки, изделия из хрустала и т.д.	III	1110
Мексика	: 331-(1)	Кирпич и другие строительные материалы	III	1114
Мексика	: 332-(1)	Оконное стекло, плоские и закругленные ветровые стекла для автомашин, зеркала и т.д.	III	1116
Мексика	: 332-(2)	Стекланные изделия, банки	III	1118
Центральная Европа	: 331-(1)	Кирпич, керамические плитки, керамические изделия и печной кафель	III	1120
Центральная Европа	: 331-(2)	Огнеупорный кирпич (сплошной, пустотелый и т.д.)	III	1124

IV. ANIMAL PRODUCTION (in 000 US \$)

Products (or group of products)	Yr. of first prod.	Quantity produced		Nominal capacity utilized	Unit price or factory output (US \$)	Total production value
		1966	1965			
Canned meat		6,605			82.9	5,475
Beef extract		204			581.1	119
Bone soup		617		See capacity utilization below	244.7	65
Beef fat (edible)		267			120.5	37
Tallow (inedible)		204			62.7	131
Meats (bone, meat, liver)		2,085			369.3	559
Cattle hides		1,513				1,267
Other by-products						
Total value of production						7,697

Remarks: 90-95% of the output is exported through the international marketing channels of the overseas parent company. Meats (bone, meat and liver) are mainly consumed locally. Exports of meat products are subject to 3% export tax.

Commercial imports: Imports of similar products from abroad are subject to 37.5% import tariff (relative to f.o.b. price).

Capacity utilization: With full 3-shift 7 days week operation throughout the year, maximum number of cattle heads that can be processed in this establishment would be about 215,000. Due to the supply limitation, only 1 shift is working, processing 94,480 heads in 1966. If 1 shift operation is considered normal, however, the capacity of this establishment is fully utilized.

From 1966

VI. VALUE ADDED (in 000 US \$)

1966	Value
1. Wages & salaries	
- Employees in direct production (960 persons)	148
- Other employees (102 persons)	113
2. Other payments for employees	58
3. Annual depreciation	139
4. Rentals paid	-
5. Interests and royalties	18
6. Sales tax	-
7. Other ind. bus. tax (-) subsidize	134
8. Corporate income before tax	244
TOTAL VALUE ADDED:	1,379

VII. EMPLOYMENT RATES (in US \$)

Year of 1966	No. of empl.	Average output per empl.
1. Local non-operative total:		
- Managers		
- Engineers		
- Technicians		
- Accountants		
- Sales officers		
- Clerks and typists		
2. Local operative total:		
- Supervisors	60	18.8
- Foremen		
- Machine operators		
- Craftsmen		
- Truck drivers		14.8
- Semi-skilled operat.		
- Unskilled operat.		
- Part-time operat.		
3. Foreign employees total: (all non-operative)		
	40	

Value of consumption

1. Other materials and supplies total:	1,496
- Packaging material (bags, metal containers, paper boxes)	1,496
4. Business services purchased total:	372
- Transport, storage and insurance	20
- Comm. adv. and other business net.	352
5. Work performed by sub-contractors total:	-
TOTAL VALUE OF CONSUMPTION:	6,798

V. VALUE OF CONSUMPTION (in 000 US \$)

1966	Quantity consumed	Unit price	Tariff rate	Total consumption value
1. Energy and water				
- Electricity	000 kWh	1,350.60	-	135
- Liquid fuels:				
Fuel oil	1	3,680,172	-	52
Lubricants	1	7,500	-	41
2. Raw materials				
Cattle	heads	44,421	-	4,272
Frozen fat	kg	9,298	100	1,111
Paramei colouring	kg	4,948	100	11
Hackney essence (hydrolysed protein)	kg	12,479	100	7
Wheat flour	kg	135,654	-	11
Sugar	kg	4,251	-	1
Salt	kg	1,192,154	100	28
Sodium sulfite/bisulfite	kg	21,287	-	1

* The tariff value of salt includes 2% ad valorem tariff.

VIII. CHARACTERISTICS OF THE HERDS IN THE COUNTRY (in US \$)

1966	No. of establs.	No. of animals	Avg. U.S. \$ per head	1965-66	
				Avg. gross prod. val./gross prod.	Avg. net prod. value
10 - 19	35	495			
20 - 49	47	1,465			
50 - 99	26	1,585			No data available
100 - 499	17	3,689			No data available
over 500	2	2,382			No data available
total	127	2,821	48	4,000	

2. Size groups by scale of production of establishments	
up to	No data available.
100 - 200	
200 - 300	
300 - 400	
400 - 1,000	
1,000 - 4,000	
over 4,000	
total	

IX. SUPPLIES

Commercial policies:
Policies warranting better holding grounds for cattle are desired.

Major Products: Sausages and ham. Capable of producing annually 316 t of meat products in one-shift operation.

Reporting Unit: A one-establishment enterprise, private corporation, no participation of foreign capital. Exports.

I. FIXED CAPITAL ASSETS

(End of 1967)		Year of installation	Orig. purchase value USD US \$	Replacement value USD US \$
1. Primary process equipment				
TOTAL				
- Process equipment			47	51
- Hand tools & apparatuses		various	0.2	0.2
- Cost of installation			5	5
2. Primary industrial building				
TOTAL				
(total floor space: 478 m ²)		1966	39	39
3. Auxiliary facilities				
TOTAL				
- Water, steam, electricity, cooling & storing		1966	5	6
- Transportation facilities			-	-
- Administrative facilities			2	3
- Laboratory facilities			-	-
TOTAL PHYSICAL FIXED CAPITAL ASSETS including land:				
			91	96
4. Other fixed capital assets				
TOTAL				
- Land (total acreage: 2,649 m ²)			4	5

DETAIL OF PROCESS EQUIPMENT (m.t.)	Supplier country	Year of installation	Orig. purchase value USD US \$	Replacement value USD US \$
- Cutters	2 FR.Germ.	1965	4.5	4.7
- Slicing machine	1 USA	"	2.8	3.3
- Vacuum packing machine	1 FR.Germ.	"	1.6	1.7
- Slicing machine	1 FR.Germ.	"	3.0	3.2
- Sealing machine	1 "	"	0.7	0.7
- Cold rooms	"	"	10.8	11.8
- Processors	"	"	2.6	2.8
- Electrical motors	"	"	0.7	0.8
- Auxiliary equipment	"	"	14.5	16.0
- Chipper machine	"	"	2.6	2.8

HISTORY OF INVESTMENT:

Construction of the factory started in 1965. The first trial as well as commercial production started in 1966. Profits accrued in the same year after utilizing 60% of capacity. No significant investments have been made since that period.

CAPACITY POWER:

Process equipment: - MW
Generating equipment installed capacity: - kVA

EXTERNAL CONDITIONS:

Transport: Long distance, excellent; local area, fair.

Utilities: Electr. ity, excellent; water, fair.

Community: Residential, fair.

II. INVENTORIES AND WORKING CAPITAL

in USD US \$

(End of 1967)		Actual value	2. Liquid assets	Actual value
1. Inventories				
TOTAL				
- Production materials		-	- Cash (hand/bank)	-
- Other input materials		-	- Market, sec. & bonds	-
- Work-in-process		-	- Short-term investment	-
- Finished products		-	- Prepaid expenses	-
		-	- Accounts receivable	-
3. Desired working capital				
TOTAL				
	Number of units	Value		
- Production materials	1 month	8		
- Work-in-process	1 day	0.5		
- Finished products	1 week	3		
- Wages & salaries	-	-		
- Other special items	-	-		

III. MANAGING TABLE

(number of persons)

A - Total
B - Other operators

(1967 average)	Total	In shift		Out shift A+B	Out shift A+B
		A	B		
ALL SHOPS & UNITS:					
16	16	-	-	-	-
1. Primary operative shops					
13	9	4	-	-	-
Labourers					
13	9	4	-	-	-
2. Auxiliary operative units					
1	1	-	-	-	-
- Repair and maintenance	-	-	-	-	-
- Mechanical shop	-	-	-	-	-
- Utilities control	-	-	-	-	-
- Product & material storage	-	-	-	-	-
- Off-site transport	-	-	-	-	-
- Guards, cleaners, etc.	1	1	-	-	-
3. Auxiliary non-operative units					
2	2	-	-	-	-
- Production management	1	1	-	-	-
- Research & development	-	-	-	-	-
- Sales unit	-	-	-	-	-
- General administration	1	1	-	-	-

WORKING TIME PER OPERATIVE WORKER:

Normal hours/day: 8 hours Normal days/year: 260 days
Actual hours/year: 2,080 hours

CAPACITY OF OPERATIVE SHOPS:

IV. ANNUAL PRODUCTION

(1967)	V. of Prod. Unit	Quantity produced		(*) Normal capacity output	Unit price in factory (US \$)	Total production value (1000 US \$)
		Unit	Output			
Products for group of products						
- Hot dogs	1966	lbs	73,600	122,667	0.38	28
- Bologna	"	"	51,400	85,667	0.37	19
- Ham	"	"	20,500	34,165	1.09	22
- Miscellaneous	"	"	251,960	391,601	0.36	91
TOTAL VALUE OF PRODUCTION						160

(*) based on one-shift operation

VI. VALUE ADDED

(1967)	Value (1000 US \$)
1. Wages & salaries	
- Employees in direct production (13 persons)	9
- Other employees (3 persons)	10
2. Other payments for employees	1
3. Annual depreciation	12
4. Rents paid	-
5. Interest & royalties	4
6. Sales tax	-
7. Other incl. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	6
TOTAL	42

CAPACITY UTILIZATION:

In order to utilize the total capacity additional 72-man hours per day would be required.

COMPETITIVE IMPORTS:

The following tariff rates are imposed on imported meat products like:

	Hot dogs and Bologna	Ham
Tariff rate per 1000 kg + ad valorem	US \$ 0.90 30%	" " 1.00 30%

EXPORTS:

Product	Percentage of total production
Hot dogs	25%
Bologna	4%
Ham	15%
Miscellaneous	15%

Unit price f.o.b. (US \$)

Hot dogs	0.38
Bologna	0.37
Ham	1.09
Miscellaneous	0.36

VII. MONTHLY EARNING RATES

(End of 1967)	No. of emp.	Average earning rate (US \$)
1. Local non-operative	2	380
TOTAL:		
- Managers	1	600
- Engineers	-	-
- Technicians	-	-
- Accountants	-	-
- Sales officers	-	-
- Other professional staff	-	-
- Clerks & typists	1	160
2. Local operatives	14	59
TOTAL:		
- Supervisors	-	-
- Foremen	-	-
- Machine operators	9	66
- Craftsmen	-	-
- Truck drivers	-	-
- Other full-time operatives	4	38
- Unskilled & part-time operatives	1	80
3. Foreign employees	-	-
TOTAL:		

V. ANNUAL CONSUMPTION

(1967)	Quantity consumed		Value		Total consumption value (1000 US \$)
	Unit	Purchase	Yearly use	US \$	
1. Energy and water					2
TOTAL:					
- Electricity	000 Kwh	81.7			2.2
- Firewood	t	10			0.2
- Liquid fuels and lubricants	m3	0.38			0.1
2. Production materials			per gross kg	ad val.	110
TOTAL:					
- Meat	lbs	291,800	US \$ 0.6	10%	104
- Ice	"	115,400	"	"	1
- Sugar	"	1,200	"	"	0.1
- Salt	"	4,700	"	"	0.1
- Condiments	"	2,100	" 0.5	25% (100% imported)	2
- Others	"	"	US \$ 0.5	25% (100% imported)	3

(a) All packaging materials and 50% of parts and supplies for equipment maintenance are imported.

3. Other materials & supplies	Total consumption value (1000 US \$)
TOTAL:	3
- Packagings (celloph. and polyth.bags)(a)	2.5
- Repair & maintenance (*)	0.4
- Non-factor service inputs	0.2
4. Business services purchased	3
TOTAL:	
- Transport, storage & insurance	0.3
- Communication, advertisements, etc.	3.1
5. Work performed by sub-contractors	-
TOTAL:	118

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1967)	Industry group:	(SIC:)			
1. Size groups by number of persons employed:	Number of estab.	Number of emp.	Avg. W. & S. per emp. (US \$)	Avg. gross prod. val. per emp. (US \$)	Avg. emp. gross prod. ratio* (%)
up to					
No data available.					
TOTAL					
2. Size groups by value of annual production (1000 US \$):					
up to					
TOTAL					

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

Major Products: Slaughtering of cattle, pigs, calves and sheep. Capable of producing annually about 1,600 t of beef, 1,150 t of pork, 85 t of veal and 90 t of mutton based on 1-shift operation.

Reporting Unit: A one-establishment enterprise; founded in 1964; co-operative society; exports; excellent location concerning supply with cattle and distribution of meat; 23 employees.

I. FIXED CAPITAL ASSETS

(End of 1968)	Original purchase value 1000 US \$	Replacement value 1000 US \$	Avg. age (Yrs.)
1. Primary process equipment (including installation cost) TOTAL:	189	339	
- Process equipment *	189	339	4
- Hand tools & apparatus	-	-	-
2. Buildings TOTAL:	258	344	
- Primary industrial buildings (total floor space: 1,363 m ²)	177	236	4
- Auxiliary buildings	29	39	4
- Warehouses	-	-	-
- Office administration buildings } - Housing }	52	69	4
3. Auxiliary facilities (excl. buildings) TOTAL:	88	97	
- Internal power equipment	10	15	4
- Laboratory facilities	3	4	4
- Means of transportation	69	70	3
- Office equipment	6	8	4
TOTAL PHYSICAL FIXED ASSETS (excluding land):	535	780	
4. Other fixed capital assets TOTAL:	19	29	
- Land (total acreage: 5,962 m ²)	-	-	-
- Land improvements (t.acr. 1,634 ")	19	29	-
- Others	-	-	-

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII).

II. MONTHLY GROSS WAGES AND SALARIES

(1968 monthly average)	Number of persons				
	up to 100 100 USD	100-140 140 USD	140-160 160 USD	160-240 240 USD	240-560 560 USD
1. Local non-operatives					
- Managers	-	-	-	-	1
- Engineers	-	-	-	-	-
- Technicians	-	-	-	-	-
- Accountants	-	-	-	-	-
- Sales officers	-	-	-	3	2
- Clerks and typists	-	-	2	1	-
2. Local operatives					
- Supervisors	-	-	-	-	1
- Foremen	-	-	-	-	-
- Skilled operatives	-	-	-	-	-
- Machine operators	-	-	-	-	5
- Craftsmen	-	-	-	3	1
- Truck drivers	-	-	-	2	1
- Unskilled operatives	-	-	-	1	-
- Other full-time operatives	-	-	-	-	-
- Part-time operatives	-	-	-	-	-
3. Foreign employees					
- Managerial staff	-	-	-	-	-
- Technical staff	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-

EXTERNAL CONDITIONS:

Transport:	external long distance	excellent
	internal long distance	"
	local and city	insignificant
Utilities:	electricity	fair
	water	excellent
	gas	insignificant
Community:	residence	excellent
	health and recreation	fair
	education	insignificant
Own Welfare Facilities:		-

IV. MANNING TABLE

(1968 average)	Number of persons				
	Total	A	B	C	D
ALL SHOPS & UNITS:	23	12	11	-	-
1. Primary operative shops	8	-	5	3	-
- All shops	8	-	5	3	-
(Three-phase processing) (*)					
(*) This process is applied, except for eight technical modifications, for the slaughtering of pigs, cattle, and calves.					
2. Auxiliary operative units	5	2	3	-	-
- Repair & maintenance	2	1	1	-	-
- Mechanical shop	-	-	-	-	-
- Tooling shop	-	-	-	-	-
- Utilities control	-	-	-	-	-
- Product & materiel storage	-	-	-	-	-
- Off-site transport	3	1	2	-	-
- Guards, cleaners, etc.	-	-	-	-	-
3. Auxiliary non-operative units	10	10	-	-	-
- Production management	1	1	-	-	-
- Research & development	-	-	-	-	-
- Sales unit	5	5	-	-	-
- Accounting	-	-	-	-	-
- General administration	4	4	-	-	-

III. INVENTORIES

(End of 1968)	Actual value 1000 US \$	Number of months
Inventories TOTAL:	58	
- Production materials (*)	-	-
- Other input materials	-	-
- Work-in-process (**)	31	0.5
- Finished products	27	1
(*) No storage due to continuous supply of raw material.		
(**) Frozen meat.		

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	
Shift hours/day	11 (*)	-	-	hours
Actual hours/year	2,860	-	-	hours
Actual days/year	260	-	-	days
(*) Actual shift hours due to overtime. Normal working time 9 hrs/day.				

V. ANNUAL PRODUCTION

(1968)	Yr. of first prod.	Quantity produced		Av. unit price on factory (US \$)	Total output value (USD US\$)
		Units	Quantity		
Beef	1965	t	1,500	1,135.3	1,703
Pork	"	"	1,040	850	884
Veal	"	"	78	1,487.2	116
Mutton	"	"	80	962.5	77
Revenue from commission work	-	-	-	-	4
Other revenue, e.g. freight charges	-	-	-	-	51
Note: Revenue from sales of waste is already included in the total output value					
TOTAL VALUE OF PRODUCTION:					2,835

VI. VALUE ADDED

(1968)	Total value (USD US \$)
1. Annual wages & salaries:	
- Operative workers (11 persons)	23
- Non-operative workers (12 persons)	41
2. Other payments for employees	10
3. Annual depreciation:	17
- Machinery & equipment	12
- Buildings & other facilities	4
- Non-physical capital assets	1
4. Rentals paid	-
5. Interest & royalties	16
6. Sales tax	26
7. Other indirect business taxes (*)	2
8. (-) Subsidies	-
9. Corporate income before tax	27
(*) transportation tax and car tax	162
TOTAL VALUE ADDED:	283

DESCRIPTION OF MAJOR PRODUCTS:

The establishment only sells halves (pigs) and quarters (cattle) of slaughtered animals.

MARKET ASPECTS:

Re-sales:

Annual turnover amounts to US \$ 11.6 million and includes purchases as well as sales of domestic cattle, breeding cattle, and fat stock. Some cattle is raised on own farm. 24,000 heads of cattle, 32,000 pigs and 8,000 calves are traded annually.

Consumers of products:

Meat processing industry, butchers, restaurants, hotels, etc.

Sales organization:

Approx. 85% of production is delivered by own refrigerated trucks, the rest is picked up by the customers themselves.

Share in the domestic market:

Not determinable since there are too many slaughter-houses in the country.

Competition in the market:

Keen price and quality competition, as at present supply exceeds demand.

EXPORT:

Total annual export: US \$ 640,000.

Major products	To Western countries	To Eastern countries	To Developing countries
Fresh meat (cooled)	100%	-	-

Export price policy:

The government grants export licenses for a monthly export of 40 - 50 t of fresh meat.

Governmental policies:

The government subsidizes exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under VI.6. has been adjusted accordingly.

VII. ANNUAL CONSUMPTION

(1968)	Quantity consumed		% Import	Average import price	Total consumption value (USD US \$)
	Units	Quantity			
1. Energy and water					
TOTAL:					15
- Electricity	000 kWh	470			7
- Diesel oil	t	70			6
- Fuel oil	t	68			2
- Water (*)	000 m3	8			-
(*) internally supplied					
2. Production materials					
TOTAL:					2,616
- Cattle	pcs.	4,946	-	-	1,600
- Pigs	"	12,839	-	-	828
- Calves	"	1,384	-	-	111
- Sheep	"	5,200	-	-	77

3. Other materials & supplies

TOTAL:	Total consumption value (USD US \$)
TOTAL:	10
- Packaging material (containers, paper, etc.)	2
- Parts, supplies & services	5
- Other materials & supplies	3

4. Business services purchased

TOTAL:	Total consumption value (USD US \$)
TOTAL:	32
- Transportation, storage & insurance	7
- Communication, advertising & other business services	25

5. Work performed by subcontractors

TOTAL:	Total consumption value (USD US \$)
TOTAL:	-
TOTAL VALUE OF CONSUMPTION:	2,673

VII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT E.T.:	Number	Original Purchase Value (\$00 US \$)	Replacement value (\$00 US \$)	Av. Age (yrs)	Remarks		Daily running time	Capacity output		
					III: Purchased assembled	IV: Obsolete				
Overhead track rail	1	66	112	4		Austria	8 hrs	..		
Picking machine	1							"	2 x a week/6 hrs	35 pigs/hr
Cut cleaning machines	2							"	occas. 5 hrs	150 pigs/week
Mesentery processing machine	1							"	very seldom used	..
Pouch cleaning machine	1					"	8 hrs	..		
Rotating crushing machine	1	12	17	4		FR.Germ.	8 hrs	..		
Cooling equipment	1	22	54	4						
Scales	3	13	19	4						
Elevator	1	6	10	4						
Electrical equipment	1	32	62	4						
Heating and sanitary equipment	..	38	65	4						

CAPACITY POWER:
 Process equipment:
 - electric motors 135 kW

Generating equipment:
 - installed capacity - kVA

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Shop no.	Autom.
Three-phase slaughtering	Details see below	A	II

- Cattle slaughtering:**
- Phase: Shooting - butchering - preparation of head (3 operatives)
 - " : Decapitation - opening of breastbone and of abdominal wall (2 operatives)
 - " : Removal of intestines - removal of skin - division of cattle - pre-cooling (3 operatives)

Advantages: Whereas the conventional slaughtering process requires at least 12 persons, 3-phase slaughtering can already be done with 3 - 8 operatives through intensive utilization of substitutes. Up to 35 pigs can be processed/hour processing of one cattle requires 8 - 10 minutes only.

CAPACITY UTILIZATION:

Full-capacity output: US \$ 3,150,000.

Current utilization: based on 1-shift operation

Major products (by process)	up to	Approximate %
	20	20
	40	40
	60	60
	80	80
	100	100

All shops are utilized up to 90%.

Capacity of pre-cooling rooms is far too small.

IX. HISTORY & PLAN

1. Performance in the past:	Total output (\$00 US \$)	No. of persons employed	Total exports (\$00 US \$)
Year: 1963	-	-	-
1964	-	-	-
1965	2,260	17	580
1966	2,370	19	580
1967	2,630	21	580
1968	2,840	22	640

2. Investments in the past:	Approximate amount (\$00 US \$)	Type of investment
In 1968:	46	Machinery and equipment

3. Future Plan:

From 19 69 to 1973: 390 Cooling capacity will be doubled.

2 operatives and 5 non-operatives will have to be employed additionally.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(196)

Industry _____ (HSIC-Code: _____)

1. Size groups by number of persons employed up to	No. of estab.	No. of empl.	Av. W. & S. per pers. (\$00 \$)	Av. gross prod. vol./ per pers. (\$00 \$)	Av. value added/gross prod. ratio (%)	2. Size groups by annual value of production \$00 US \$:	No. of estab.	No. of empl.	Av. W. & S. per pers. (\$00 \$)	Av. gross prod. vol./ per pers. (\$00 \$)	Av. value added/gross prod. ratio (%)
No data available, since enterprise was founded in 1964.											
TOTAL: _____						TOTAL: _____					

XII. DESIGN AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service

- | | | |
|---|---|---------------------------------|
| 1. Engineering study | 3. Technical and managerial personnel | 8. Import and export assistance |
| 2. Financial assistance | 4. Industrial training | 9. Admission of foreign labor |
| 3. Industrial services | 5. Equipment supply, installation & maintenance | |
| 4. Equipment supply, installation & maintenance | 6. Technical consultancy | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
1				Preliminary engineering studies could be furnished for the slaughtering industry.
3				Supply of know-how contracts for entire production process (3-phases slaughtering).
5				Establishment could supply own personnel to train operatives.
8				The enterprise is interested in expanding its exports to developing countries.

XIII. SUPPLEMENTS & NOTES

Commission work:

Cattle, pigs and calves are slaughtered and processed on commission basis amounting to US \$ 3,870 in the reporting year.

Current activities:

Demand for high-quality meat increases steadily.

Inventory policy:

Only meat which cannot be processed immediately and which therefore has to be refrigerated or frozen is counted as inventories.

The value of finished products in stock equals about 1% of total production value.

Amortization policy:

The straight line method is applied.

History of investment:

Construction of the factory started in 1964, the first products were manufactured in 1965. The break-even point was surpassed in 1967 with sales amounting to 2,600 t of meat.

Major Products:

Cheese, butter, cream, etc.

Installed annual capacity output of cheese is 900,000 t.

Reporting Unit:

A one-establishment enterprise; founded in 1957; no participation of foreign capital.

I. FIXED CAPITAL ASSETS

(End of 1966)		Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
1. Primary process equipment				
TOTAL			52.8	..
- Process equipment			52.8	
- Hand tools & apparatuses			-	
- Cost of installation			-	
2. Primary industrial building				
TOTAL			2.0	4.8
(total floor space: 1,000 m ²)			2.0	4.8
3. Auxiliary facilities				
TOTAL			13.5	16.0
- Water, steam, electricity, cooling & storing			-	-
- Transportation facilities			13.5	16.0
- Administrative facilities			-	-
- Laboratory facilities			-	-
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):			68.3	..
4. Other fixed capital assets				
TOTAL			4.0	28.0
- Land (total acreage: 1,200 m ²)			4.0	28.0

DETAIL OF PROCESS EQUIPMENT (no.)	Supplier country	Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
Separators (2)	FR.Germ.	1957/60	6.0	
Steel tank for storing (1)	Mexico	1957	0.2	
Pre-heating steel tank (1)	"	1966	3.6	
Clarifiers (3)	FR.Germ.	1957/59/64	5.0	
Low temperature pasteurizers (4)	USA	1957/60/64	11.2	
Plate heat exchangers (2)	"	1964/66	3.2	..
Boilers (2)	"	1957/64	5.2	
Steel kettles for curdling (5)	Mexico	1957/58/59/64	4.0	
Refrigerating chambers (4)	"	1957/60	11.2	
Equipment for vacuum packing	"	1960	3.2	

HISTORY OF INVESTMENT

The primary building was not newly constructed at the time of foundation; an old building was renovated and used as it was.
 The first trial as well as commercial production started in 1957; the operation became already profitable in the same year. In 1957 approx. US \$ 20,000 were invested for additional machinery and equipment in general; in 1960 another US \$ 40,000 were invested for the same purpose; from 1961 to 1964 US \$ 20,000 were invested for replacement and improvement of machinery and equipment in general, and in 1966 another US \$ 8,000 were invested for the same purpose.

CAPACITY POWER:

Process equipment:
 - Electric motors: 24,4 kW

Generating equipment:
 Installed capacity: - kVA

EXTERNAL CONDITIONS:

Transport: Long distance, local area excellent.
Utilities: Electricity fair; water, excellent.
Community: Residential, health and recreational facilities fair; educational facilities, poor. The level of education of workers should be raised by semi-specialized technical schools, free short-term courses, and a steady supply of labour.

II. INVENTORIES AND WORKING CAPITAL (in 1000 US \$)

(End of 1966)		Actual value	2. Liquid assets	Actual value
1. Inventories				
TOTAL		16.2	TOTAL	56.4
- Production materials		1.8	- Cash (hand/bank)	22.7
- Other input materials		0.8	- Market. sec. & bonds	-
- Work-in-process		9.3	- Short-term investment	-
- Finished products		6.0	- Prepaid expenses	-
			- Accounts receivable	33.7
3. Desired working capital				
TOTAL				
- Production materials				
- Other input materials				
- Finished products				
- Wages & salaries				
- Other special items				

III. MANNING TABLE (number of persons)

(1966 average)	Total	1st shift		2nd shift	2nd shift
		A	B	A+B	A+B
ALL SHOPS & UNITS:	73	71		2	-
1. Primary operative shops	26	15	9	2	-
Storage	3	-	3	-	-
Pasteurization	4	2	-	2	-
Fermentation	6	4	2	-	-
Moulding and pressing	10	6	4	-	-
Packing	3	3	-	-	-
2. Auxiliary operative units	23	23		-	-
- Repair and maintenance	1	1			
- Mechanical shop	-	-			
- Utilities control	-	-			
- Product & material storage	4	4			
- Off-site transport	16	16			
- Guards, cleaners, etc.	2	2			
3. Auxiliary non-operative units	24	24		-	-
- Production management	1	1			
- Research & development	1	1			
- Sales unit	21	21			
- General administration	1	1			

WORKING TIME PER OPERATIVE WORKER:

- Normal hours/day: 8 hours - Normal days/year: 305 days
 - Actual hours/year: 2,440 hours

CAPACITY OF OPERATIVE SHOPS:

IV. ANNUAL PRODUCTION

(1966)	Yr. of first prod.	Quantity produced		Unit price on factory (US \$)	Total production value (1000 US \$)
		Unit	Output		
Cheese "A" (*)	..	t	375	1.60/kg	600.0
Cheese "B" (*)	..	t	35	1.44/kg	50.4
Cheese "C" (*)	..	t	2.5	1.12/kg	2.8
Butter	..	t	16	1.60/kg	25.6
Cream (**)	..	000 l	23.5	0.94/l	19.7
Ice-creams	..	000 l	7.5	0.56/l	4.2
Sour milk	..	000 l	8.2	0.20/l	1.6
Liquid whey	..	000 l	2,133.6	1.00/l	2133.6
TOTAL VALUE OF PRODUCTION					725.6

(*) Cheese "A" - Refined cheese of soft paste type "manchego"
 Cheese "B" - Cheese type "madero"
 Cheese "C" - Fresh cheese

(**) Includes butyric fat production for industries

(**) Assumes 2 shifts

(#) Not including sales tax

Competitive imports: No figures available.

Exports: None.

Capacity utilization: Capacity utilization could be doubled if the factory were fully operated with two shifts. The major cause of the underutilization is lack of production material and skilled labour. For full utilization of the existing capacity additional two or three workers would be required on the 2nd shift.

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed				Total consumption value (1000 US \$)
	Unit	Purchase	% imported	Tariff rate	
1. Energy and water					
TOTAL:					10.1
- Electricity	000 kWh	..			4.5
- Diesel oil	000 l	85.3			2.4
- Petrol	000 l	42.7			3.0
- Gas	t	2.3			0.2
2. Production materials					
TOTAL:					393.3
- Milk	000 l	4,243	-		390.4
- Curds	000 l	3.9	100		2.4
- Salt	t	9.6	-		0.5

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)
 Industry group: Manufacture of dairy products (NIC: 202)

1. Size groups by number of persons employed	Number of units	Number of empl.	Av. no. of pers. per unit (1000 \$)	Av. gross prod. val. per unit (1000 \$)	Av. emp. gross prod. rate* (1000 \$)
6 - 50	174	2,994	915	5,065	64
51 - 500	49	6,609	1,299	15,847	46
TOTAL	386	10,151	1,090	14,283	46

2. Size groups by vol. of annual production (1000 US \$)	Number of units	Number of empl.	Av. no. of pers. per unit (1000 \$)	Av. gross prod. val. per unit (1000 \$)	Av. emp. gross prod. rate* (1000 \$)
over 8	300	9,833	1,118	14,724	46
TOTAL	529	10,452	1,027	13,916	46

* Output is defined as physical output value.

VI. VALUE ADDED

(1966)	Value (1000 US \$)
1. Wages & salaries	
- Employees in direct production (49 persons)	53.4
- Other employees (24 persons)	103.2
2. Other payments for employees	11.1
3. Annual depreciation	6.6
4. Rentals paid	-
5. Interest & royalties	-
6. Sales tax (not incl. in fiscal)	(10.2)
7. Other ind. tax taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	120.0
TOTAL	303.0

VII. MONTHLY EARNING RATES

(End of 1966)	No. of emp.	Average earning rates (1000 US \$)
1. Local non-operative		
TOTAL:	19	424
- Managers	4	120
- Engineers	-	-
- Technicians	-	-
- Accountants	1	290
- Sales officers	1	480
- Other professional staff (sales supervisors and cashiers)	1	520
- Clerks and typists	5	120
2. Local operative		
TOTAL:	45	86
- Supervisors	1	160
- Foremen	2	120
- Machine operators	11	96
- Craftsmen	1*	120
- Truck drivers	12	120
- Other full-time operatives	18	72
- Unskilled & part-time operatives	-	-
* permanent, others as required.		
3. Foreign employees		
TOTAL:	-	-

IX. SUPPLEMENTS

Governmental policies:
 Without co-operation with LATA countries (particularly in regard to the use of the Argentine surplus milk) this firm's products cannot be cheap enough to compete in the export market.

Promotion of dairy cattle raising in Mexico together with economic and technical assistance would help to lower costs of production materials.

Future plans:
 A future plan is being studied in connection with the plan for improving the milk supply.

Major Products: Whole milk powder, cream powder, skimmed milk powder, chocolate preparation.
Total annual output amounted to 12,000 t of milk powder products, based on 3-shift operation.
Full-capacity output amounts to approximately 20,000 tons.

Reporting Unit: A one-establishment enterprise, privately owned, founded in 1958. Largest producer of milk powder in the country.
The establishment only performs commission work or materials supplied by the national association of milk processing enterprises which also regulates the quantity of milk to be produced and processed. Plant is located in one of the major milk producing areas of the country. 80 employees. 60% exports.

I. FIXED CAPITAL ASSETS

(End of 1968)	Original purchase value (1000 US \$)	Replacement value (1000 US \$)	Avg. age (Yrs.)
1. Primary process equipment (including installation cost)			
TOTAL	1,478	1,618	
- Process equipment *	1,441	1,579	-
- Hand tools & apparatuses	37	39	4
2. Buildings			
TOTAL	829	928	
- Primary industrial buildings (total floor space: 3,790 m ²)	628	711	4
- Auxiliary buildings (laboratory)	135	149	2
- Warehouses	66	68	2
- Office administration buildings	-	-	-
- Housing	-	-	-
3. Auxiliary facilities (excl. buildings)			
TOTAL	601	659	
- Internal power equipment	581	637	4
- Laboratory facilities (**)	-	-	-
- Means of transportation	5	5	2
- Office equipment	15	17	4
TOTAL PHYSICAL FIXED ASSETS (excluding land):	2,908	3,205	
4. Other fixed capital assets			
TOTAL	11	25	
- Land (total acreage: 7,091 m ²)	2	5	-
- Land improvements (i.e. 3,522 ")	5	16	-
- Others	4	4	4

(**) See I.2. Auxiliary buildings

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII).

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1968 monthly average)	(*) up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1. Local non-operatives						
- Managers	-	-	-	-	1	-
- Engineers	-	-	-	-	-	-
- Technicians	-	-	-	3	4	-
- Accountants	-	-	-	-	2	-
- Sales officers	-	-	-	-	-	-
- Clerks and typists	-	1	1	1	-	-
- Others	-	-	-	2	2	-
2. Local operatives						
- Supervisors	-	-	-	-	-	-
- Foremen	-	-	-	19	-	-
- Skilled operatives	-	-	-	-	-	-
- Machine operators	-	-	-	29	-	-
- Craftsmen	-	-	-	5	-	-
- Truck drivers	-	-	-	-	-	-
- Unskilled operatives	-	3	7	-	-	-
- Other full-time operatives	-	-	-	-	-	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

(*) Including employer's contributions to social security.

EXTERNAL CONDITIONS:

Transport:	external long distance internal long distance local and city	excellent fair "
Utilities:	electricity water gas	excellent fair insignificant
Community:	residence health and recreation education	fair excellent fair
Own Welfare Facilities:	-	-

III. INVENTORIES

(End of 1968)	Actual value (1000 US \$)	Number of months
Inventories		
TOTAL	10	-
- Production materials (*)	-	-
- Other input materials	10	1
- Work-in-process	-	-
- Finished products	-	-

(*) Incoming raw materials are processed immediately after arrival.

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift hours/day	8	..	..	hours
Actual hours/year	2,280	..	..	hours
- Actual days/year	285	285	285	days

IV. MANNING TABLE

(Number of persons)

Shift categories: A: Supervisory staff and foremen (for all shifts)
B: Skilled operatives
C: Semi-skilled operatives (machine operators)
D: Unskilled operatives

(1968 average)	Total	A	1st Shift			2nd Shift	3rd Shift
			B	C	D	B-C	B-D
ALL SHOPS & UNITS:	80	17	-	42	-	11	10
1. Primary operative shops	52	4	3	16	10	10	9
- Milk storing unit	5	1	-	2	-	2	-
- Production of milk powder	38	3	3	13	6	6	7
- Packing shop	9	-	-	1	4	2	2
2. Auxiliary operative units	20	5	-	13	-	1	1
- Repair & maintenance	2	-	-	2	-	-	-
- Mechanical shop	4	1	-	1	-	1	1
- Tooling shop	-	-	-	-	-	-	-
- Utilities control	-	-	-	-	-	-	-
- Product & material storage	4	-	-	4	-	-	-
- Off-site transport	2	-	-	2	-	-	-
- Guards, cleaners, etc.	4	-	-	4	-	-	-
- Laboratory	4	4	-	-	-	-	-
3. Auxiliary non-operative units	8	8	-	-	-	-	-
- Production management	3	3	-	-	-	-	-
- Research & development	-	-	-	-	-	-	-
- Sales unit	-	-	-	-	-	-	-
- Accounting	5	5	-	-	-	-	-
- General administration	-	-	-	-	-	-	-

Страна	Классификация	Основные продукты	Том №	Страница
Центральная Европа	: 332-(1)	Стекланные бутылки, широкогорлые стекланные банки, осветительное стекло	III	1128
Франция	: 332-(1)	Стекланные бутылки	II	604
Индия	: 331-(1)	Огнеупорный кирпич, изоляционный кирпич, канализационные трубы и строительные растворы	II	606
Индия	: 331-(2)	Огнеупорный кирпич и блоки, строительные растворы и очищенная глина	II	608
Индия	: 331-(3)	Огнеупорный кирпич	II	610
Индия	: 331-(4)	Стекловолокно, огнеупорные продукты и керамические грубы	II	612
Израиль	: 331-(1)	Черепица (белая и цветная)	II	614
Израиль	: 332-(1)	Стекланные изделия (чашки, бутылки и т.д.)	II	616
Югославия	: 331-(1)	Керамическая черепица, керамика для санитарии и другие бытовые керамические изделия	II	618
Югославия	: 331-(2)	Кирпич и черепица	II	619
Югославия	: 331-(3)	Огнеупорный кирпич и другие огнеупорные материалы ...	II	620
Югославия	: 331-(4)	Кирпич	II	621
Югославия	: 332-(1)	Оконное стекло и стеклнная посуда	II	622
Югославия	: 332-(2)	Стекланные банки	II	623
Югославия	: 332-(3)	Стекланные изделия	II	624

ПРОИЗВОДСТВО ГИДРАВЛИЧЕСКОГО ЦЕМЕНТА

Восточная Африка	: 334-(1)	Портландцемент	III	1132
Ирак	: 334-(1)	Цемент	III	1134
Центральная Европа	: 334-(1)	Цемент и связующие вещества	III	1138
Центральная Европа	: 334-(2)	Цемент и смесь из цемента и извести	III	1142
Центральная Европа	: 334-(3)	Портландцемент и клинкер	III	1146
Центральная Европа	: 334-(4)	Цемент и связующие вещества строительных растворов ...	III	1150
Франция	: 334-(1)	Цемент	I	182
Франция	: 334-(2)	Цемент	I	184
Индия	: 334-(1)	Цемент	I	186
Индия	: 334-(2)	Цемент	I	188
Индия	: 334-(3)	Цемент	I	190
Индия	: 334-(4)	Цемент	I	192
Индия	: 334-(5)	Цемент	I	194
Израиль	: 334-(1)	Цемент	I	196
Израиль	: 334-(2)	Цемент	I	198
Югославия	: 334/339-(1)	Цемент и асбестоцементные изделия	II	625
Югославия	: 334-(2)	Цемент	II	626
Югославия	: 334-(3)	Цемент	II	627
Югославия	: 334-(4)	Цемент	II	628

БЕТОННЫЕ, АСБЕСТОВЫЕ И ГИПСОВЫЕ ИЗДЕЛИЯ И Т.Д.

Центральная Европа	: 339-(1)	Обожженный магнезит (огнеупорный материал и строительные растворы) и магнезитовый кирпич	III	1154
Центральная Европа	: 339-(2)	Бетонные изделия	III	1158
Франция	: 339-(1)	Стекловолокно (силикатное волокно для тканей, столбов, фитилей, шаров и т.д.)	II	630
Франция	: 339-(2)	Бетонные изделия (небольшие балки, штукатурка для готовых перекрытий, бетонные блоки и трубопроводы)	II	632
Франция	: 339-(3)	Бетонные изделия (блоки, плиты, трубы, материалы для дорожного покрытия и т.д.)	II	634

V. ANNUAL PRODUCTION

(1968)	Yr. of prod.	Quantity produced		Avr. unit price ex factory (US \$)	Total output value (1000 US \$)
		Unit	Quantity		
Whole milk powder	1960	t	3,703	97.50(*)	1,155
Powdered cream	1964	"	549	"	
Skimmed milk powder	1960	"	4,722	"	
Chocolate preparation	1967	"	2,214	"	
Calaco (1/3 whole milk powder and 1/3 cocoa)	1964	"	90	"	
Chocolate milk crumb	1968	"	108	"	
Whole milk powder enriched with iron and vitamins (infant food)	1967	"	457	"	
Total revenue from contract and commission work					1,155
(*) Avr. processing fee/ton of finished product					
TOTAL VALUE OF PRODUCTION:					1,155

VI. VALUE ADDED

(1968)	Total value (1000 US \$)
1. Annual wages & salaries	183
- Operative workers (63 persons)	136
- Non-operative workers (17 persons)	47
2. Other payments for employees	47
3. Annual depreciation	364
- Machinery & equipment	135
- Buildings & other facilities	23
- Non-physical capital assets	6
4. Rentals paid	2
5. Interest & royalties	107
6. Sales tax	64
7. Other indirect business taxes	9
8. (-) Subsidies	-
9. Corporate income before tax	105
TOTAL VALUE ADDED:	881

DESCRIPTION OF MAJOR PRODUCTS:

Milk powder: Without any chemical agents, therefore no change in taste. Can be stored almost unlimited. Company considers its milk powder products to be top European quality.

Milk powder comes in bags of 25 kg and cans of 12.7 kg (2 cans = 1 carton) and can be delivered within one week ex factory.

Company could also dehydrate eggs, vegetables, and yeast.

MARKET ASPECTS:

Consumers of products:

Chocolate industry, baby food industry, feed industry, etc.

Sales organization:

Working as a subcontractor, the establishment does not have a sales organization of its own.

Extent of the market:

The company has to process any fresh milk delivered on behalf of the national association of milk processing enterprises. Usually this quantity does not suffice to operate on full capacity.

Export price policy:

Cost of production of milk powder is approximately equal to the average European milk price plus processing costs of the leading European dairy farming countries.

Exports of milk powder products are very much hampered by potential buyer countries.

Finished products can only be exported by the national association of milk processing enterprises.

EXPORT:

Total annual export: 7,000 t, i.e. about 60% of the total production

Major products	To Western countries	To Eastern countries	To Developing countries
Whole powdered milk	80%	-	20%
Powdered cream	100%	-	-
Powdered skimmed milk	-	-	100%
Chocolate preparation	100%	-	-
Baby food	100%	-	-
Chocolate milk crumb	100%	-	-
Calaco	100%	-	-

Governmental policies:

The government subsidizes exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under VI.6. has been adjusted accordingly.

VII. ANNUAL CONSUMPTION

(1968)	Quantity consumed		% Import	Average import duties	Total consumption value (1000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL:					
- Electricity	000 kWh	3,120			179
- Fuel oil	t	5,210			50
- Steam (internal supply)	m3	73,030			129
- Water	"	378,400			-
2. Production materials					
TOTAL:					
- Sugar	t	61			- (*)
- Cocoa mass	"	98			-
- Cocoa powder	"	25			-
- Whole milk	"	52,937			-
- Skimmed milk	"	51,110			-
- Cream	"	2,473			-

(*) See note under XII, page 4, commission work.

3. Other materials & supplies		Total consumption value (1000 US \$)
TOTAL:		73
- Packaging material (455,000 bags with polythene ply, 37,000 tins, 18,500 cartons)		3
- Parts, supplies & services		38
- Other materials & supplies		32
4. Business services purchased		TOTAL:
- Transportation, storage & insurance		4
- Communication, advertising & other business services		18
5. Work performed by subcontractors		TOTAL:
		-
TOTAL VALUE OF CONSUMPTION:		274

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (1)

Equipment	Number	Original Purchase Value (1000 US \$)	Replacement Value (1000 US \$)	Avg. Age (years)	Supplier country	Year of installation	Output capacity per hour
Two-stage evaporator	1	31	41	4	Germany	1960	4,000 l
Roller driers	2	38	47	5	"	1961	350-400 kg
Three-stage evaporator	2	127	146	6	"	1962-1963	4,000-5,000 kg
Three-stage evaporator	2	216	229	5	"	1965-1967	10,000-17,000 "
Spray-towers	2	243	273	4	Denmark	1962-1963	150-400 kg
Spray-tower	2	313	329	2	"	1965-1967	1,000-1,500 kg
Milk tank (10,000 lt)	10	56	65	7	Austria	1965-1967	total capacity 100,000 l
" " (15,000 ")	4	46	43	6	"	"	
" " (30,000 ")	6	57	62	5	Italy	"	
" " (80,000 ")	4	14	16	1	Austria	"	
" " (10,000 ")	4	15	11	1	Italy	"	
Milk pipelines and equipment for chemical cleaning	1	8	10	4	Austria	1965	"
Mix and filling machine	1	107	117	3	Switzerland	1965	"
Sealing machine for plastic sacks	1	10	11	3	"	"	"
Sewing machine	4	7	7	5	"	"	"
Vibrating table	1	0.7	0.5	2	"	"	"
Homogeniser	1	10	11	4	"	"	"
Elevator	2	12	14	4	"	"	"
Stacker, sets of pulleys	1	3	4	4	"	"	"
Electric fork truck	1	7	7	2	"	"	"

CAPACITY POWER

Process equipment electric motors kW

Generating equipment installed capacity kVA

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Shop primary operative shop	Kind of process involved	Status	Automation	Further details:
Milk storing unit	Milk is delivered by tank-trucks and stored in stainless steel tanks until processing	A	II	Capacity of steel tanks 700,000 l; daily delivery
Production of milk powder	Multiple-stage dehydration of milk - spray tower - roller driers	A	II	At full-capacity output operating 3 shifts 20 tons of milk powder could be produced per day. Current utilization rate approximately 75%.
Packing shop		B	II	

CAPACITY UTILIZATION:

Full-capacity output Approximately 20,000 t annually. Could only be achieved with 4 additional operatives on the 1st shift and 3 additional operatives on the 2nd and 3rd shift each.

Current utilization based on 3-shift operation.

Major products (in process)	Approximate %						
	up to 30	40	50	60	70	80	90
Whole powdered milk						x	
Powdered cream						x	
Powdered skimmed milk						x	
Chocolate preparation	x						
Cacao	x						
Chocolate milk crumb	x						
Whole powdered milk baby food	x						

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output t	No. of persons employed	Total capacity %
1963	4,401	42	50 - 60%
1964	7,000	47	"
1965	8,208	57	"
1966	8,415	70	"
1967	12,766	87	"
1968	11,843	80	65%

2. Investments in the past:

From	To	Approximate amount (1000 US \$)	Type of investment
1958	1961	253	Roller drier and evaporator
1962	1964	804	2 spray-towers with evaporators
1965	1967	1,527	2 spray-towers with evaporators, boiler house
1968		233	

3. Future Plan:

1969 : 194 Evaporator to produce milk powder, instant cocoa, and instant coffee. Tin-filling machine.

2 additional operatives will be required on the 1st shift.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1964)

Industry Manufacture of dairy products (ISIC Code: 202)

C - Confidential; figures of this size group included above.

1. Size groups by number of persons employed	No. of estab.	No. of empl.	Av. W. & S.		Av. value added/gross prod. ratio (%)	2. Size groups by annual output of production (1000 US \$)	No. of estab.	No. of empl.	Av. W. & S.		Av. value added/gross prod. ratio (%)
			per pers. (US \$)	per pers. (US \$)					per pers. (US \$)	per pers. (US \$)	
up to 19	93	472	1,615	26,703	21	up to 20	16	11	922	13,274	38
20 - 99	54	2,349	1,903	32,856	18	20 - 40	7	9	1,298	23,530	27
100 - 499	25	6,477	1,964	18,924	23	40 - 200	49	189	1,593	23,975	24
500 - 999	3	-	-	-	0	200 - 400	16	247	1,517	17,376	24
over 1,000	-	-	-	-	-	400 - 2,000	57	2,479	1,678	20,310	25
						over 2,000	30	6,333	2,058	24,079	20
TOTAL:	175	9,268	1,931	22,878	21	TOTAL:	175	9,268	1,930	22,876	21

13. COVERED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service

- | | | |
|-------------------------|---------------------------------------|---------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export operations |
| 2. Financial assistance | 6. Industrial training | 9. Attainment of foreign labor |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or area	No. of years	Field of activity	Description of project
1,7				Company reports general interest to provide both technical and advisory assistance for over-all planning of milk processing plants.
2,6				Financial assistance could be worked out in the form of a joint-venture. In this particular case the company could provide its training facilities.
3				Know-how contracts would not only cover the dehydration of milk but the production of butter, cheese, and other milk products as well.
4				Within the framework of a know-how contract the company could furnish addresses of well-known producers of milk processing machinery.
5				The know-how agreement would include the delegation of experts as well.
8				The establishment would like to export its products to developing countries. The acceptance of cacao in return even on barter basis is possible.

14. SUPPLIERS AND COSTS

Commission work:

The total value of production results from commissions received for processing of raw materials (e.g. milk) supplied and consumed by the national association of milk-processing establishments.

Inventory policy:

Since the company only performs commission work, inventories do not exist except for a few minor input materials.

Government policies:

Market regulations as decreed by the national government determine the size of the area which has to be served by each dairy. The quantity of milk produced has to be accepted by the dairies at fixed market prices. Since the supply of milk is rather stable except for seasonal variations, existing capacities are always not fully utilized. In order to make up for this difference dairies could buy milk from other areas, however, usually at excess prices only.

In this particular case, the company complains about the insufficient quality of fresh milk supplied on behalf of the national association of milk processing enterprises.

Major Products: Soft cheese and heavy cream.

Total annual production amounted to 800 t of soft cheese and 200 t of heavy cream based on 1-shift operation.

Reporting Unit:

A one-establishment enterprise, privately owned, founded in 1910. Favourably located with respect to milk supply and consumer markets. Company reduced its product-mix to two kinds of soft cheese. Specialised in the production of camembert. Exports are promoted. 52 employees.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value 1000 US \$	Replacement value 1000 US \$	Average age (Yrs.)
1. Primary process equipment (including installation cost)			
TOTAL	142	175	
- Process equipment *	142	175	5
- Hand tools & apparatuses	-	-	-
2. Buildings			
TOTAL	146	553	
- Primary industrial buildings (total floor space: 370 m ²)	129	464	57
- Auxiliary buildings	2	4	40
- Warehouses	-	-	-
- Office administration buildings	-	-	-
- Housing	15	85	..
3. Auxiliary facilities (excl. buildings)			
TOTAL	65	99	
- Internal power equipment (fountain)	1	4	..
- Steam plant	9	27	30
- Laboratory facilities	2	4	3
- Means of transportation	48	58	2
- Office equipment	5	6	3
TOTAL PHYSICAL FIXED ASSETS (including land):	353	827	
4. Other fixed capital assets			
TOTAL	10	33	
- Land (total acreage: 3,195 m ²)	2	9	-
- Land improvements (8,933 ")	8	24	-
- Others	-	-	-

*NB Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII).

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1967 monthly average)	up to 100 100 US \$	100 - 140 140 US \$	140 - 160 160 US \$	160 - 240 240 US \$	over 240 560 US \$
1. Local non-operative					
- Managers	-	-	-	1	-
- Engineers	-	-	-	-	-
- Technicians	-	-	-	-	-
- Accountants	-	-	-	1	-
- Sales officers	-	-	-	1	-
- Clerks and typists	-	-	2	-	-
2. Local operative					
- Supervisors	-	-	-	-	-
- Foremen	-	-	-	2	-
- Skilled operatives	-	-	3	-	-
- Machine operators	-	18	10	-	-
- Craftsmen	-	-	6	-	-
- Truck drivers	-	-	3	-	-
- Unskilled operatives	-	4	-	-	-
- Other full-time operatives	-	-	-	-	-
- Part-time operatives	-	-	-	-	-
- Masters	-	-	-	1	-
3. Foreign employees					
- Managerial staff	-	-	-	-	-
- Technical staff	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-

EXTERNAL CONDITIONS:

Transport:	external long distance	fair
	internal long distance	fair
	local and city	excellent
Utilities:	electricity	fair
	water	excellent
	gas	insignificant
Community:	residence	fair
	health and recreation	fair
	education	fair
Own Welfare Facilities:		-

III. INVENTORIES

(End of 1967)	Actual value 1000 US \$	Number of months
Inventories	45	
TOTAL		
- Production materials	1	-
- Other input materials	13	1
- Work-in-process	31	15 days
- Finished products	-	-

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	
- Shift length: (°)	7.5	-	-	hours
- Actual hours/year:	2,340	-	-	hours
- Actual days/year:	274	-	-	days
(°) Normal: actual: 8.2 hrs.				

IV. MANNING TABLE

(Number of persons)

Shift categories: A. Supervisory staff and foremen (for all shifts)
B. Skilled operatives
C. Semi-skilled operatives (machine operators)
D. Unskilled operatives

(1967 average)	Total	1st Shift				2nd Shift		3rd Shift	
		A	B	C	D	B-C	D	D	
ALL SHOPS & UNITS:	52	9	43				-	-	
1. Primary operative shops	33	2	3	28	-	-	-		
- Pasteurisation and standardisation	1	-	1	-	-	-	-		
- Cheese manufacturing	22	2	2	18	-	-	-		
- Salt bath and maturation	2	-	-	2	-	-	-		
- Packaging	8	-	-	8	-	-	-		
2. Auxiliary operative units	14	2	12				-	-	
- Repair & maintenance	5	-	5				-	-	
- Mechanical shop	-	-	-				-	-	
- Tooling shop	-	-	-				-	-	
- Utilities centre:	1	1	-				-	-	
- Product & material storage	-	-	-				-	-	
- Off-site transport	3	-	3				-	-	
- Guards, cleaners, etc.	4	-	4				-	-	
- Heating	1	1	-				-	-	
3. Auxiliary non-operative units	5	5	-				-	-	
- Production management	1	1	-				-	-	
- Research & development	-	-	-				-	-	
- Sales unit	3	3	-				-	-	
- Accounting	1	1	-				-	-	
- General administration	-	-	-				-	-	

V. ANNUAL PRODUCTION

(1967)	Yr. of firm prod.	Quantity produced		Av. unit price or factory (RUB @)	Total output value (000 US \$)
		Unit	Quantity		
Products for group of product					
Soft cheese:	1910	t	800	1,016	813
- Camembert	}				
- Brie cheese					
- Gervais					
Heavy cream	1910	t	288	361	104
TOTAL VALUE OF PRODUCTION:					917

VI. VALUE ADDED

(1967)	Total value (000 US \$)	
1. Annual wages & salaries	80	
- Operative workers (44 persons)	61	
- Non-operative workers (8 persons)	19	
2. Other payments for employees	18	
3. Annual depreciation	54	
- Machinery & equipment	21	
- Buildings & other facilities	32	
- Non-physical capital assets	1	
4. Rentals paid	-	
5. Interests & royalties	3	
6. Sales tax	14	
7. Other indirect business taxes (Payroll tax, land tax)	8	
8. (-) Subsidies	-	
9. Corporate income before tax	59	
TOTAL VALUE ADDED:		236

DESCRIPTION OF MAJOR PRODUCTS:

Packaging units: Camembert: 320 g
 Brie cheese: 100 g, with a fat-content of either 45% or 55%.
 Gervais: 100 g, with a fat-content of 65%.

Taste: Somewhat between French and German camembert.

Cream is sent to a dairy for further processing.

Soft cheese is transportable up to 10 days at a maximum temperature of 5°C, provided this temperature is not interrupted. At optimal cooling conditions soft cheese can be kept up to 7 - 8 weeks.

Up to 5 t of soft cheese can be supplied within 20 days.

MARKET ASPECTS:

Re-sales:

Whole milk powder, butter, and skim milk powder were sold totalling US \$ 89,000.

Consumers of products:

Households, hotels and restaurants.

Sales organization:

80% of the goods manufactured are marketed by regional and national associations of milk processing enterprises; the remaining 20% is sold to consumers by 2 representatives.

Competition in the market:

Domestic prices are fixed prices as recommended by the company. Prices for imported cheese are substantially higher.

Share in the domestic market:

2% of the annual national production of cheese which amounts to 37,000 t. However, the company produces about 70% of the Camembert manufactured in this country.

EXPORT:

Total annual export: US \$ 16,000

Major products	To Western countries	To Eastern countries	To Developing countries
Camembert	-	-	100%

Export price policy:

Brie cheese is mainly exported by the national association of milk processing enterprises, very little is done by individual establishments to promote exports and to develop an export price policy.

Governmental policies:

The government subsidizes exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under VI.6. has been adjusted accordingly.

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% Import	Average import price	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL:					
- Electricity	000 kWh	221			13
- Lignite	t	449			6
- Coke	t	68			5
					2
2. Production materials					
TOTAL:					
- Milk	000 l	7,000			513
					513

	Total consumption value (000 US \$)	
3. Other materials & supplies	126	
TOTAL:		
- Packaging material (aluminium foil, cardboard boxes, corrugated cardboard boxes)	109	
- Parts, supplies & services	11	
- Other materials & supplies	6	
4. Business services purchased	29	
TOTAL:		
- Transportation, storage & insurance	17	
- Communication, advertising & other business services	12	
5. Work performed by subcontractors	-	
TOTAL:		
TOTAL VALUE OF CONSUMPTION:		681

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (8.1):

Number	Original Purchase Value (USD US \$)	Replacement value (USD US \$)	Age (yrs)	Remarks	Supplier country	Year of installation	Daily running time	Capacity output
Cheese processing machines	18	14	15	8	Germany, F.R.	1958-69	5 hrs	300 l/hr
Automatic packing machines	3	34	46	3	"	1964-66	8-15 hrs	..
Preheater	1	5	6	new	"	1967	..	8,000 l/hr
Pasteurisation plant	1	27	31	6	"	1962	6 hrs	5,000 l/hr
Centrifuge	1	7	8	6	"	1962	6 hrs	5,000 l/hr
Automatic cleaning equipment	1	6	10	6	Austria	1962	2 hrs	..
Tanks	4	16	15	3	"	1964-65	1 tank: 10,000 l 3 tanks: 7,000 l	..
Multi-purpose heater	1	2	2	4	"	1964		600 l
Maturation molds	5,000	20	27	10	Germany, F.R.			75 l per pile
Cheese mold washing machine	1	6	6	2	Germany, F.R.			75 l per pile
Cooling system	1	5	9	6				

CAPACITY POWER:
 Process equipment:
 - electric motors kW 146
 Generating equipment:
 - installed capacity kVA -

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechan.		Further details	Output capacity	Capacity utilized
		A. most advanced E. considerably high standard	C. modern standard B. appreciably short of today's standard D. almost outdated			
Pasteurisation	Standardisation of fresh milk, e.g. equalisation of fat-content of milk. Pasteurisation	C	II		30,000 l/day	70%
Cheese production	Coagulation, concentration, cleaning of molds	B	II		3.2 t/day	70%
Salt bath	Salt solution to dehydrate, preserve and flavour the cheese					
Maturation	At given temperature and humidity	B	II		Operating cycle: 8 - 10 days	70%
Packing	Camembert mould will be growing	B	II			

CAPACITY UTILIZATION:

Full-capacity output: US \$ 1,350,000

Current utilization: Based on 1-shift operation

Major products by process	Approximate %					
	20	40	60	80	90	100
Camembert						x
Gervais	x					

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output (USD US \$)	No. of persons employed	Total exports (USD US \$)
1963			
1964			
1965			
1966			
1967			
1968			

No data available.

2. Investments in the past:

From	To	Approximate amount (USD US \$)	Type of investment
1962	1967	63	Expansion of factory premises
1962	1967	50	Machinery and equipment

3. Future Plan:

From 1969 to 1975 : 232
 Either expansion of existing premises or construction of a new building; change from coal to fuel oil heating system. These investments will require additional personnel, however, due to lack of a detailed investment plan, no data can be given.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C - confidential; figures of this size group are included above.

(1964)
 Industry: Manufacture of dairy products (NSIC Code: 202)

1. Size groups by number of persons employed	No. of estab.	No. of empl.	Av. W. & A. per pers. (USD US \$)	Av. gross prod. vol./per pers. (USD US \$)	Av. value added/gross prod. ratio (%)	2. Size groups by annual rate of production (USD US \$)	No. of estab.	No. of empl.	Av. W. & A. per pers. (USD US \$)	Av. gross prod. vol./per pers. (USD US \$)	Av. value added/gross prod. ratio (%)
up to 19	93	470	1,611	26,703	21	up to 20	16	11	922	13,274	38
20 - 99	54	2,340	1,903	12,856	18	20 - 40	7	9	1,298	23,530	27
100 - 499	25	6,441	1,261	18,224	23	40 - 200	49	189	1,593	23,975	24
500 - 999	3	0	0	0	0	200 - 400	16	247	1,517	17,376	24
over 1,000	-	-	-	-	-	400 - 2,000	57	2,479	1,678	20,310	25
						over 2,000	30	6,333	2,058	24,079	20
TOTAL:	175	9,268	1,931	22,878	11	TOTAL:	175	9,268	1,930	22,876	21

XII. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service:

- | | | |
|---|---------------------------------------|-----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export transactions |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
1				The enterprise is interested in preparing engineering studies for the production of soft cheese.
3				Interest is reported to furnish know-how contracts concerning the planning of the plant, production processes and marketing.
4				Addresses of suppliers of machinery and equipment necessary for the production of soft cheese could be procured.
5				Dairy experts could be made available on short-term basis only.
7				Trouble-shooting advisory service could be rendered.
9				The establishment is prepared to employ and train foreign labourers on short-term contracts.

XIII. SUPPLEMENTS & NOTES

Inventory policies:

Since raw materials and finished products get spoilt rather quickly, the dairy does not keep any such products on stock.

Government policies:

Market regulations as decreed by the national government determine the size of the area which has to be served by each dairy. The quantity of milk produced has to be accepted by the dairies at fixed market prices. Since the supply of milk is rather stable except for seasonal variations, existing capacities are always not fully utilized. In order to make up for this difference dairies could buy milk from other areas, however, usually at excess prices only.

Major Products: Fresh milk, butter, cheese, whey, curd, cassia, fodder, etc.
Full-capacity output amounts to US \$ 20.5 million based on 2- and 3-shift operation.

Reporting Unit: A one-establishment enterprise; founded in 1881; privately owned. Originally founded as a dairy, later on expanded by cheese, cassia, powdered milk and milk sugar manufacturing plants; 540 employees; 10% exports.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average age (Yrs.)
1. Primary process equipment (including installation cost)			
TOTAL:	1,253	1,519	
- Process equipment *	1,219	1,477	..
- Hand tools & apparatuses	34	42	..
2. Buildings			
TOTAL:	1,299	1,536	
- Primary industrial buildings (total floor space: 17,300 m ²)	370	432	..
- Auxiliary buildings	216	245	..
- Warehouses	454	547	..
- Office administration buildings	166	196	..
- Housing	93	116	..
3. Auxiliary facilities (excl. buildings)			
TOTAL:	404	492	
- Internal power equipment	173	213	8
- Laboratory facilities	21	25	3
- Means of transportation	169	205	4
- Office equipment	41	49	3
TOTAL PHYSICAL FIXED ASSETS (excluding land):	2,956	3,547	
4. Other fixed capital assets			
TOTAL:	360	459	
- Land (total acreage: 61,000 m ²)	42	75	-
- Land improvements	-	-	-
- Others	318	384	5

*NB Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII.)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1967 monthly average)	up to 125 US\$	125 - 160 US\$	160 - 200 US\$	200 - 300 US\$	300 - 1,000 US\$	over 1,000 US\$
1. Local non-operatives						
- Managers	-	-	-	-	3	-
- Engineers	-	-	2	24	14	-
- Technicians	-	-	9	46	8	-
- Accountants	-	-	-	2	4	3
- Sales officers	-	-	2	4	3	-
- Clerks and typists	-	-	12	39	4	-
2. Local operatives						
- Supervisors	-	-	-	-	-	-
- Foremen	-	-	-	-	-	-
- Skilled operatives	-	-	-	-	-	-
- Machine operators	-	-	14	31	-	-
- Craftmen	-	-	19	47	3	-
- Truck drivers	-	-	-	-	-	-
- Unskilled operatives	-	18	53	86	-	-
- Other full-time operatives	-	11	36	49	-	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

Company considers both supervisors and foremen as local non-operatives.

incl. in "Other full-time operatives"

EXTERNAL CONDITIONS:

Transport:	external long distance	Fair
	internal long distance	fair
	local and city	fair
Utilities:	electricity	excellent
	water	excellent
	gas	-
Community:	residence	fair
	health and recreation	fair
	education	fair
Own Welfare Facilities:		-

III. INVENTORIES

(End of 1967)	Actual value (000 US \$)	Number of months
Inventories		
TOTAL:	624	
- Production materials	33	-
- Other input materials	229	0.5
- Work-in-process	53	0.2
- Finished products	309	0.3

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift intervals	8	8	8	hours
Actual hours/year	2,283	2,283	2,283	hours
Actual days/year	281	281	281	days

IV. MANNING TABLE

(Number of persons)

Shift categories: A. Supervisory staff and foremen (for all shifts)
B. Skilled operatives
C. Semi-skilled operatives (machine operators)
D. Unskilled operatives

(End of 1967)	Total	1st Shift				2nd Shift	3rd Shift	
		A	B	C	D	B-C	C-D	
ALL SHOPS & UNITS:	542	175	306				15	26
1. Primary operative shops	200	14	5	16	104	35	26	
- Milk processing department	19	2	1	2	6	8	-	
- Butter production dept.	28	4	2	6	16	-	-	
- Cheese production dept.	68	3	1	7	57	-	-	
- Milk powder production dept.	85	5	1	1	25	27	26	
2. Auxiliary operative units	202	25	177				-	-
- Repair & maintenance	60	7	53				-	-
- Mechanical shop	-	-	-				-	-
- Tooling shop	-	-	-				-	-
- Utilities control	4	4	-				-	-
- Product & material storage	9	2	7				-	-
- Off-site transport	35	-	35				-	-
- Guards, cleaners, etc.	10	-	10				-	-
- Others	84	12	72				-	-
3. Auxiliary non-operative units	140	136	4				-	-
- Production management	2	2	-				-	-
- Research & development	17	16	1				-	-
- Sales unit	26	23	3				-	-
- Accounting	30	30	-				-	-
- General administration	65	65	-				-	-

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (1):	Number	Original Purchase Value (000 US \$)	Replacement value (000 US \$)	Av. Age (yrs)	Remarks	Supplier country	Year of installation	Daily running time	Capacity output
Automatic packing machines	2	15	19	2		Germany, F.R.	1967	9 hrs	2,300 units/hr
Evaporator	1	42	51	7		Germany, F.R.	1960	20 hrs	33 t water/hr
Drying rolls	2	33	43	4		Germany, F.R.	1965	12 hrs	180 kg water/hr
Drying plant	1	46	54	7		France	1963	22 hrs	650 kg water/hr
Silo for fodder mixing plant	1	63	75	2		Germany, F.R.	1966	-	-
Self-constructed special machines and fixtures	..	105	133	6	SC				
Other special machines	..	225	275	6					
Fork lift trucks	3	20	23	4					
Pneumatic conveyor belts	2	32	38	5					
Switch plant	1	54	62	10					
Storage tanks	8	19	22	8					
Self-constructed universal machines	..	140	170	6	SC				
Other universal machines	..	425	512	6					

REMARKS:
 SM Purchased second-hand
 M Machine
 R Rented
 W self-constructed

CAPACITY POWER:
 Process equipment:
 - electric motors kW 1,500
 - other prime " 200
 - mowers
 Generating equipment:
 - installed capacity kVA 2,500

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Mechanization: A. most advanced B. considerably high standard C. moderate standard D. approximately that of today's standard E. almost unaided
 Automation: I. fully automated II. semi-automated III. non-automated

Major primary operative shops	Kind of process involved	Mechan.	Autom.	Further details:
Milk processing department		B	II	
Butter production		C	II	
Cheese production		C	III	
Milk powder production		A	I	
Fodder mixing plant		A	I	

CAPACITY UTILIZATION:
 Full-capacity output: US \$ 20,500,000

Current utilization: Based on 2-shift operation

Major products for process	up to 20	Approximate %	20-40	40-60	60-70	70-80	80-90	90-100
Butter		X						
Cheese and curd			X					
Milk sugar				X				
Powdered skimmed milk					X			
Powdered whey						X		

Under-utilization due to lack of demand. In order to reach full-capacity output another 18 operatives and 5 non-operatives would be required on the 1st shift and additional 6 operatives on the 2nd shift.

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output (000 US \$)	No. of persons employed	Total exports (000 US \$)
1963	10,390	450	-
1964	11,380	471	-
1965	13,510	502	250
1966	15,770	525	750
1967	18,930	533	1,750
1968	..	..	..

2. Investments in the past:

Year	Approximate amount (000 US \$)	Type of investment
1965 :	667	Machinery and buildings
1966 :	883	" " "
1967 :	632	" " "

3. Future Plan:
 From 1969 to 1971 : 2,250
 Expansion of machinery and operative shops, rationalization of product-mix, machinery and processing methods, specialisation of product-mix.
 Additional operatives will then be employed: 1st shift: 8; 2nd and 3rd shift: 3 each.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1962)

Industry: Manufacture of dairy products (NIC-Code: 202)

C = confidential; figures of these six groups are included in total.

1. Size groups by number of persons employed:						2. Size groups by annual sales of sales (000 US \$):					
up to	No. of estab.	No. of emp.	Avg. W. & B. per pers. (RUB \$)	Avg. sales per pers. (RUB \$)	Avg. value added/sales ratio (%)	up to	No. of estab.	No. of emp.	Avg. W. & B. per pers. (RUB \$)	Avg. sales per pers. (RUB \$)	Avg. value added/sales ratio (%)
19	1,842	17,392	1,581	45,345	15	1,250 -	2,065	18,117	1,124	39,201	10
20 - 99	458	17,906	1,804	36,489	17	1,250 - 2,500	193	8,533	1,837	38,007	17
100 - 199	51	6,841	1,875	29,920	20	2,500 - 6,250	96	10,523	1,865	33,790	18
200 - 499	26	7,565	1,960	29,124	20	6,250 - 12,500	19	5,801	2,018	29,196	21
500 - 999	3	C	C	C	C	12,500 - 25,000	4	1,565	2,069	35,615	18
over 1,000	1	C	C	C	C	over 25,000	3	3,259	2,058	29,364	20
TOTAL:	2,381	47,798	1,807	35,794	17	TOTAL:	2,381	47,798	1,618	35,794	15

Страна	Классификация	Основные продукты	Том №	Страница
Индия	: 339-(1)	Асбестоцементные изделия (листовой материал, плиты, трубы и т. д.)	II	636
Индия	: 339-(2)	Асбестоцементные изделия (листовой материал, плиты, трубы и т. д.)	II	638
Индия	: 339-(3)	Асбестоцементные изделия (листовой материал, плиты, трубы и т. д.)	II	640
Израиль	: 339-(1)	Асбестоцементные изделия (листовой материал, трубы и фасонные формы)	II	642
Израиль	: 339-(2)	Бетонные изделия (трубы, шпалы, столбы и блоки)	II	644
Израиль	: 339-(3)	Сборные бетонные строительные детали и блоки	II	646
Израиль	: 339-(4)	Изделия из гипсового цемента (тепло- и звукоизоляционные блоки и сборные бетонные детали)	II	648
Израиль	: 339-(5)	Бетонные материалы для дорожного покрытия	II	650
Япония	: 339-(1)	Бетонные изделия	II	652
Япония	: 339-(2)	Бетонные изделия	II	654
Югославия	: 339-(1)	Бетонные изделия (столбы, шпалы, плиты, блоки и т. д.)	II	656
Югославия	: 339-(2)	Бетонные изделия (шпалы, столбы, трубы, плиты и т. д.)	II	657
Югославия	: 339-(3)	Бетонные изделия (шпалы, столбы, плиты и т. д.)	II	658
Югославия	: 339-(4)	Асбестоцементные изделия (плиты, напорный трубопровод, трубы и т. д.)	II	659

ПРОКАТКА, ВОЛОЧЕНИЕ И ЛИТЬЕ ЧЕРНЫХ МЕТАЛЛОВ

Мексика	: 341-(1)	Прокатанные, волочильные, кованные и литые металлические изделия	III	1162
Франция	: 341-(1)	Кованные металлические изделия и готовые инструменты	I	200
Франция	: 341-(2)	Волочение (нержавеющая стальная проволока)	I	202
Индия	: 341-(1)	Чугунолитейный и сталелитейный завод с металлообрабатывающими и фрезерными цехами, производящими дробилки для тростника и электродвигатели	I	204
Индия	: 341-(2)	Сварные трубы, бесшовные трубы и холоднокатаные полосы	I	206
Индия	: 341-(3)	Чугунолитейный завод для машин и запчастей (краны с ручным приводом, полнспасты, автолебедки, вагонетки и т. д.)	I	208
Индия	: 341-(4)	Чугунолитейный и сталелитейный завод с машинным цехом, производящим инвентарь, строительные изделия, болты и гайки и т. д.	I	210
Израиль	: 341/350-(1)	Чугунолитейный завод с металлообрабатывающими цехами, производящими санитарно-техническую арматуру, бетономешалки, насосы и т. д.	I	212
Япония	: 341-(1)	Стальное литье и чугунные изделия из „механита“	I	214
Япония	: 341-(2)	Специальное чугунное и стальное литье	I	216
Япония	: 341-(3)	Чугунное литье (станины для станков, станины для двигателей)	I	218
Япония	: 341-(4)	Ковкий чугун для автомобилей	I	220
Япония	: 341-(5)	Литые изделия из чугуна и стали (формы для заготовок, поддоны, пресс-формы и насосы)	I	222
Япония	: 341-(6)	Стальные плиты, трубы и рельсы	II	660
Япония	: 341-(7)	Стальные литые трубы и трубы большого диаметра	II	662
Югославия	: 341-(1)	Серый чугун и термически обработанное железо; также станки, арматура, кухонные плиты и т. д.	I	224

ПРОКАТКА, ВОЛОЧЕНИЕ И ЛИТЬЕ ЦВЕТНЫХ МЕТАЛЛОВ

Мексика	: 342-(1)	Производство очищенного сурьмяного свинца	III	1164
Центральная Европа	: 342-(1)	Алюминиевая фольга	III	1166
Франция	: 342-(1)	Изделия из прокатанного и вытянутого алюминия (плиты, листы, рулоны, фольга, заготовки и т. д.)	I	226
Франция	: 342-(2)	Медные и латунные трубы	I	228
Франция	: 342-(3)	Медные и латунные полосы	I	230
Франция	: 342-(4)	Медные и латунные трубы	I	232

XII. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|---|---------------------------------------|----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export transaction |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of services	Country or region	No. of projects	Field of industry	Description of projects
3				Provision of know-how and license agreements.
5				Provision of experts and other skilled personnel.
7				Company is prepared to render various technical consulting services.
8				Interest in intensifying exports of dry milk products to developing countries.

XIII. SUPPLEMENTS & NOTES

Contract and commission work:

Casein grinding amounting to US \$ 11,000 was performed by a subcontractor.

Major bottlenecks in the past:

Insufficient milk drying capacity; could be increased.

Current problems:

Quality improvements; rationalisation of production process.

Inventory policy:

On the average the value of finished products in stock amounts to 1.6% of the total value of production.

Training courses:

Company delegates employees to external training and management development courses and seminars.

Major Products: Bottled olives, capers, olive oil, powdered soups, vinegar, etc.

Reporting Unit: A two-establishment enterprise founded in 1950.
Foreign capital participation 49% and local capital 51%.

I. FIXED CAPITAL ASSETS

(End of 1966)		Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
1. Primary process equipment				
TOTAL:				
- Process equipment			240.0	283.2
- Hand tools & apparatuses			209.6	248.0
- Cost of installation			6.4	7.2
			24.0	28.0
2. Primary industrial building				
TOTAL:				
(total floor space: 700 m ²)	1960		80.0	104.0
			80.0	104.0
3. Auxiliary facilities				
TOTAL:				
- Water, steam, electricity, cooling & storing			64.0	70.8
- Transportation facilities			16.0	18.0
- Administrative facilities			18.4	20.8
- Laboratory facilities			18.4	20.8
- Others			11.2	11.2
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):				
			384.0	458.0
4. Other fixed capital assets				
TOTAL:				
- Land (total acreage: 29,000 m ²)			232.0	..

DETAIL OF PROCESS EQUIPMENT (no.):	Supplier country	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
Oil presses	Argentina	1960	48.0	57.6
Centrifuges and separators	Argentina	1960	11.2	14.4
Grinders	Argentina	1960	2.4	3.2
Boilers	Mexico	1964	12.0	12.8
Soup process equipment	France	1965	120.0	144.0
Miscellaneous	Spain	1954	16.0	16.0

ENERGY OF INVESTMENT:

The factories were constructed in 1954. The first trial as well as commercial production started in the same year. In 1956 approximately \$80,000 were invested for the expansion of the olives processing capacity. In 1960 approximately US \$ 40,000 were invested for the expansion of the olive oil processing and in 1965 US \$ 96,000 were invested for the expansion of the soup production.

CAPACITY POWER:

Process equipment:	Generating equipment:
- Electric motors: 150 kW	Installed capacity: - kW

EXTERNAL CONDITIONS:

Transport: Long distance, excellent; local area, fair.
Utilities: -
Community: Residential, health and recreational, educational, fair.

II. INVENTORIES AND WORKING CAPITAL (in 000 US \$)

(End of 1966)		Actual value	2. Liquid assets	Actual value
1. Inventories				
TOTAL:				
- Production materials	432.0	- Cash (hand/bank)	35.3	
- Other input materials	-	- Market. sec. & bonds	16.4	
- Work-in-process	-	- Short-term investment	354.4	
- Finished products	32.0	- Prepaid expenses	-	
		- Accounts receivable	-	
TOTAL: 464.0				
3. Desired working capital				
TOTAL:				
- Production materials	12	240.0		
- Other input materials	-	-		
- Finished products	6	32.0		
- Wages & salaries	3	56.7		
- Other special items	-	72.0		
		400.7		

III. MANNING TABLE

(1966 average)	Number of persons		A - Skilled operators		B - Other operators	
	Total	% shift	2nd shift	2nd shift	A + B	A + B
ALL SHOPS & UNITS:	114	114	-	-	-	-
1. Primary operative shops	100	20 80	-	-	-	-
Processing and canning of olives and olive oil	90*	10 80*	-	-	-	-
Capers and soups	10	10 -	-	-	-	-
2. Auxiliary operative units	2	2	-	-	-	-
- Repair and maintenance	1	1	-	-	-	-
- Mechanical shop	-	-	-	-	-	-
- Utilities control	-	-	-	-	-	-
- Product & material storage	1	1	-	-	-	-
- Off-site transport	-	-	-	-	-	-
- Guards, cleaners, etc.	-	-	-	-	-	-
3. Auxiliary non-operative units	12	12	-	-	-	-
- Production management	1	1	-	-	-	-
- Research & development	1	1	-	-	-	-
- Sales unit	-	-	-	-	-	-
- General administration	10	10	-	-	-	-

WORKING TIME PER NON-SEASONAL OPERATIVE WORKER:

- Normal hours/day:	9 hours	- Normal days/year:	240 days
- Actual hours/year:	2,096 hours		

CAPACITY OF OPERATIVE SHOPS:

The daily (8hr) maximum capacity of installed equipment is: 12 t of olives, 2.5 t of olive oil, 0.7 t of soup concentration, and 0.2 t of vinegar. (Estimates based on one shift). The capacity of process equipment is thus much greater than the current production level.
Bottling and packing are not automated.

IV. ANNUAL PRODUCTION

(1966)	Yr. of first prod.	Quantity produced		Nominal capacity output *	Unit price in factory (US \$)	Total production value (000 US \$)
		Unit	Output			
- Canned olives and capers	..	1	350	2,900	2.20/kg	770
- Olive oil	..	1	43	580	3.20/kg	138
- Powdered soups	..	1	2	170	1.60/kg	4
- Vinegar	..	000 1	3	12	0.48/l	1
TOTAL VALUE OF PRODUCTION						913

* Assuming a 1 shift operation. Estimates based on nominal engineering specifications of the major machinery. These estimates are believed to be upward biased.

EXPORTS:

No exports. But the sales network is secured by a foreign-owned enterprise which is the major share-holder for this reporting firm.

CAPACITY UTILIZATION:

Capacity is underutilized due to shortage of the supply of raw material, which occasionally interrupts the operation.

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed				Total consumption value (000 US \$)
	Unit	Purchase	% imported	Tariff rate	
1. Energy and water					
TOTAL:					7.1
- Electricity	000 Kwh	168	-	-	6.7
- Gas oil	000 m3	5	-	-	0.2
- Water	000 m3	6	-	-	0.2
2. Production materials					
TOTAL:					439
- Olives	1	720	-	-	242
- Capers	"	6	100	100	9
- Pepper	"	50	-	-	28
- Salt	"	50	-	-	3
- Miscellaneous					157

		Total consumption value (000 US \$)	
3. Other materials & supplies			
TOTAL:		108	
- Packaging (bottles, boxes, etc.)		97	
- Repair & maintenance		4	
- Non-factor service inputs		7	
4. Business services purchased			
TOTAL:		27	
- Transport, storage & insurance		21	
- Communication, advertisements, etc.		6	
5. Work performed by sub-contractors			
TOTAL:		-	
		581.1	

VI. VALUE ADDED

(1966)	Value (000 US \$)
1. Wages & salaries	
- Employees in direct production (100 persons)*	106
- Other employees (12 persons)	81
2. Other payments for employees	
3. Annual depreciation	
4. Rentals paid	
5. Interest & royalties	
6. Sales tax (not incl. in TOTAL)	
7. Other ind. bus. taxes	
8. (-) Subsidies	
9. Corporate income before tax	
	54
	332

* incl. seasonal workers

VII. MONTHLY EARNING RATES

(End of 1966)	No. of pers. emp.	Average earning rate (US \$)
1. Local non-operative		
TOTAL:		
- Managers	3	440
- Engineers	-	-
- Technicians	-	-
- Accountants	1	320
- Sales officers	-	-
- Other professional staff	-	-
- Clerks & typists	-	-
2. Local operatives		
TOTAL:		
- Supervisors	1	360
- Foremen	1	200
- Machine operators	5	88
- Craftsmen	1	112
- Truck drivers	-	-
- Other full-time operatives	-	-
- Unskilled & part-time operatives	-	-
3. Foreign employees		
TOTAL:		
- Engineers, trainers and other technical control staff	1	960

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)						
Industry group: <u>Canning and preserving of fruits and vegetables (ISIC: 203)</u>						
1. Size groups by number of persons employed	Number of estab.	Number of emp.	Avg. gross prod. US & C.	Avg. gross prod. value	Avg. emp. gross prod. rate* (US)	
			per pers. (US \$)	per pers. (US \$)	(%)	
up to 5	26	97	448	2,398	70	
over 5	135	21,584	528	3,979	88	
TOTAL		161	21,681	589	3,972	88
2. Size groups by each of annual production (000 US \$)						
up to 2	26	80	18	302	231	
2 - 8	24	127	218	1,008	101	
8 -180	52	1,249	352	1,655	119	
over 180	84	20,278	542	4,140	87	
TOTAL		186	21,728	527	3,964	88

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

Future Plan: Within the next 2 years, the factory will invest approximately US \$ 80,000 for olive oil processing. Another 5 persons will then be employed.

Major Products:

Canned vegetables, fruits and fruit juices. The actual output is about 30 million cans, including contract and commission work on 3-shift operation. But the full-capacity output is said to be significantly higher than that.

Reporting Unit:

An old branch of a multi-establishment enterprise; owned by a private corporation, founded in 1924. No participation of foreign capital.

I. FIXED CAPITAL ASSETS

(End of 1966)	Year of installation	Orig. purchase value (1966 US \$)	Replacement value (1966 US \$)
1. Primary process equipment			
TOTAL:		280	360
- Process equipment	..	280	360
- Hand tools & apparatuses	-	-	-
- Cost of installation	-	-	-
2. Primary industrial building			
TOTAL:	..	72	..
(total floor space: 30,000 m ²)		72	..
3. Auxiliary facilities			
TOTAL:		344	544
- Water, steam, electricity, cooling & storing	-	-	-
- Transportation facilities	..	168	336
- Administrative facilities	..	176	208
- Laboratory facilities	-	-	-
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		696	..
4. Other fixed capital assets			
TOTAL:		120	..
- Land (total acreage: 42,000 m ²)	-	120	..

DETAIL OF PROCESS EQUIPMENT (No.):	Supplier country	Year of installation	Orig. purchase value (1966 US \$)	Replacement value (1966 US \$)
<u>Canning line system</u>				
a. Precookers	USA	1955	280	360
b. Filling machines				
c. Closing and sealing machines				
d. Autoclaves				
e. Conveyor-belts	FR. Germ.			
f. Labelling machines				
g. Fruit-washing machines				

HISTORY OF INVESTMENT:

This branch-establishment was constructed and began commercial production in 1955; in 1966 approximately \$640,000 were invested for the expansion of the canning facilities but this sum is not reflected in the above data. The production in the first year (1955) was already profitable at 75% of the current production level.

CAPACITY POWER:
Process equipment: 700* kW
- Electric motors:
* rough estimate

Generating equipment:
Installed capacity - kW

EXTERNAL CONDITIONS:

Transport: Long distance, fair; local area, excellent.
Utilities: Electricity and gas, excellent; water, fair.
Community: Residential, health and recreational facilities, fair.

II. INVENTORIES AND WORKING CAPITAL

(in 1966 US \$)

(End of 1966)	Actual value	2. Liquid assets	Actual value
1. Inventories	1,075	TOTAL:	5,800
TOTAL:	1,075	- Cash (hand/bank)	80
- Production materials	27	- Market. sec. & bonds	640
- Other input materials	160	- Short-term investment	136
- Work-in-process	416	- Prepaid expenses	672
- Finished products	472	- Accounts receivable	4,272
3. Desired working capital	Number of months	Value	
TOTAL:	-	-	
- Production materials			
- Other input materials			
- Finished products			
- Wages & salaries			
- Other special items			

III. MANNING TABLE

(number of persons)

A - Shift system
B - Other operators

(1966 average)	Total	1st shift A	2nd shift B	3rd shift A+B
ALL SHOPS & UNITS:	701	614	71	16
1. Primary operative shops	200	105	20	65
Canning line system*	200	105	20	65
2. Auxiliary operative units	118	106	6	6
- Repair and maintenance	19	19	-	-
- Mechanical shop	2	2	-	-
- Utilities control	7	7	-	-
- Product & material storage	72	72	-	-
- Off-site transport	-	-	-	-
- Guards, cleaners, etc.	18	6	6	6
3. Auxiliary non-operative units	383	383	-	-
- Production management	1	1	-	-
- Research & development	5	5	-	-
- Sales unit	170	170	-	-
- General administration	207	207	-	-

WORKING TIME PER OPERATIVE WORKER:

- Normal hours/day:	8 hours	- Normal days/year:	283 days
- Actual hours/year:	2,264 hours		

CAPACITY OF OPERATIVE SHOPS:

The utilization of the capacity (canning line system) is influenced considerably by the orders received from contractors; over 50% of the productive revenues consist of commissions.

IV. ANNUAL PRODUCTION

(1966) Product (or group of products)	Yr. of Prod.	Quantity produced*		Nominal capacity output	Unit price in factory (US \$)	Total production value (1966 US \$)
		Unit	Output			
- Chili products	..	000 cans	3,786.1	..	1,100	416.0
- Other canned vegetable products	..	" "	1,961.1	..	1,800	353.0
- Canned fruits	..	" "	589.3	..	500	295.0
- Tomato products	..	" "	3,324.3	..	800	266.0
- Fruit juices	..	" "	1,629.1	..	900	147.0
- Other products	..	" "	3,482.0	..	..	684.0
- Revenue from contract and commission work						3,440.0
- Net change in inventories						(+)1,075.0
TOTAL VALUE OF PRODUCTION						6,676.0

* The quantity and the value of production here represent the annual sale. The total value of production is therefore adjusted for the net change in inventory.

CONTRACT AND COMMISSION WORK:

Canning and packaging of tuna, sardines, shrimps, champignons (hongos de México) and other food products is performed in the form of contract and commission work. The so-called contractors are mostly other branch establishments of the same parent enterprise.

EXPORTS: None

CAPACITY UTILIZATION:

The production capacity is considered as being under-utilized, due to insufficient orders, as well as seasonal supply of raw materials. The nominal capacity output is not available.

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed				Total consumption value (1966 US \$)
	Unit	Purchase	% imported	Tariff rate	
1. Energy and water					
TOTAL:					
- Electricity	000 KwH	701	-	-	14
- Gas	000 m3	..	-	-	8
- Water	000 m3	..	-	-	6
2. Production materials					
TOTAL:					
- Tomatoes	000 t	1,687	-	-	54
- Chili	" "	338	-	-	32
- Sugar	" "	300	-	-	36
- Chicore	" "	276	-	-	36
- Vegetables of various kinds	" "	174	-	-	10
- Fruits	" "	1,413	-	-	136
- Other raw materials	" "	226	-	-	40

VI. VALUE ADDED

(1966)	Value (1966 US \$)
1. Wages & salaries	
- Employees in direct production (318 persons)	360
- Other employees (383 persons)	1,200
2. Other payments for employees	
3. Annual depreciation	100
4. Rentals paid	64
5. Interest & royalties	160
6. Sales tax (not incl. in TOTAL)	280
7. Other ind. bus. taxes	(136)
8. (-) Subsidies	16
9. Corporate income before tax	256
	2,736

VII. MONTHLY EARNING RATES

(End of 1966)	No. of empl.	Average earning rate (US \$)
1. Local non-operative		
TOTAL:		
- Managers	10	1,760
- Engineers	6	600
- Technicians	7	240
- Accountants	9	560
- Sales officers	120	300
- Other professional staff	15	320
- Clerks & typists	179	188
2. Local operatives		
TOTAL:		
- Supervisors	-	-
- Foremen	-	-
- Machine operators	-	-
- Craftsmen	28	144
- Truck drivers	-	-
- Other full-time operatives	90	120
- Unskilled & part-time operatives	-	-
3. Foreign employees		
TOTAL:		
- Managerial staff	5	1,040

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965) Industry group: Canning and preserving of fruits & vegetables (ISIC: 203)					
1. Size groups by number of persons employed	Number of establ.	Number of empl.	Avg. W & S. per pers. (US \$)	Avg. gross prod. val. per pers. (US \$)	Avg. emp. gross prod. ratio* (%)
up to 5	26	97	448	2,398	70
over 5	135	21,584	528	3,979	88
TOTAL	161	21,681	529	3,970	88
2. Size groups by rate of annual production (1966 US \$)					
up to 2	26	80	18	302	231
2 - 8	24	127	218	1,008	101
8 - 120	52	1,249	352	1,655	119
over 120	84	20,272	542	4,140	87
TOTAL	186	21,728	527	3,964	88

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

Governmental policies: No particular observations.

Future plan: Within the next 3 years (1967-1970), approximately US \$ 400,000 will be invested for the installation of a faster and more automated production line. No additional man-years are envisaged.

Major Products: Fruits and vegetables canning and bottling.
Capable of processing about 10,000 t annually based on 3-shift operation. Full-capacity output amounts to US \$ 5.5 million.

Reporting Unit: A one-establishment enterprise, privately owned; founded in 1960; 570 employees. One of the largest companies in this branch; own research activities; favourably situated in one of the major fruits and vegetable producing regions of the country. 76% exports. Business year: 1 May 1966 - 30 April 1967.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (1000 US \$)	Replacement value (1000 US \$)	Average age (Yrs.)
1. Primary process equipment (including installation cost)	1,519	..	
TOTAL:	1,429	..	3
- Process equipment *	90	..	-
- Hand tools & apparatuses			
2. Buildings	1,196	..	
TOTAL:	378	..	7
- Primary industrial buildings (total floor space: 3,557 m ²)	103	..	7
- Auxiliary buildings	458	..	7
- Warehouses	190	..	6
- Office administration buildings	73	..	6
- Housing			
3. Auxiliary facilities (excl. buildings)	229	..	5
TOTAL:	78	..	7
- Internal power equipment	15	..	5
- Laboratory facilities	82	..	3
- Means of transportation	54	..	6
- Office equipment			
TOTAL PHYSICAL FIXED ASSETS (excluding land):	2,944	..	
4. Other fixed capital assets	253	..	
TOTAL:	252	..	-
- Land (total acreage: 61,378 m ²)	1	..	-
- Land improvements (v. acc. 260 ")			
- Others			

*NB Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII).

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(196 monthly average)	up to					
	US\$	US\$	US\$	US\$	US\$	US\$
1. Local non-operatives						
- Managers						
- Engineers						
- Technicians						
- Accountants						
- Sales officers						
- Clerks and typists						
2. Local operatives						
- Supervisors						
- Foremen						
- Skilled operatives						
- Machine operators						
- Craftsmen						
- Truck drivers						
- Unskilled operatives						
- Other full-time operatives						
- Part-time operatives						
3. Foreign employees						
- Managerial staff						
- Technical staff						
- Other skilled operatives						
- Unskilled operatives						

No data available.

EXTERNAL CONDITIONS:

Transport:	external long distance	fair
	internal long distance	excellent
	local and city	"
Utilities:	electricity	insignificant
	water	excellent
	gas	-
Community:	residence:	fair
	health and recreation	excellent
	education:	fair
Own Welfare Facilities:		-

IV. MANNING TABLE

(number of persons)

Shift categories: A. Supervisory staff and foremen (for all shifts)
B. Skilled operatives
C. Semi-skilled operatives (machine operators)
D. Unskilled operatives

(1967 summer)	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	A-B	B-C
ALL SHOPS & UNITS:	575 (C)	105	224			200	26
1. Primary operative shops	402	4	30	45	129	180	14
- All primary operative departments	402	4	30	45	129	180	14
2. Auxiliary operative units	82	10	20			20	32
- Repair & maintenance	27	3	6			6	18
- Mechanical shop	-	-	-			-	-
- Tooling shop	-	-	-			-	-
- Utilities control	10	4	3			3	-
- Product & material storage	20	2	4			4	10
- Off-site transport	7	1	2			2	2
- Guards, cleaners, etc.	18	-	5			5	8
3. Auxiliary non-operative units	91	91	-			-	-
- Production management	6	6	-			-	-
- Research & development	3	3	-			-	-
- Sales unit	49	49	-			-	-
- Accounting	18	18	-			-	-
- General administration	15	15	-			-	-

(C) Including 50 seasonal workers.

III. INVENTORIES

(End of 1967)	Actual value (1000 US \$)	Number of months
Inventories	1,916	
TOTAL:	313	1
- Production materials	3	3
- Other input materials	-	-
- Work-in-process	1,600	4
- Finished products		

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
- Shift hours/day:	8	8	3.8	hours
- Actual hours/year:	2,205	2,205	1,090	hours
- Actual days/year:	276	276	276	days

V. ANNUAL PRODUCTION

(1967)

Products (or group of products)	Yr. of prod.	Quantity produced		Av. unit price at factory (US \$)	Total (*) output value (000 US \$)
		Unit	Quantity		
Canned baby food	1960/61	t	378.2	1,126.3	426
Specialities			619.4	872.7	541
Fruits			140.9	558.9	79
Soups			16.2	561.8	9
Processed food			259.7	873.7	227
Jam, marmalade and juices			150.7	411.1	62
Salads			658.3	465.9	307
Vegetables			5,479.9	319.5	1,751
Pickled vegetables			1,831.3	294.5	539
Frozen food			1,038	219.2	226
Export products			1,793.2	712.9	1,278

(*) free delivery

TOTAL VALUE OF PRODUCTION: 5,445

VI. VALUE ADDED

(1967)

	Total value (000 US \$)
1. Annual wages & salaries	
- Operative workers (425 persons)	610
- Non-operative workers (100 persons)	308
2. Other payments for employees	181
3. Annual depreciation	224
- Machinery & equipment	173
- Buildings & other facilities	38
- Non-physical capital assets	13
4. Rentals paid	51
5. Interest & royalties	74
6. Sales tax	277
7. Other indirect business taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	375

TOTAL VALUE ADDED: 2,100

DESCRIPTION OF MAJOR PRODUCTS:

All products: Serial production.

Packing units: Cans, glasses, and various large packages of frozen food weighing between 2.5 - 40 kg; 12 or 24 units/carton.

Terms of delivery: 3 - 4 days.

MARKET ASPECTS:

Re-sale:

Canned vegetables, fruits and meat; baby food, ketchup, frozen vegetables, frozen processed food.

Customers of products:

Restaurants, canteens, households.

Sales organization:

Sales representatives for households as well as for large-scale customers.

Share in the domestic market:

Approximately 30% of industrially processed fruits and vegetables.

Ketchup: 76%.

Company belongs to one of the four largest enterprises of this industry in the country.

Competition in the market:

Domestic prices are almost equal. Export prices are adjusted to foreign price level. Similar qualities at home and abroad.

EXPORT:

Total annual export: US \$ 1,355,000.

Major products	To Western countries	To Eastern countries	To Developing countries
Frozen food	100%	-	-
Pickled vegetables	100%	-	-
Canned vegetables	100%	-	-
Ketchup	50%	50%	-

The establishment has the highest export ratio of the fruit and vegetable processing industry in the country.

VII. ANNUAL CONSUMPTION

(1967)

1. Energy and water (*)	Quantity consumed		% import	Average import duties (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity			
TOTAL:					183
- Electricity	000 kWh	1,830			45
- Fuel	t	..			29
- Oil	t	..			29
- Gas (for heating)	000 m3	..			0.04
- Water	000 m3	370			20
2. Production materials					1,684
TOTAL:					1,684
- Fruits	t	247	65	..	92
- Vegetables	t	8,211	0.5	..	983
- Meat and fats	t	496	-	-	363
- Other ingredients	t	1,089	-	-	246

(*) 2,660,000 m3 of steam are internally supplied.

	Total consumption value (000 US \$)
3. Other materials & supplies	1,124
TOTAL:	1,009
- Packaging material (glasses, bottles, cans, labels, cartons)	
- Parts, supplies & services	91
- Other materials & supplies	24
4. Business services purchased	414
TOTAL:	115
- Transportation, storage & insurance	
- Communication, advertising & other business services	299
5. Work performed by subcontractors	-
TOTAL:	-

TOTAL VALUE OF CONSUMPTION: 3,345



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Страна	Классификация	Основные продукты	Том №	Страница
Франция	: 342-(5)	Литые изделия из цветного металла	II	664
Франция	: 342-(6)	Литые изделия из сплава меди и алюминия	II	666
Индия	: 342-(1)	Прокат из меди, медных сплавов, алюминия и алюминиевых сплавов	I	234
Индия	: 342-(2)	Слитки алюминия	I	236
Индия	: 342-(3)	Листы, полосы, диски, обручи и проволока из алюминия и меди	II	668
Израиль	: 342-(1)	Прокат алюминия (фольга, листы, полосы и диски)	I	238
Израиль	: 342/350-(2)	Трубы и профили из алюминия, а также окна и двери, изготовленные из профильного алюминия	I	240
Япония	: 342-(1)	Бруски, стержни, проволока, трубы малых и больших диаметров из меди и латуни	I	242
Югославия	: 342-(1)	Прокат и волочение из цинка и латуни (листы, полосы, бруски, проволока, трубы и т.д.)	I	244
Югославия	: 342-(2)	Волочение и литые цинка, меди и других цветных металлов	I	245
Югославия	: 342-(3)	Прокат, волочение и горячая штамповка алюминия и сплавов (листы, полосы, бруски, проволока, трубы большого диаметра, муфты и т.д.)	I	246
Югославия	: 342-(4)	Изделия из вытянутых цветных металлов (проволока в изоляционной оплетке, изделия из меди и медных сплавов, алюминиевые и стальные тросы)	II	670

**ПРОИЗВОДСТВО МЕТАЛЛИЧЕСКИХ ИЗДЕЛИЙ, НЕ ОТНОСЯЩИХСЯ
К РАЗЯДУ МАШИННОГО И ТРАНСПОРТНОГО ОБОРУДОВАНИЯ**

Восточная Африка	: 350-(1)	Проволочные гвозди	III	1170
Восточная Африка	: 350-(2)	Производство эмалированной посуды (изделия для домашнего обихода)	III	1172
Сальвадор	: 350-(1)	Медная и алюминиевая проволока	III	1174
Мексика	: 350-(1)	Стальные угольники, болты, гайки, прутковая сталь, баки, стойки и т.д.	III	1176
Мексика	: 350-(2)	Трос, проволока и проволочные изделия	III	1178
Мексика	: 350-(3)	Жестяные консервные банки	III	1180
Мексика	: 350-(4)	Стальная формовочная дробь (из стальной проволоки)	III	1182
Центральная Европа	: 350-(1)	Банки, банки с нажимными крышками и другие емкости разового использования	III	1184
Центральная Европа	: 350-(2)	Эмалированная медная проволока	III	1188
Центральная Европа	: 350/360-(3)	Фасонная сталь различных типов, резонансные вибраторы, трубчатые конвейеры, ленточные конвейеры и роликовая опора конвейеров	III	1192
Центральная Европа	: 350/360-(4)	Котлы, стальные мосты, гидравлические стальные пролетные строения, оборудование для театральной сцены, аппараты, баки, напорный трубопровод, баллоны высокого давления, краны, каиатная дорога, фуникулер, стальная отливка из серого чугуна и т.д.	III	1196
Центральная Европа	: 350/360-(5)	Оросительное и сельскохозяйственное оборудование, стальные профили	III	1200
Франция	: 350-(1)	Штампованные металлические изделия, инструменты и сигнальные устройства	I	248
Франция	: 350-(2)	Стальные и алюминиевые провода и кабели (из прутковой стали)	I	250
Франция	: 350-(3)	Готовые металлические части для автомобилей и предметы домашнего обихода	I	252
Франция	: 350-(4)	Радиаторы различных типов	I	254
Франция	: 350-(5)	Арматура для окон и дверей	I	256
Франция	: 350-(6)	Проволока (оцинкованная, в медной оплетке, отпущенная, с обмоткой и т.д.) и проволочные изделия (решетки для заборов, сварные сетки и т.д.)	I	258

<i>Страна</i>	<i>Классификация</i>	<i>Основные продукты</i>	<i>Том №</i>	<i>Страница</i>
Франция	: 350-(7)	Котлы, электронные принадлежности, арматура и фото-графическая аппаратура	II	672
Франция	: 350-(8)	Металлические рамы, слесарные и другие изделия, цинковые и медные изделия и т.д.	II	674
Франция	: 350-(9)	Оборудование для резки и штамповки листового металла (для изготовления автомобильных и тракторных деталей)	II	676
Франция	: 350-(10)	Болты, гайки, винты и шайбы	II	678
Франция	: 350-(11)	Ванны и баки из чугуна	II	680
Франция	: 350-(12)	Конторское оборудование и металлические бочки	II	682
Франция	: 350-(13)	Вырезные штампованные металлические изделия и инструменты	II	684
Франция	: 350-(14)	Опрыскиватели, чайники, ведра и другие металлические изделия для сельского хозяйства и домашнего обихода ...	II	686
Индия	: 350-(1)	Винты, заклепки, петли и другие скобяные изделия для строительства	I	260
Индия	: 350-(2)	Жестяные коробки и ящики	I	262
Индия	: 350-(3)	Строительные профили, сосуды для хранения жидкостей, трубы и т.д. (включая монтаж)	I	264
Индия	: 350-(4)	Строительные профили (включая монтаж)	I	266
Индия	: 350-(5)	Металлические (алюминиевые) предметы домашнего обихода	I	268
Индия	: 350-(6)	Металлические контейнеры, металлические колпачки для бутылок и другие металлические изделия	II	688
Индия	: 350-(7)	Металлические контейнеры, кроненпробки и другие металлические изделия	II	690
Индия	: 350-(8)	Болты, гайки и винты	II	692
Индия	: 350-(9)	Болты, гайки, винты, заклепки, гвозди и т.д.	II	694
Индия	: 350-(10)	Металлические предметы домашнего обихода (кухонная утварь, обручи, заклепки, рейки и т.д.)	II	696
Израиль	: 350-(1)	Арматура для труб и другие изделия чугуно- и сталелитейного производства	I	270
Израиль	: 350-(2)	Проволока, гвозди и заклепки	I	272
Израиль	: 350-(3)	Проволока, проволочная сетка и другие изделия из проволоки	I	274
Израиль	: 350-(4)	Оконные и дверные рамы из алюминиевых профилей	I	276
Израиль	: 350-(5)	Ирригационные трубы и арматура, алюминиевые профили и изготовленные из них дверные и оконные рамы	I	698
Израиль	: 350-(6)	Устройства по защите от солнечного тепла и оборудование складов	II	698
Япония	: 350-(1)	Стальные бочки	I	280
Япония	: 350-(2)	Пылеуловители, жалюзи, гибкие трубы, дверные петли и упорные башмаки (в основном стальные, а частично пластмассовые)	I	282
Япония	: 350-(3)	Металлические клапаны и пожарные гидранты	I	284
Япония	: 350-(4)	Банки, крышки и другие емкости (жестяные и алюминиевые)	I	286
Япония	: 350-(5)	Ведра, ковши, тазы и т.д. (металлические и пластмассовые)	I	288
Япония	: 350-(6)	Стальные конструкции	I	290
Япония	: 350-(7)	Стальные и алюминиевые оконные рамы	I	292
Япония	: 350-(8)	Оконные ставни (тяжелые и легкие)	I	294
Япония	: 350-(9)	Проволочные канаты, стальные стренги и стальная проволока	I	296
Япония	: 350-(10)	Стальная проволока	II	700
Япония	: 350-(11)	Проволочные и плоские пружины	II	702
Япония	: 350-(12)	Изделия из белой жести (банки и т.д.)	II	704
Япония	: 350-(13)	Крепежные винты, болты и гайки	II	706
Япония	: 350-(14)	Болты и гайки	II	708
Япония	: 350-(15)	Болты, гайки, винты, заклепки и т.д.	II	710
Югославия	: 350-(1)	Металлические контейнеры и бочки	I	298
Югославия	: 350-(2)	Эмалированные изделия, посуда, радиаторы, котлы и т.д.	I	299

Страна	Классификация	Основные продукты	Том №	Страница
Югославия	: 350-(3)	Ручной инструмент для сельского хозяйства (изделия ручной ковки)	I	300
Югославия	: 350-(4)	Ручной инструмент для сельского хозяйства (литые и кованые изделия)	I	301
Югославия	: 350-(5)	Стальные конструкции, резервуары, подъемные краны, холодильное оборудование и т. д.	I	302
Югославия	: 350-(6)	Стальные цепи (и детали сельскохозяйственных машин) ...	II	712
Югославия	: 350-(7)	Литой и кованый ручной сельскохозяйственный инструмент	II	713
Югославия	: 350-(8)	Кухонные плиты и жестяные контейнеры	II	714
Югославия	: 350-(9)	Радиаторы и котлы	II	715
Югославия	: 350-(10)	Гребные винты	II	716
Югославия	: 350-(11)	Кухонное оборудование, оборудование для отопления и другие бытовые предметы	II	717
Югославия	: 350-(12)	Металлическая мебель	II	718
Югославия	: 350-(13)	Спиральные изделия, школьное оборудование и другие металлические и пластмассовые изделия	II	719
Югославия	: 350-(14)	Литье и арматура для водопроводов и детали для текстильных машин	II	720
Югославия	: 350-(15)	Гребные винты и проволочные изделия	II	721
Югославия	: 350-(16)	Арматура, фланцы и другие скобяные изделия	II	722

ПРОИЗВОДСТВО МАШИННОГО ОБОРУДОВАНИЯ, ИСКЛЮЧАЯ ЭЛЕКТРОДВИГАТЕЛИ

Иран	: 360-(1)	Домашние холодильники, водоохладители и разнообразные отопительные и охлаждающие аппараты	III	1204
Иран	: 360-(2)	Холодильники, охладители, нагреватели и т. д.	III	1208
Мексика	: 360-(1)	Краны и штамповочные прессы	III	1212
Мексика	: 360-(2)	Тракторы, сеялки, культиваторы, бороны и другой сельскохозяйственный инвентарь	III	1214
Мексика	: 360-(3)	Сельскохозяйственные тракторы	III	1216
Мексика	: 360-(4)	Сельскохозяйственные машины, грузовики и тракторы	III	1218
Центральная Европа	: 360-(1)	Насосы, моторы, коммутаторные устройства	III	1220
Центральная Европа	: 360-(2)	Измельчители-швырялки, комбайны, картофелеуборочные машины, приспособления для уборки кукурузы и т. д.	III	1224
Центральная Европа	: 360-(3)	Машины и оборудование для пластмассовой промышленности	III	1228
Центральная Европа	: 360-(4)	Ковочные машины, станки для фрезерования коленчатых валов и сверлильные станки	III	1232
Центральная Европа	: 360-(5)	Универсальные станки, деревообрабатывающие станки, токарные патроны, приборы для испытания на твердость	III	1236
Центральная Европа	: 360-(6)	Револьверные и патронные токарные станки	III	1240
Центральная Европа	: 360-(7)	Гнезда и сепараторы шарикоподшипников, стандартные шарикоподшипники и т. д.	III	1244
Франция	: 360-(1)	Шарикоподшипники	I	304
Франция	: 360-(2)	Токарные станки, включая вспомогательное оборудование и запчасти	I	306
Франция	: 360-(3)	Фрезерные станки	II	724
Франция	: 360/381-(4)	Дизельные двигатели (для судов и промышленных установок)	II	726
Франция	: 360-(5)	Насосы, оборудование для них и арматура	II	728
Франция	: 360-(6)	Центробежные насосы и компрессоры	II	730
Франция	: 360-(7)	Контрольно-измерительные и регулирующие приборы для турбин	II	732
Франция	: 360-(8)	Прессы	II	734
Индия	: 360-(1)	Центробежные насосы	I	308
Индия	: 360-(2)	Центрифуги, кристаллизаторы, передвижные лебедки и н. д.	I	310
Индия	: 360-(3)	Краны, лебедки, смесители для песка и другое строительное оборудование	I	312

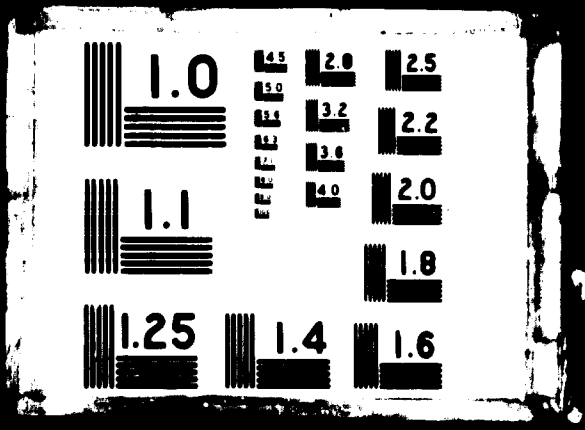
Страна	Классификация	Основные продукты	Том №	Страница
Индия	: 360-(4)	Краны, бетономешалки, трубы и т. д.	I	314
Индия	: 360-(5)	Культиваторы, опылители, молотилки и другие сельскохозяйственные машины и орудия	I	316
Индия	: 360-(6)	Краны, вагонетки, тележки с подъемным устройством для груза и другое погрузочно-разгрузочное оборудование	I	318
Индия	: 360/341-(7)	Дизельные двигатели, ткацкие станки, сельскохозяйственные насосы и ленточные детали для станков	II	736
Индия	: 360-(3)	Сельскохозяйственные прицепы, бороны, плуги и т. д.	II	738
Индия	: 360-(9)	Токарные и продольно-строгальные станки, ленточные пилы и катаные изделия	II	740
Индия	: 360-(10)	Швейные машины (в собранном виде и детали)	II	742
Индия	: 360-(11)	Листорезные станки и механические прессы	II	744
Индия	: 360-(12)	Молотилки, веялки, культиваторы и водозаборные колеса	II	746
Индия	: 360-(13)	Штампы, кондукторы и арматура	II	748
Индия	: 360-(14)	Токарные станки	II	750
Индия	: 360-(15)	Металлические конструкции, бак для хранения жидкостей, электроподъемники, ленточные пилы, оборудование для производства сахара и бумаги	II	752
Индия	: 360-(16)	Насосы и коммутаторные устройства	II	754
Израиль	: 360-(1)	Гидравлические насосы и цилиндры	I	320
Израиль	: 360-(2)	Сеиные прессы, зерновые и другие сеялки, сортировальные машины и т. д.	I	322
Израиль	: 360-(3)	Сеялки, культиваторы и уборочные машины	I	324
Израиль	: 360-(4)	Насосы	II	756
Япония	: 360-(1)	Шарикоподшипники, детали машин, насосы и изделия порошковой металлургии	I	326
Япония	: 360-(2)	Мотокультиваторы, опрыскиватели, насосы, кусторезы и т. д.	I	328
Япония	: 360-(3)	Насосы различных типов	I	330
Япония	: 360-(4)	Сельскохозяйственные орудия (тракторные плуги, погрузчики, бороны и т. д.)	II	758
Япония	: 360-(5)	Сельскохозяйственные орудия (рядоделатели, прополочные бороны, барабаны и грабли)	II	760
Япония	: 360-(6)	Корморезки	II	762
Югославия	: 360-(1)	Насосы и сельскохозяйственные машины	I	332
Югославия	: 360-(2)	Комбайны, грузовики, дробилки и другое сельскохозяйственное оборудование и детали	I	333
Югославия	: 360-(3)	Токарные станки и буровое оборудование	I	334
Югославия	: 360-(4)	Компрессоры, пневматические инструменты, автомобильные фары и другие запчасти для автомобилей	I	335
Югославия	: 360-(5)	Шарикоподшипники	I	336
Югославия	: 360-(6)	Водяные турбины, всасывающие насосы, дизельные двигатели и другие машины и аппаратура для промышленности	II	764
Югославия	: 360-(7)	Дизельные двигатели и тракторы	II	765
Югославия	: 360-(8)	Швейные машины	II	766
Югославия	: 360-(9)	Лифты, лестницы и другие металлические конструкции ...	II	767

ПРОИЗВОДСТВО ЭЛЕКТРИЧЕСКИХ АППАРАТОВ, АРМАТУРЫ, ПРИНАДЛЕЖНОСТЕЙ И ДЕТАЛЕЙ

Иран	: 370-(1)	Электрические кабели с пластмассовой изоляцией	III	1248
Иран	: 370-(2)	Телевизоры, приемники и проигрыватели	III	1252
Иран	: 370-(3)	Телевизоры	III	1256
Мексика	: 370-(1)	Электрические лампы	III	1260
Мексика	: 370-(2)	Проволока из цветных металлов, провода и кабели	III	1262
Центральная Европа	: 370-(1)	Стационарные небольшие аккумуляторы для телефонных станций и стартерные аккумуляторы для автомобилей	III	1264
Центральная Европа	: 370-(2)	Силовые кабели и линии передачи, кабели и линии передачи для электросвязи, кабельная арматура	III	1268
Центральная Европа	: 370-(3)	Холодильники, морозилки, автоматические стиральные машины, электродвигатели и т. д.	III	1272

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VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (1):	Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Av. Age (yrs)	Supplier		Year of installation	Daily running time (e)	Output capacity
					Country	Supplier			
Various crushing machines	56	78	..	..			
Pea-threshing plant	8	123	..	4	Belgium		1964	(e) 16 hrs	4,000 kg/hr
Autoclave-station	12	36	..	4	Sweden		1964	(e) 18 "	..
Steriliser (conveyor-belt type)	1	33	..	4	Germany, F.R.		1964	(e) 18 "	..
Freezer (conveyor-belt type)	1	80	..	2	USA		1966	(b) 10 "	1,700 kg/hr
Peeling plant	1	11	..	5	Sweden		1963	(b) 16 "	300 kg/hr
Bean processing plant	6	19	..	3	Belgium		1965	(e) 16 "	300 kg/hr
Cherry pitting machine	1	7	..	6	Germany, F.R.		1962	(a) 16 "	..
Various sorting machines	19	37	..	5	Austria, F.R.		1963	(b) 16 "	400 kg/hr
					Germany, F.R.				
Pilling and capping machines	34	98	..	1	USA		1967	(b) 16 "	70 units/min
Bottle capping and labelling machine	1	10	..	1	Germany, F.R.		1967	(b) 16 "	35 "
Packing machine	1	26	..	3	Switzerland		1965	(b) 16 "	27 "
Other packing and labelling machines	21	41	..	..			
Other special machines	..	419	..	1-6					
Empty can conveying machinery	1	14	..	4					
Lift trucks	17	4	..	2-4					
Stacker truck	7	28	..	1-4					
Various conveyor-belt type sorting machines	74	81	..	4					
Platform balance (50 t)	1	14	..	6					
Various balances (5-6 t)	22	8	..	1-6					
Various containers and tank cars	39	12	..	2-6					
Other machines	..	266	..	1-6					

For further details see page 4/XII.

CAPACITY POWER:

Process equipment:
- electric motors kW 680

Generating equipment:

- installed capacity kVA -

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization		Automation		Further details
		Mechan.	Automat.	I. fully automated	II. semi-automated	
All operative shops		B	II			The machinery and equipment utilized is rather new and of modern standard.

CAPACITY UTILIZATION:

Full-capacity output: US \$ 5.5 million.

Current utilization: Based on 3-shift operation.

Major products (or processes)	Approximate %									
	up to 20	20-40	40-60	60-70	70-80	80-90	90-100			
All products										X

The company only operates at full capacity during harvest time.

In order to shorten the period during which machinery and equipment can not be fully utilized due to insufficient domestic supply of raw material, the company increased imports of fruits.

IX. HISTORY & PLAN

1. Performance in the past:

Year:	Total output (1000 US \$)	No. of persons employed	Total exports (1000 US \$)
1963			
1964			
1965			
1966			
1967			
1968			

No data available.

2. Investments in the past:

From 1960 to 1967:	Approximate amount (1000 US \$)	Type of investment
1960 to 1967	1,470	Land, buildings
" 1960 " 1967	1,200	Machinery
" 1960 " 1967	670	Office equipment
In 1967:	530	

3. Future Plan:

From 1967 to 1969:	Approximate amount (1000 US \$)	Type of investment
1967 to 1969	970	Expansion of primary operative shops; rationalization of machinery and equipment.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C = confidential; figures of these size groups are included in those underlined.

(1964)						
Industry: Food canning (ISIC Code: 203, 204)						
1. Size groups by number of persons employed:		No. of estab.	No. of empl.	Av. W. & S. per pers. (RUB \$)	Av. gross prod. val./per pers. (RUB \$)	Av. value added/gross prod. ratio (%)
up to 19	232	659	1,324	10,623	42	
20 - 99	28	1,142	1,558	10,843	48	
100 - 499	6	2,065	1,817	10,175	46	
500 - 999	1	C	C	C	C	
over 1,000	-	-	-	-	-	
TOTAL:	267	3,866	1,657	10,448	46	

2. Size groups by annual rate of production (1000 US \$):		No. of estab.	No. of empl.	Av. W. & S. per pers. (RUB \$)	Av. gross prod. val./per pers. (RUB \$)	Av. value added/gross prod. ratio (%)
up to 20	157	83	974	9,664	49	
20 - 40	26	97	927	7,547	43	
40 - 200	55	629	1,302	8,303	44	
200 - 400	7	275	1,444	7,730	46	
400 - 2,000	18	2,780	1,804	11,326	46	
over 2,000	4	C	C	C	C	
TOTAL:	267	3,866	1,657	10,448	46	

XII. DESIGN AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service

- | | | |
|---|---|------------------------------------|
| 1. Engineering study | 1. Technical and managerial personnel | 2. Import and export promotion |
| 2. Financial assistance | 4. Industrial training | 3. Administration of foreign labor |
| 3. Industrial services | 5. Equipment supply, installation & maintenance | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
-----------------	-------------------	-----------------	-------------------	-------------------------

The reporting establishment is interested in supplying know-how, experts, and technical assistance.

Presently the company employs 35 foreign workers.

XIII. SUPPLEMENTS & NOTES

Commission and contract work:

The company manufactures farinaceous products and baby food on commission basis. In 1967 total commission received amounted to US \$ 286,000. Commission work is based on long-term (US \$ 103,000) as well as on short-term agreements (US \$ 183,000).

On the other hand, one subcontractor was asked by the company to produce juices on commission basis. The company's orders account for a small part of the subcontractor's annual proceeds. Commissions paid amounted to US \$ 14,900. The work performed is based on a short-term agreement.

Management development:

In the past numerous employees participated in different nationally conducted management development courses.

Inventory policies:

On the average the value of finished products in stock amounts to 19% of the total production value.

Major bottlenecks:

The problem of lacking personnel could almost be solved.

NAME AREA: 825-1)

NAME PROJECT: Wheat flour. Capable of producing annually 40,000 t on 3-shift operation.

BRIEF HISTORY: Branch of a 4-establishment enterprise founded in 1954. Originally 100% foreign capital participation, now government owned. The total number of employees in the parent company is 534. The number of employees in the central office is 29.

I. FIXED CAPITAL ASSETS (in 000 US \$)		Year of compl.	Orig. purchase value	Replacement value
(End of 1966)				
1. Primary process equipment				
Total:				
- Process equipment	1958	981	1,260	
- Hand tools and apparatus		981	1,260	
- Cost of installation		included	incl.	
2. Primary industrial building				
Total:				
(total floor space: .. m ²)	1958	207	..	
3. Auxiliary facilities				
Total:				
- Water, steam, electricity, cooling and atering	1958	507	..	
- Transportation facilities (total load: .. t)		362	..	
- Administrative facilities	1958	49	..	
- Others (Manager's house)	1958	82	..	
- Others (Manager's house)	1958	14	..	
TOTAL PHYSICAL FIXED CAPITAL ASSETS (incl. land):				
		1,695	..	
4. Other fixed capital assets				
Total:				
- Land (total acreage: .. m ²)		15	..	
		35	..	

DETAIL OF I.1. (supplier):	Year of inst.	Orig. purchase value	Replacement value
Screen room (UK)	1958	182	..
Mill (")	"	697	
Sprinkler (")	"	70	
Hydromet (")	"	10	
Box cleaner (")	"	7	
Boiler packer (")	"	6	
Hizers (")	"	7	
Crumbler (")	"	2	

HISTORY OF INVESTMENT:

Construction of the factory as well as production started in 1958. In 1965 US \$ 140,000 were invested to double the capacity of the flour mill.

ENERGY CONSUMPTION:

Electric motors: (46) 636 kW
 Generator equipment: - installed capacity: - MVA

ENVIRONMENTAL CONDITIONS:

Climate: Long distance: poor during long rains; local area: fair.
 Pollution: Electricity, water: fair.

Summary:

II. INVENTORIES AND WORKING CAPITAL (in 000 US \$)		Actual value
(End of 1966)		
1. Inventories		
Total:		
- Production materials	550	
- Other input materials	146	
- Work-in-process	166	
- Finished products		
2. Liquid assets		
Total:		
- Cash (hand/bank)	0.4	
- Market sec. & bonds	-	
- Short-term investment	-	
- Prepaid expenses	-	
- Accounts receivable	445	

3. Desired working capital	No. of months	Value
Total:		
- Production materials	3	800
- Other input materials	3	840
- Work-in-process		
- Finished products		
- Wages and salaries		

* B - Machine operators
 * C - Other operatives

III. MANNING TABLE

(1966 average)	Total	1st shift			2nd shift		3rd shift	
		B*	C*	B+C*	B+C*	B+C*		
TOTAL EMPLOYED:	254	168	13	13	13			
1. Primary operative shops								
Purifying shop	3	1	-	1	1			
Rolling floor	3	1	-	1	1			
Sifter floor	3	1	-	1	1			
Mill basement	3	1	-	1	1			
Cyclon floor	3	1	-	1	1			
Screen floor	4	2	-	1	1			
Packing shop	112	7	61	22	22			
2. Auxiliary operative units								
- Repair and maintenance	3	3	-	-	-			
- Tooling shop	-	-	-	-	-			
- Mechanical shop	-	-	-	-	-			
- Utilities control	4	4	-	-	-			
- Product and material storage	55	55	-	-	-			
- Off-site transport	29	29	-	-	-			
- Guards, cleaners, etc.	20	10	-	5	5			
3. Auxiliary non-operative units								
- Production management	3	3	-	-	-			
- Research and development	-	-	-	-	-			
- Sales unit	-	-	-	-	-			
- Accounting	-	-	-	-	-			
- General administration	9	9	-	-	-			

CAPACITY OF OPERATIVE SHOPS:

WORKING TIME PER OPERATIVE WORKER:	
- Normal hours/day:	8 hours
- Normal days/year:	300 days
- Actual hours/year:	2,410 hours

The wheat mill has a utilization rate of 100%, it is fully automated and mechanized. Packing is neither automated nor mechanized.

IV. ANNUAL PRODUCTION (in 000 US \$)

Products (or groups of products)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price or factory (US \$)	Total production value
		Mill	Output			
Wheat flour	..	\$	22,964	40,000	159.0	3,652
Waste (by-products)	..	\$	348
Total value of production						4,000

Remarks

Part of the by-products (US\$252,000) is exported.

Capacity utilization of mill

The input (wheat) is 12,500 lbs per hour. The mill operates 3 shifts.

VI. VALUE ADDED (in 000 US \$)

(1966)	Value
1. Wages & salaries	
- Employees in direct production (232 persons)	99
- Other employees (12 persons)	31
2. Other payments for employees	43
3. Annual depreciation	82
4. Rentals paid	-
5. Interests and royalties	98
6. Sales tax	-
7. Other ind. bus. tax (-) subsidies	2
8. Corporate income before tax	484
TOTAL VALUE ADDED:	839

VII. MONTHLY WAGEING RATES (in US \$)

(End of 1966)	No. of emp.	Average earnings rates
1. Local non-operatives total:		
- Managers		
- Engineers		
- Technicians		
- Accountants		
- Sales officers		
- Clerks and typists		
2. Local operatives total:		
- Supervisors		
- Foremen		
- Machine operators		
- Craftsmen		
- Truck drivers		
- Semi-skilled operat.		
- Unskilled operat.		
- Part-time operat.		
3. Foreign employees total:		

No details available

V. ANNUAL CONSUMPTION (in 000 US \$)

1. Power and water	Quantity consumed		%	Tariff rate	Total consumption value
	Mill	Persons			
- Electricity	000 KW	1,055			42
- Liquid fuel and lubricants: oil	000 gal.	30			3
- Lubricants	"	440			1
- Water	"	5.5			4
2. Production materials total:					2,860
- Wheat	000 t	31	50		2,834
- Chemicals					26

3. Other materials and supplies total:	TOTAL consumption value
- Packaging (bags) bgs, cardboard	188
- Parts etc. for equip. maintenance	163
	25
4. Business services purchased total:	71
- Transport, storage and insurance	9
- Comm. advert. and other bus. activities	62
5. Work performed by sub-contractors total:	-
TOTAL VALUE OF CONSUMPTION:	3,161

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY (in US \$)

1. Size groups by establishments	No. of establs.	No. of emp.	Avr. M & S. per emp.	ISIC-codes		FO
				Avr. gross prod. val./emp.	Avr. cap./gross prod.	
10 - 19	35	499	..	..	..
20 - 49	47	1,606	..	..	..	No data
50 - 99	24	1,588	..	..	..
100 - 499	17	3,429	..	..	..	available
over 500	2	2,102	..	..	..
total	125	9,224	440	6,010		
2. Size groups by scale of production of establishments:						
up to 2						
2 - 8						
8 - 40						
40 - 100						
100 - 200						
200 - 400						
400 - 1,000						
1,000 - 4,000						
over 4,000						
total						

No data available

IX. SUPPLEMENTS

GOVERNMENTAL POLICIES:

The supply of wheat is controlled by a wheat board.

* Capital is defined as physical capital goods.

MAJOR PRODUCTS: Wheat flour, maize flour, rice, etc. Capable of producing annually 9,600 t of wheat flour, 5,760 t of maize flour, 7,650 t of rice on a 3-shift operation.

REPORTING UNIT: A one-establishment enterprise founded in 1948. Originally private corporation with no foreign capital participation, now Government owned.

I. FIXED CAPITAL ASSETS (in 000 US \$)		Year of compl.	Orig. purchase value	Replacement value
(End of 1966)				
1. Primary process equipment				
total:				
- Process equipment			397	517
- Hand tools and apparatuses			-	-
- Cost of installation			-	-
2. Primary industrial building				
total:				
(total floor space: .. m ²)		1962	306	..
3. Auxiliary facilities				
total:				
- Water, steam, electricity, cooling and storing	t)	1948	145	..
- Transportation facilities (total load: ..				
- Administrative facilities				
- Laboratory facilities				
TOTAL PHYSICAL FIXED CAPITAL ASSETS (excl. land):				
			848	..
4. Other fixed capital assets				
total:				
- Land (total acreage: .. m ²)			rented	

DETAIL OF I.I. (supplier):		Year of inst.	Orig. purchase value	Replacement value
Wheat mill (UK)		1962	257	336
Rice mill (UK)		1962		
Maize mill (UK)		1962	135	175
Oil mill (UK)		1962		
Sack cleaning equipm. (UK)		1962	1	1
Conveying equipm. (UK)		1962	4	5

HISTORY OF INVESTMENT:

Both construction of the factory and production started in 1948.

II. INVENTORIES AND WORKING CAPITAL (in 000 US \$)		Actual value	Actual value
(End of 1966)			
1. Inventories		420	
total:			364
- Production material	} 420		- Cash (hand/bank)
- Other input materials			- Market sec. & bonds
- Work-in-process			- Short-term investment
- Finished products			- Prepaid expenses
			- Accounts receivable

4. Desired working capital		No. of months	Value
total:		3	420
- Production materials	} 420		* B - Machine operators
- Other input materials			* C - Other operatives
- Work-in-process			
- Finished products			
- Wages and salaries			

III. MANNING TABLE (1966 average)		Total	1st shift B*	2nd shift C*	3rd shift B+C*
TOTAL EMPLOYED:					
		164	102	31	31
1. Primary operative shops					
- Wheat mill		110	25	23	31
- Maize mill		64	14	10	20
- Rice mill		19	6	5	4
- Oil mill		15	2	5	4
		12	3	3	3

2. Auxiliary operative units					
		30	30	-	-
- Repair and maintenance		3	3	-	-
- Tooling shop		-	-	-	-
- Mechanical shop		-	-	-	-
- Utilities control		-	-	-	-
- Product and material storage		7	7	-	-
- Off-site transport		5	5	-	-
- Guards, cleaners, etc.		15	15	-	-

3. Auxiliary non-operative units					
		24	24	-	-
- Production management		2	2	-	-
- Research and development		1	1	-	-
- Sales unit		1	1	-	-
- Accounting		-	-	-	-
- General administration		18	18	-	-
- Others (working proprietors)		2	2	-	-

CAPACITY OF OPERATIVE SHOPS:	WORKING TIME FOR OPERATIVE WORKER:
	- Normal hours/day: 8 hours
	- Normal days/year: 300 days
	- Actual hours/year: 2,910 hours

Wheat mill: 120 bags x 200 lbs/8 hours;
 Maize mill: 80 bags x 80 kg/8 hours;
 Rice mill: 85 bags x 100 kg/8 hours (for seasonal reasons 8 months idle)
 During the season all three mills are utilized up to capacity. They are fully automated and mechanized.

CAPACITY POWER:		Generating equipment:	
- Electric motors:	640 kW	- installed capacity:	- kVA

INTERNAL CONDITIONS:
Infrastructure: Long distance poor during long rain, local area fair
Production: Water, electricity, gas - fair
Community: Residential, health and recreational, educational fair

IV. ANNUAL PRODUCTION (in 000 US \$)

Products (or group of products)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price ex factory (US \$)	Total production value
		Unit	Output			
Wheat flour		t	9,268	9,600	151	1,399
Maise flour		t	2,675	5,760	103	275
Rice		t	567	7,650	102	58
Groundnut oil		t	99		368	22
Waste						227
Total value of production:						1,981

VI. VALUE ADDED (in 000 US \$)

(1966)	Value
1. Wages & salaries	
- Employees in direct production (140 persons)	69
- Other employees (23 persons)	52
2. Other payments for employees	10
3. Annual depreciation	48
4. Rentals paid	6
5. Interests and royalties	18
6. Sales tax	-
7. Other indus. tax (-) subsidies	-
8. Corporate income before tax	96
TOTAL VALUE ADDED:	299

COMPETING IMPORTS

The CIF price of wheat flour without tariff of competing imports amounts to \$ 13.23/200 lbs. No duty is levied. On imports of groundnut oil 37.5 % duty is charged.

MINIMAL CAPACITY OUTPUT

Based on a 3-shift operation.

VII. MONTHLY EARNING RATES (in US \$)

(End of 1966)	No. of emp.	Average earnings rates
1. Local non-operatives		
total:	23	..
- Managers	3	280-700
- Engineers	1	560
- Technicians	-	-
- Accountants	1	210-290
- Sales officers	1	108
- Clerks and typists	17	56
2. Local operatives		
total:	140	..
- Supervisors	-	-
- Foremen	3	94
- Machine operators	5	70
- Craftsmen	7	56
- Truck drivers	8	42-49
- Other fulltime operators	102	39
- Unskilled operat.	-	-
- Part-time operat.	15	32
3. Foreign employees		
total:	1	560
- Engineers, trainees and other technical control staff	1	560

V. ANNUAL CONSUMPTION (in 000 US \$)

1. Energy and water total:	Quantity consumed		Tariff rate	Total consumption value
	Unit	Purchase		
- Electricity	000 Kwh	1,020	-	26
- Lubricants	..	..	-	24
- Water	Gallons	2,298	-	0.5
				2
				1,554
2. Production materials total:				
Wheat	t	12,946	39	1,177
Maise	t	3,335	-	251
Paddy	t	642	-	68
Groundnuts	t	145	-	35
Chemicals				23

	Total consumption value
3. Other materials and supplies total:	61
- Packaging (text. cloth, cardboard, etc.)	10
- Parts etc. f. equipm. maintenance for non-manufacturing activities	16
- for non-manufacturing activities	15
4. Business services purchased total:	41
- Transport, storage, insurance	-
- Communic., advertising, etc.	41
5. Work performed by sub-contractors total:	-
TOTAL VALUE OF CONSUMPTION:	1,632

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY (in US \$)

1. Size groups by establishments	No. of establs.	No. of emp.	Avr. M.A.S. per estab.	ISIC-code	Avr. gross prod. val. per estab.	Avr. emp. gross prod. ratio*
10 - 19	35	498	..	..	No data	
20 - 49	47	1,606	..	..	data	
50 - 99	24	1,588	..	..	available	
100 - 499	17	3,429	..	..	..
over 500	2	2,102	..	..	..
total	125	9,223	440	6,010		
2. Size groups by scale of production of establishments:						
up to	2					
2 - 8	8					
8 - 40	40					
40 - 120	120					
120 - 240	240					
240 - 400	400					
400 - 1,600	1,600					
1,600 - 4,000	4,000					
over 4,000	4,000					
total						

No data available

* Capital is defined as physical capital goods.

IX. SUPPLIERS

Major Products: Wheat flour and by-products. Installed capacity is about 80,000 t of wheat per annum with 3 shifts.

Reporting Unit: Branch of an enterprise, founded in 1920. Private corporation with no foreign capital participation. The parent enterprise has another large branch (with over 1,000 employees) producing biscuits, pastry, etc. and using the flour from this branch.

I. FIXED CAPITAL ASSETS

(End of 1966)		Year of installation	Orig. purchase value (1966 US \$)	Replacement value (1966 US \$)
1. Primary process equipment				
TOTAL				
- Process equipment			735	1,411
- Hand tools & apparatuses			13	26
- Cost of installation			166	280
2. Primary industrial building				
TOTAL				
(total floor space: 60,40 m ²)			312	623
(19 silos)			312	623
3. Auxiliary facilities				
TOTAL				
- Water, steam, electricity, cooling & storing and others			160	320
- Transportation facilities (Trucks, etc.)			20	40
- Administrative facilities			12	24
- Laboratory facilities				
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land)				
			1,418	2,524
4. Other fixed capital assets				
TOTAL				
- Land (total acreage: 23,100 m ²)			5.3	489
			5.3	489

DETAIL OF PROCESS EQUIPMENT (no.):	Supplier country	Year of installation	Orig. (**)	Replacement value (1966 US \$)
Transport equipment, feeding machinery, air conditioning equipment, bleaching equipment, centrifuges, separators, grinders, roller mills, purifiers, sifters, mixers, dust-collectors, classifiers, sewing machines, packaging equipment and auxiliary equipment	(*)	1942-1955	263.4	526.9
		1956	335.6	671.2
		1957	20.3	44.6
		1958	28.8	57.6
		1959	6.6	13.3
		1962	21.2	29.7
		1963	16.0	20.8
		1964	18.7	22.4
		1965	14.7	16.2
		1966	7.7	9.0

(*) The greatest part of equipment was supplied from Switzerland; only in 1956 some machines were supplied from Federal Republic of Germany.
(**) Yearly net investments.

HISTORY OF INVESTMENT:

In 1920 the factory was constructed and the first trial and commercial production started. The break-even point was surpassed in the same year. In 1955 US \$ 300,000 were invested for the expansion of grinders and store-rooms for wheat and in 1956 US \$ 336,000 were invested for the same purpose. Investments in later years can be seen in the above.

This branch establishment operates as a completely decentralized unit of the parent enterprise, although a significant part of its output is sold to the other branch of the same enterprise.

CAPACITY POWER:

Process equipment:	Generating equipment
Electric motor: 825 kW	Installed capacity: - kVA

EXTERNAL CONDITIONS:

Transport: Long distance, fair; local area, poor.

Utilities: Electricity, water, fair.

Community: Residential, health and recreational, educational, fair. Costs for land very high as the ground is not sold up to a depth of 40 meters. The factory is situated far away from the source of supply of water.

II. INVENTORIES AND WORKING CAPITAL

(in 1966 US \$)

(End of 1966)		Actual value	2. Liquid assets	Actual value
1. Inventories				
TOTAL				
- Production materials		400	- Cash (hand/bank)	341
- Other input materials		51	- Market. sec. & bonds	-
- Work-in-process		-	- Short-term investment	-
- Finished products		276	- Prepaid expenses	-
			- Accounts receivables	188
3. Desired working capital				
TOTAL				
	Number of months	Value		
- Production materials	3	960.0		
- Other input materials	1	9.3		
- Finished products	-	-		
- Wages & salaries	2	21.0		
- Other special items	..	8.0		

III. MANNING TABLE

(number of persons)

A = Shift supervisor
B = Other operatives

(1966 average)	Total	1st shift		2nd shift A + B	3rd shift A + B
		A	B		
ALL SHOPS & UNITS:	95	68	14	13	
1. Primary operative shops	49	27	6	8	8
- Milling department	28	12	-	8	8
- Packing department	21	15	6	-	-
2. Auxiliary operative units	35	24	6	5	
- Repair and maintenance	13	6	4	3	
- Mechanical shop	-	-	-	-	
- Utilities control	-	-	-	-	
- Product & material storage	9	9	-	-	
- Off-site transport	6	2	2	2	
- Guards, cleaners, etc.	-	-	-	-	
- Others (Manual workers)	7	7	-	-	
3. Auxiliary non-operative units	11	11	-	-	
- Production management	2	2	-	-	
- Research & development	4	4	-	-	
- Sales unit	1	1	-	-	
- General administrative	4	4	-	-	

WORKING TIME PER OPERATIVE WORKER:

Normal hours/day:	8	hours	Normal days/year:	310	days
Actual hours/year:	2,480	hours			

CAPACITY OF OPERATIVE SHOPS:

Ordinary flour-milling factory with a moderate degree of mechanization.

IV. ANNUAL PRODUCTION

(1966) Product (or group of products)	V. of first prod.	Quantity produced		Nominal capacity output	Unit(**) price in factory US \$	Total production value 1966 US \$
		Unit	Output			
- Wheat flour	..	t	38,436	60,450	109.03	4,190.3
- By-products (30% bran)	..	t	15,600	20,150	59.18	923.2
- Sales of wastes				109.4
TOTAL VALUE OF PRODUCTION						5,222.9

(*) The nominal capacity output assumes 3 shifts.

(**) The flour price is regulated by the Government. Price does not include sales tax.

REPORTS: None.

CAPACITY UTILIZATION: The overall rate of capacity utilization is 66%.
Weak demand is the major factor responsible for the underutilization.

VI. VALUE ADDED

(1966)	Value (1966 US \$)
1. Wages & salaries:	
- Employees in direct production (72 persons)	93.3
- Other employees (23 persons)	32.0
2. Other payments for employees	16.4
3. Annual depreciation	18.4
4. Rentals paid	-
5. Interest & royalties	232.0
6. Sales tax (not incl. in TOTAL)	(0.3)
7. Other ind. base taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	(-) 43.7
	406.4

VII. MONTHLY EARNING RATES

(End of 1966)	No. of pers. emp.	Average earning rates (1966 US \$)
1. Local non-operative		
TOTAL:	10	206
- Managers	1	400
- Engineers	-	-
- Technicians	4	136
- Accountants	1	320
- Sales officers	1	480
- Other professional staff	-	-
- Clerks & typists	3	104
2. Local operatives		
TOTAL:	84	97
- Supervisors	3	192
- Foremen	-	-
- Machine operators	43	104
- Craftsmen	13	104
- Truck drivers	2	120
- Semi-skilled operatives	17	88
- Unskilled & part-time operatives	-	-
- Others	6	88
3. Foreign employees		
TOTAL:	1	1,200
- Engineers, trainers and other technical control staff	1	1,200

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed			Total consumption value (1966 US \$)
	Unit	Purchase	% Imported	
1. Energy and water				
TOTAL:				81.3
- Electricity	000 Kwh	4,112		79.0
- Water	000 m ³	41.6		2.3
2. Production materials				
TOTAL:				4,600.6
- Wheat	t	52,000		4,600.6

	Total consumption value (1966 US \$)
3. Other materials & supplies	
TOTAL:	115.1
- Packagings (sacks)	115.1
- Repair & maintenance	-
- Non-factor service inputs	-
4. Business services purchased	
TOTAL:	17.5
- Transport, storage & insurance	2.7
- Communication, advertisements, etc.	14.8
5. Work performed by sub-contractors	
TOTAL:	-
	4,814.5

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)
Industry group: Manufacture of grain mill products (SIC: 205)

1. Size group by number of persons employed	Number of units	Number of emp.	Avg. U.S. & C. per pers. (1965)	Avg. gross prod. per pers. (1965)	Avg. emp. gross prod. ratio (%)
up to 25	6,098	18,607	489	6,718	43
26 - 50	123	4,366	1,035	20,781	71
51 - 100	52	3,715	1,200	21,047	58
over 100	32	6,387	586	5,364	64
TOTAL	6,305	31,075	649	10,128	57
2. Size group by value of annual production (1965 US \$)	Number of units	Number of emp.	Avg. U.S. & C. per pers. (1965)	Avg. gross prod. per pers. (1965)	Avg. emp. gross prod. ratio (%)
up to 2	16,717	25,244	51	400	94
2 - 8	1,841	3,888	159	1,853	35
8 - 40	1,405	4,852	427	6,324	21
40 - 120	270	3,018	463	5,280	39
120 - 500	198	7,363	689	9,419	69
over 500	113	7,554	1,286	25,865	59
TOTAL	20,245	51,869	389	6,335	57

IX. SUPPLEMENTS

Operating loss: The high financial costs, which arise from the short-term loans needed for advance purchase of wheat, are the major factors responsible for the loss. The loss seems to be covered up by the parent enterprise in a manner that is not revealed in the branch-accounting records shown here.

Future plan: During an investment period of 5 years approximately US \$ 320,000 will be invested for the expansion of wheat storage facilities.

Major Products: Wheat semolina, wheat flour, wheat bran, rye flour, bruised whole meal rye, rye pollarde, rye bran, etc.
Total output amounts to about 708,000 m) on 3-shift operation.

Reporting Unit: A one-establishment enterprise, founded in 1852; privately owned; largest flour mill in the country;
240 employees; no export; license and research activities.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (1000 US \$)	Replacement value (1000 US \$)	Avg. age (Yrs.)
1 Primary process equipment (including installation cost)			
TOTAL	2,054	1,091	
- Process equipment *	2,028	1,041	-
- Hand tools & apparatuses	27	40	-
2 Buildings	1,718	2,660	
- Primary industrial buildings (total floor space: - m ²)	696	1,508	50
- Auxiliary buildings	448	11	50
- Warehouses	381	479	48
- Office administration buildings	61	61	16
- Housing	142	163	30
3 Auxiliary facilities (excl. buildings)			
TOTAL	371	509	
- Internal power equipment	-	-	-
- Laboratory facilities	19	22	..
- Means of transportation	154	231	..
- Office equipment	57	85	..
- Staff housing	142	163	..
TOTAL PHYSICAL FIXED ASSETS (excluding land)	4,144	6,250	
4 Other fixed capital assets			
TOTAL	277	146	
- Land (total acreage: - m ²)	-	-	-
- Land improvements (tract, 25, 400 m ²)	62	62	-
- Others	215	84	..

*NB: Details of process equipment and capacity of primary operations, shown on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(1967 monthly average)	Number of persons					
	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1. Local non-operatives						
- Managers	-	-	-	-	-	5
- Engineers	-	-	-	-	2	-
- Technicians	-	-	-	1	6	-
- Accountants	-	-	-	3	16	-
- Sales officers	-	-	-	33	-	-
- Clerks and typists	-	-	-	-	6	-
- Others	-	-	-	-	-	-
2. Local operatives						
- Supervisors	-	-	-	-	-	-
- Foremen	-	-	-	-	-	-
- Skilled operatives	-	-	-	27	-	-
- Machine operators	-	-	-	47	-	-
- Craftsmen	-	-	-	-	-	-
- Truck drivers	-	-	-	-	-	-
- Unskilled operatives	-	22	-	5	-	-
- Other full-time operatives	-	-	-	67	-	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operative	-	-	-	-	-	-

EXTERNAL CONDITIONS

Transport	external long distance	fair
	internal long distance	"
	local and city	"
Utilities	electricity	excellent
	water	"
	gas	"
Community	residence	excellent
	health and recreation	"
	education	"
Own Welfare Facilities:		-

M. INVENTORIES

(End of 1967)	Actual value (1000 US \$)	Number of months
Inventories		
TOTAL	4,865	
- Production materials	1,840	-
- Other input materials	26	4
- Work-in-process	-	-
- Finished products	439	1,5

WORKING TIME PER OPERATIVE WORKER

	1st shift	2nd shift	3rd shift	hours
Shift hours/day	9	8	8	
Actual hours/year	2,045	1,861	1,815	
Actual days/year	227	211	207	

IV. MANNING TABLE

(1967 average)	Total	Skill categories: A Supervisory staff and foremen (for all shifts) B Skilled operatives C Semi-skilled operatives (machine operators) D Unskilled operatives					
		1st Shift				2nd Shift	3rd Shift
		A	B	C	D	B-D	B-D
ALL SHOPS & UNITS:	238	77	107	32	15		
1. Primary operative shops	70	4	15	13	3	23	12
- Milling department	33	3	9	1	-	10	10
- Sacking and flour silo dept.	25	-	4	11	-	8	2
- Small-units packaging	12	1	2	1	3	5	-
2. Auxiliary operative units	101	8	74	16	3		
- Repair & maintenance	15	1	12	1	1		
- Mechanical shop	-	-	-	-	-		
- Tooling shop	-	-	-	-	-		
- Utilities control	1	1	-	-	-		
- Product & material storage	40	6	20	14	-		
- Off-site transport	16	-	16	-	-		
- Guards, cleaners, etc.	20	-	17	1	2		
- Others	9	-	9	-	-		
3. Auxiliary non-operative units	67	65	2	-	-		
- Production management	2	2	-	-	-		
- Research & development	5	3	2	-	-		
- Sales unit	32	32	-	-	-		
- Accounting	21	21	-	-	-		
- General administration	7	7	-	-	-		

V. ANNUAL PRODUCTION

(1967)

Products (or group of products)	Yr. of first prod.	Quantity produced		Av. unit price on factory (US \$)	Total output value (1000 US\$)
		Unit	Quantity		
Wheat semolina	..	t	9.3	19.78	1,843
Wheat flour 700	..	"	26.4	18.35	4,860
Wheat flour 1600	..	"	10.0	9.94	1,000
Wheat meal (animal food)	..	"	1.9	5.71	109
Wheat bran	..	"	8.6	4.64	401
Seeds, bruised gran, scraps, waste	..	"	0.2	8.30	21
Rye flour 960	..	"	9.7	10.00	976
Rye flour 500	..	"	0.6	12.76	85
Rye flour 2500	..	"	0.1	9.82	14
Bruised whole meal rye	..	"	0.4	9.22	41
Rye pollards	..	"	0.9	5.58	54
Rye bran	..	"	1.9	3.51	68
Rye meal (animal food), warts	..	"	0.2	5.29	13
Commission work	-	-	-	-	23

TOTAL VALUE OF PRODUCTION: 9,508

VI. VALUE ADDED

(1967)

	Total value (1000 US \$)
1. Annual wages & salaries	618
- Operative workers (161 persons)	363
- Non-operative workers (77 persons)	255
2. Other payments for employees	195
3. Annual depreciation	223
- Machinery & equipment	129
- Buildings & other facilities	91
- Non-physical capital assets	3
4. Rentals paid	-
5. Interest & royalties	251
6. Sales tax	130
7. Other indirect business taxes	-
8. (-) Subsidies	(-)263
9. Corporate income before tax	262

TOTAL VALUE ADDED: 1,416

DESCRIPTION OF MAJOR PRODUCTS:

Wheat flour: Serial production, packed in boxes (containing 10 packets of 1 kg each) or in tanks.

Rye flour: Serial production, packed in 50 kg sacks or tanks.

Wheat semolina: Serial production, packed in boxes (containing 10 packets of 1 kg each).

Wheat bran: Serial production, packed in 50 kg sacks.

Wheat meal (animal food): Serial production, packed in 50 kg sacks.

Time of delivery: prompt.

MARKET ASPECTS:

Consumers of products:

Pastry manufacturers, farinaceous-product manufacturers, dealers.

Sales organization:

Representatives and direct sale.

Extent of the market:

The reporting enterprise is capable of supplying at least 10% of the domestic demand.

Competition in the market:

Setting of prices and capacity utilisation are restricted by governmental regulations. (Flour mill law, price regulations law, etc.).

EXPORT:

Total annual export: no exports.

Major products	To Western countries	To Eastern countries	To Developing countries
-	-	-	-

VII. ANNUAL CONSUMPTION

(1967)

	Quantity consumed		% import	Average input dollar	Total consumption value (1000 US \$)
	Unit	Quantity			
1. Energy and water					121
TOTAL:					121
- Electricity	000 kWh	5,707			98
- Coke	t	69			3
- Firewood	t	3			0.1
- Fuel oil	t	284			8
- Motor fuels	t	..			10
- Gas	m3	27			1
- Water	m3	184			1
2. Production materials					7,219
TOTAL:					7,219
- Wheat	t	56,156	3	..	5,250
- Rye	t	14,250	29	..	1,217
- Other wheat input materials	..	..			495
- Other rye input materials	..	..			257

	Total consumption value (1000 US \$)
3. Other materials & supplies	204
TOTAL:	204
- Packaging material (sacks)	32
- Parts, supplies & services	161
- Other materials & supplies	11
4. Business services purchased	547
TOTAL:	547
- Transportation, storage & insurance	405
- Communication, advertising & other business services	142
5. Work performed by subcontractors	-
TOTAL:	-

TOTAL VALUE OF CONSUMPTION: 8,091

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (1.1):	Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Av. Age (yrs)	Remarks:		Year of installation	Running time	Daily output
					20: Purchased second-hand	21: Obsolete			
Rollers	..	83.3	124.9	30			1920-1958	24 hrs/day	340 t
Plan sifters	..	132.3	198.2	13			1952, 1958	24 " "	340 "
Cleaning equipment	..	146.7	220.0	14			1950, 1958	24 " "	340 "
Sacking machines	..	33.5	50.1	7			1959, 1963	16 " "	290 "
Hoisting equipment	..	236.3	354.3	5			1963	16 " "	340 "
Others	..	1,396.3	2,094.2	..					

CAPACITY POWER:

Process equipment:
- electric motors kW 2,100

Generating equipment:
- installed capacity kVA -

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization:		Automation:		Further details:	
		A: most advanced	B: considerably high standard	C: modern standard	D: appreciably short of today's standard		E: almost outdated	F: fully automated	G: semi-automated	H: unautomated
Grain silo -	milling department -						
	flour silo	A			I		
- ranking and small-unit packaging				all	all		
				depts.	depts.		

CAPACITY UTILIZATION:

Full capacity output: 70,000 t (wheat and rye flours)

Current utilization:

Major products (in process)	Approximate %									
	40	50	60	70	80	90	100			

The existing capacity is fully utilized.

IX. HISTORY & PLAN

1. Performance in the past:	Total output (1000 US \$)	No. of persons employed	Total exports (1000 US \$)
Year: 1963	7,590	261	-
1964	7,530	260	-
1965	8,560	249	-
1966	9,420	228	-
1967	9,380	228	-
1968	9,490	227	-

2. Investments in the past:	Approximate amount (1000 US \$)	Type of investment
From 1958 to 1959:	830	Reconstruction of mill, small units packaging
" 1963 " 1964	700	Silos, sliding platform, large units packaging, transformer
" 1965 " 1966	700	Sack storing, laboratory, cafeteria, flour tanks

3. Future Plan: Not yet determined.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1964)

Industry: Grain mill products (ISIC Code: 205)

1. Size groups by number of persons employed						2. Size groups by annual value of production (1000 US \$)					
up to	No. of estab.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)	up to	No. of estab.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)
19	1,127	2,121	1,834	27,291	21	20	839	173	932	18,990	31
20 - 99	46	1,314	1,289	25,857	25	20 - 40	139	200	1,139	18,944	28
100 - 499	6	1,023	2,012	12,701	26	40 - 200	265	994	1,324	22,862	22
500 - 999	-	-	-	-	-	200 - 400	51	444	1,632	30,466	19
over 1,000	-	-	-	-	-	400 - 2,000	67	1,854	1,784	27,420	21
						over 2,000	12	1,416	1,992	33,397	27
TOTAL:	1,173	5,081	1,664	27,840	23	TOTAL:	1,173	5,081	1,664	27,840	23

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service

- | | | |
|--|---------------------------------------|-------------------------------------|
| 1. Engineering study | 3. Technical and managerial personnel | 5. Import and export assistance |
| 2. Financial assistance | 4. Industrial training | 6. Administration of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, maintenance & replacement | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
-----------------	-------------------	-----------------	-------------------	-------------------------

No data available.

XII. SUPPLEMENTS & NOTES

(*) occasionally

XII. VIII. TECHNOLOGICAL CHARACTERISTICS (cont. 3)

Further details of process equipment:

Supplier	Year of installation	Daily (*) running time	Output capacity
Belgium	1966	16 hrs	-1,500 kg/hr
Sweden	1961	(b) 8 "	90 units/min.
Netherlands	1966	(b) 16 "	60 units/min.
Switzerland	1966	(b) 16 "	2,000 kg/hr
Sweden	1965	(b) 8 "	500 kg/hr
USA	1967	(b) 8 "	1,000 kg/hr
Belgium	1966	(b) 16 "	600 kg/hr
Belgium	1966	(b) 16 "	60 units/min.

Inventory policy:

On the average the stock of finished products amounts to 26% of the total value of production.

Depreciation policy:

The company applied the straight-line method of depreciation only.

XII. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service

- | | | |
|---|---------------------------------------|---------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export assistance |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
-----------------	-------------------	-----------------	-------------------	-------------------------

No information available.

XIII. SUPPLEMENTS & NOTES

Commission work: In 1967 the enterprise received US \$ 13,220 for commission work.

Current problems: Demand is decreasing due to a change in consumer behaviour. Supply of customers gets more and more difficult because of deterioration of traffic situation. Increasing pressure on imports of flour products.

Inventories policy: High inventories of raw materials accrue after harvest period, they are reduced during the year.

Governmental policy: The country has excess production of flour. The price level has, therefore, to be supported by subsidies: mills are requested to purchase any grain immediately after harvest time being compensated for excess storage costs out of a fund which is fed by a tax levied on each kilogramme of flour sold. Financial aid is also granted for the processing of rye.

Major Products: wheat flour, rye flour.
Capable of milling annually approximately 14,000 t of grain, based on 1-2-shift operation.

Reporting Unit: A one-establishment enterprise; privately owned, founded in 1880; 80 - 90 employees; no exports.
Although the mill is already very old, the machinery and equipment utilised meet modern standards due to continuous rationalisation efforts.

I. FIXED CAPITAL ASSETS

(End of 1966)	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average age (Yrs.)
1. Primary process equipment (including installation cost)			
TOTAL	504	534	
- Process equipment *	504	534	5
- Hand tools & apparatuses	-	-	-
2. Buildings			
TOTAL	..	600	
- Primary industrial buildings (total floor space: 20,000 m ²)	..	368	40
- Auxiliary buildings	-	-	-
- Warehouse (silo)	178	232	7
- Office administration buildings	-	-	-
- Housing	-	-	-
3. Auxiliary facilities (excl. buildings)			
TOTAL	191	252	
- Internal power equipment (*)	-	-	-
- Laboratory facilities	-	-	-
- Means of transportation	89	97	2.5
- Office equipment	102	155	..
TOTAL PHYSICAL FIXED ASSETS (excluding land):	..	1,386	
4. Other fixed capital assets			
TOTAL	19	77	
- Land (total acreage: 24,160 m ²)	19	77	-
- Land improvements	-	-	-
- Others (*)	-	-	-

(*) Included in I.3. Office equipment.

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

Number of persons

(As per 1.1.1967)	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1. Local non-operatives						
- Managers	-	-	-	-	1	-
- Engineers	-	-	-	-	-	-
- Technicians	-	-	-	-	-	-
- Accountants	-	-	-	1	-	-
- Sales officers	-	-	1	1	2	-
- Clerks and typists	2	5	1	1	-	-
2. Local operatives						
- Supervisors	-	-	-	-	-	-
- Foremen	-	-	3	1	-	-
- Skilled operatives	-	-	-	-	-	-
- Machine operators	1	4	5	6	-	-
- Craftsmen	-	4	1	3	-	-
- Truck drivers	-	-	-	4	-	-
- Unskilled operatives	-	4	5	-	-	-
(*)- Other full-time operatives	7	1	2	-	-	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	1	-	-
- Unskilled operatives	-	3	-	-	-	-

(*) including 7 operatives of the packing shop.

EXTERNAL CONDITIONS:

Transport:	external long distance	fair
	internal long distance	fair
	local and city	insignificant
Utilities:	electricity	excellent
	water	excellent
	gas	insignificant
Community:	residence	fair
	health and recreation	fair
	education	fair
Own Welfare Facilities:		None

III. INVENTORIES

(End of 1966)	Actual value (000 US \$)	Number of months
Inventories	433	
TOTAL		
- Production materials	363	5
- Other input materials	13	-
- Work-in-process	-	-
- Finished products	57	0.5

WORKING TIME PER OPERATIVE WORKER: See also page 4/ XII. Supplements.

	1st shift	2nd shift	3rd shift	
Shift hours/day	9	9	-	hours
Actual hours/year	1,840	1,840	-	hours
Actual days/year	205	205	-	days

IV. MANNING TABLE

Number of personnel

(1966 average)

	Total	Shift categories:					
		1st Shift			2nd Shift		3rd Shift
		A	B	C	D	E-F	G-H
ALL SHOPS & UNITS:	90	26	55			9	-
1. Primary operative shops	41	1	13	12	6	9	-
Grain handling shop	41	1	1	2	1	9	-
Milling shop			9	6	3		
Packing shop			3	4	2		
2. Auxiliary operative units	33	9	24			-	-
- Repair & maintenance	9	-	9			-	-
- Mechanical shop	-	-	-			-	-
- Tooling shop	-	-	-			-	-
- Utilities control (laboratory)	1	-	1			-	-
- Product & material storage	5	2	3			-	-
- Off-site transport	11	-	11			-	-
- Guards, cleaners, etc.	-	-	-			-	-
- Power station	7	7	-			-	-
3. Auxiliary non-operative units	16	16	-			-	-
- Production management	-	-	-			-	-
- Research & development	-	-	-			-	-
- Sales unit	5	5	-			-	-
- Accounting	11	11	-			-	-
- General administration	-	-	-			-	-

V. ANNUAL PRODUCTION

(1966) Products (or group of products)	W. of the prod.	Quantity produced		Av. unit price at factory MUS 00	Total output value 1000 US\$
		Unit	Quantity		
Wheat flour	-	t	10,800	117.8	953
Rye flour	-				301
Miscellaneous grain products: bran, groats, semolina, millet, scraps	-				18
Revenue from contract and commission work					10
TOTAL VALUE OF PRODUCTION:					1,282 *****

VI. VALUE ADDED

(1966)	Total value 1000 US \$
1. Annual wages & salaries	132
- Operative workers (71 persons)	106
- Non-operative workers (17 persons)	26
2. Other payments for employees	37
3. Annual depreciation	82
- Machinery & equipment	80
- Buildings & other facilities	
- Non-physical capital assets	
4. Rentals paid	2
5. Interest & royalties	-
6. Sales tax	18
7. Other indirect business taxes (*)	17
8. (-) Subsidies (*)	125
9. Corporate income before tax	(-) 33
10. Corporate income tax	37
(*) See page 4/XII. Supplements.	
TOTAL VALUE ADDED:	415 *****

DESCRIPTION OF MAJOR PRODUCTS:

Wheat flour, rye flour, semolina and millet flour.

Packing units: Jute sacks of 60 and 80 kg;
Paper sacks of 50 kg and small-unit packages of 1 kg;
Bulk shipment in silo wagons.

MARKET ASPECTS:

Re-sales:
Grain.

Consumers of products:
Bakeries, hotels, households.

Share in the domestic market:
Regulated by the national milling cartel.

Competition in the market:
Domestic competitors only. Prices are fixed by the cartel. Quality of flour is standardized; only domestic grain is milled. The extraction rate is fixed, presently at 80%. The remainder has to be sold as bran. No imports of flour.

EXPORT: No exports.
Total annual export:

Major products	To Western countries	To Eastern countries	To Developing countries

VII. ANNUAL CONSUMPTION

(1966)	Quantity consumed		Average import prices	Total consumption value 1000 US \$
	Unit	Quantity		
1. Energy and water TOTAL:				6
- Electricity	000 kWh	(*)		-
- Coal and coke	t	21		1
- Diesel oil	t	45		4
- Others		..		1
(*) Internal supply of 724,000 kWh.				
2. Production materials TOTAL:				792
- Grain	t	-10,800		791
- Flour improvers (vitamines)		..		1

	Total consumption value 1000 US \$
3. Other materials & supplies TOTAL:	31
- Packaging material (jute and paper sacks)	30
- Parts, supplies & services	-
- Other materials & supplies	1
4. Business services purchased TOTAL:	38
- Transportation, storage & insurance, maintenance, others	31
- Communication, advertising & other business services	7
5. Work performed by subcontractors TOTAL:	-
TOTAL VALUE OF CONSUMPTION:	867 *****

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT S.1:	Number	Original Purchase Value (USD US \$)	Replacement value (USD US \$)	Av. Age (yrs)	Remarks:		Year of installation	Output capacity and daily running time
					IV. Purchased second-hand Or Obsolete	V. Second Hand		
					VI. Self-consumed	Supplier country		
Siloer (grain conveyor)	1	6	7	1	Capacity adjusted to 80 t/24 hrs
Magnetic conveyors	..	..	..	..	..	..	..
Triers	..	..	..	..	..	..	..
Separators	..	..	..	..	..	..	..
Whicors	1	16	16	1	..	Germany, F.R.	1962	
Grinders	..	..	..	..	..	..	..
Roller frames	15	89	101	-25	..	Germany, F.R.	1936	
Plan sifters	3	38	39	1	..	Germany, F.R.	1966	
Breakers	7	2	2	2	..	..	..
Iron centrifugals	4	5	6	1	..	..	..
Other specialised machines	..	188	132	6	..	..	..
Other common type of machines	..	175	184	8	Average running time: 18 hrs/day
Pneumatic conveyor belt (between each phase of production process)	1	32	32	1	..	Germany, F.R.	1966	
Electric switchboards	6	13	15	3	..	..	..

CAPACITY POWER: (a) Power aggregate of company-owned power station
 - electric motors (a) kW 210 (are not included)
 - other motors HP 420

Generating equipment:
 - installed capacity kVA -
 - other generating equipment HP 300

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Status		Further details
		Modern	Antique	
Grain handling shop		B	II - III	
Milling shop		B	I - II	
Packing shop		B	II	

CAPACITY UTILIZATION:
 Full-capacity output: 80 % of flour per 24 hrs.

Current utilization:

Major products (in grams)	Approximate %									
	up to 20	20-40	40-60	60-80	80-90	90-95	95-98	98-99	99-100	100
Grain handling shop										X
Milling shop										X
Packing shop										X

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output (USD US \$)	No. of persons employed	Total capacity (USD US \$)
1963	1,190	80	-
1964	1,210	80	-
1965	1,260	81	-
1966	1,280	87	-
1967	1,350	85	-
1968	1,470	76	-

2. Investments in the past:

From 19.. to 1965:	Approximate amount (USD US \$)	Type of investment
From 19.. to 1965:		No date available.
In 1966:	100	Synchronisation of machine operation, adaptation of grain conveying belt.

3. Future Plan:

From 1967 to 1968:	Approximate amount (USD US \$)	Type of investment
From 1967 to 1968:	230	Construction of larger silos; further rationalisation and specialisation of production process will result in decrease of personnel. Electronic control devices would be desirable in the long run.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1964)

Industry: Grain milling (NIC-Code: 205)

1. The groups by number of persons employed							2. The groups by annual value of production (USD US \$)					
up to	No. of estab.	No. of emp.	Av. W. & S. (USD \$)	Av. gross prod. value per emp. (USD \$)	Av. value added/emp. (USD \$)		up to	No. of estab.	No. of emp.	Av. W. & S. (USD \$)	Av. gross prod. value per emp. (USD \$)	Av. value added/emp. (USD \$)
up to 99	1,121	2,143	1,434	27,291	21	up to 20	639	173	932	18,990	31	
20 - 99	46	1,915	1,789	25,857	25	20 - 40	139	200	1,139	18,944	28	
100 - 499	6	1,021	2,012	32,701	26	40 - 200	265	994	1,384	22,862	22	
500 - 999	-	-	-	-	-	200 - 400	51	444	1,632	30,486	19	
over 1,000	-	-	-	-	-	400 - 2,000	67	1,854	1,784	27,480	21	
						over 2,000	12	1,416	1,992	33,397	27	
TOTAL:	1,173	5,081	1,684	27,840	23	TOTAL:	1,173	5,081	1,684	27,840	23	

XII. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service

- | | | |
|---|---|------------------------------------|
| 1. Engineering study | 3. Statistical and managerial personnel | 5. Import and export promotion |
| 2. Financial assistance | 4. Industrial training | 6. Administration of foreign labor |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
3				The company is not able to send any experts to developing countries. This should rather be done by the industry manufacturing machinery and equipment for grain mills.
8				Due to domestic excess production the company cannot import flour or flour products.

XIII. SUPPLEMENTS & NOTES

**AD III. VALUE ADDED
IN THE FLOUR MILLING
INDUSTRY:**

The country has excess production of flour. The price level has, therefore, to be supported by subsidies: mills are requested to purchase any grain immediately after harvest time being compensated for excess storage costs out of a fund which is fed by a tax levied on each kilogramme of flour sold. Financial aid is also granted for the processing of rye.

On the average, the stock of finished products amounts to 4% of the total value of production.

AD IV. WORKING TABLE - Working time:

The enterprise operates according to the forced feed production principle: only after the total daily input has been processed operatives can stop working.

Major Products:

Wheat and rye flour.

Capable of producing annually 13,500 t of wheat flour and of 3,000 t of rye flour based on 1- and 3-shift operation.
Full-capacity output approximates US \$ 2.7 million.

Reporting Unit:

A one-establishment enterprise; privately owned; founded in 1913; 38 employees; no commission work; no exports.

I. FIXED CAPITAL ASSETS

(End of 1968)	Original purchase value (1000 US \$)	Replace- ment value (1000 US \$)	Ave. age (Yrs.)
1 Primary process equipment (including installation cost) TOTAL	457	512	
- Process equipment *	440	491	8
- Hand tools & apparatuses	17	21	..
2 Buildings TOTAL	337	884	
- Primary industrial buildings (total floor space: 960 m ²)	106	252	20
- Auxiliary buildings	11	66	20
- Warehouses	122	441	14
- Offices	15	50	12
- Office administration buildings	13	75	..
- Housing			
3 Auxiliary facilities (excl. buildings) TOTAL	77	86	
- Internal power equipment	10	13	18
- Laboratory facilities	2	3	10
- Means of transportation	40	40	3
- Office equipment	25	30	5
TOTAL PHYSICAL FIXED ASSETS (excluding land):	871	1,482	
4 Other fixed capital assets TOTAL	14	202	
- Land (total acreage: 12,000 m ²)	7	30	-
- Land improvements (t. acc. 15,000 ")	7	112	-
- Others	-	-	-

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section - III)

II. MONTHLY GROSS WAGES AND SALARIES

Number of persons

(1968 monthly average)	up to 175 US\$	175 -250 US\$	250 -375 US\$	375 -500 US\$	500 -1,000 US\$	over 1,000 US\$
1. Local non-operatives						
- Managerial staff	-	-	-	1	2	-
- Technical staff	-	-	1	1	2	-
- Commercial staff	-	-	3	1	1	-
2. Local operatives						
- Foremen (*)	-	-	-	-	-	-
- Skilled operatives	-	7	4	-	-	-
- Semi-skilled operatives	1	6	1	-	-	-
- Unskilled operatives	2	5	-	-	-	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

(*) The company considers foremen as local non-operatives.

EXTERNAL CONDITIONS:

Transport:	external long distance internal long distance local and city	excellent fair excellent
Utilities:	electricity water gas	excellent excellent -
Community:	residence health and recreation education	fair fair -
Own Welfare Facilities:	-	-

IV. MANNING TABLE

Number of persons

Shift categories: A: Supervisory staff and foremen (for all shifts)
B: Skilled operatives
C: Semi-skilled operatives (inclusive operators)
D: Unskilled operatives

(End of 1968)	Total	1st Shift				2nd Shift		3rd Shift	
		A	B	C	D	A-B	C-D	A-C	B-D
ALL SHOPS & UNITS:	38	12	8	22	2	2	2	2	2
1. Primary operative shops	15	1	8	2	-	2	2	2	2
- Milling shop	6	1	1	-	-	2	2	2	2
- Sack filling and shipping shop	9	-	7	2	-	-	-	-	-
2. Auxiliary operative units	15	3	12	-	-	-	-	-	-
- Repair & maintenance	2	1	1	-	-	-	-	-	-
- Mechanical shop	-	-	-	-	-	-	-	-	-
- Tooling shop	-	-	-	-	-	-	-	-	-
- Utilities control	1	1	-	-	-	-	-	-	-
- Product & material storage	-	-	-	-	-	-	-	-	-
- Off-site transport	11	1	10	-	-	-	-	-	-
- Guards, cleaners, etc.	1	-	1	-	-	-	-	-	-
3. Auxiliary non-operative units	6	8	-	-	-	-	-	-	-
- Production management	1	1	-	-	-	-	-	-	-
- Research & development	-	-	-	-	-	-	-	-	-
- Sales unit	5	5	-	-	-	-	-	-	-
- Accounting	2	2	-	-	-	-	-	-	-
- General administration	-	-	-	-	-	-	-	-	-

III. INVENTORIES

(End of 1968)	Actual value (1000 US \$)	Number of months
Inventories TOTAL:	493	
- Production materials	400	2.5
- Other input materials	18	2
- Work-in-process	-	-
- Finished products	75	0.5

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours hours days
Shift hours/day:	8	8	8	
Actual hours/year:	2,000	2,000	2,000	
Actual employees:	250	250	250	

V. ANNUAL PRODUCTION

(1968)	Yr. of Prod.	Quantity produced		Av. unit price on factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Wheat flour	1914	t	9,501	159.8	1,519
Bran (from wheat)	1915	t	2,982	65.0	194
Rye flour	1918	t	2,063	147.8	305
Bran (from rye)	1918	t	113	53.0	6
TOTAL VALUE OF PRODUCTION:					2,024

VI. VALUE ADDED

(1968)	Total value (000 US \$)
1. Annual wages & salaries	129
- Operative workers (26 persons)	72
- Non-operative workers (12 persons)	57
2. Other payments for employees	26
3. Annual depreciation	78
- Machinery & equipment	65
- Buildings & other facilities	13
- Non-physical capital assets	-
4. Rentals paid	18
5. Interest & royalties	32
6. Sales tax	3
7. Other indirect business taxes	7
8. (-) Subsidies	-
9. Corporate income before tax	17
TOTAL VALUE ADDED:	310

DESCRIPTION OF MAJOR PRODUCTS:

Wheat and rye flour of various grinding classes.
Flour by-products are sold as fodder.

MARKET ASPECTS:

Character of products:

90% of total production is sold to large-scale bakeries; the remaining 10% to wholesalers.

Sales commission:

3 representatives.

Share in the regional market:

3%.

Competition in the market:

The establishment is competing with other regional and national mills.

EXPORT: No exports.

Total annual export:

Major products	To Western countries	To Eastern countries	To Developing countries

VII. ANNUAL CONSUMPTION

(1968)	Quantity consumed		% Import	Average import duties (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					
PPM:					38
- Electricity	000 kWh	1,073	-	-	22
- Diesel oil	t	77	-	-	12
- Fuel oil	t	140	-	-	4
2. Production materials					
PPM:					1,396
- Wheat	t	12,297	25	-	1,350
- Rye	t	2,580	-	-	26

	Total consumption value (000 US \$)
3. Other materials & supplies	60
PPM:	
- Packaging material (jute sacks)	34
- Parts, supplies & services	24
- Other materials & supplies	2
4. Business services purchased	20
PPM:	
- Transportation, storage & insurance	16
- Communication, advertising & other business services	4
5. Work performed by subcontractors	-
PPM:	
TOTAL VALUE OF CONSUMPTION:	1,714

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (1):	Number	Original Purchase Value (USD US \$)	Replacement value (USD US \$)	Av. Age (yrs)	Remarks			Year of installation	Output capacity
					W. Purchased second-hand	R. Obsolete	X. Self-constructed		
Wheat mill	1	125	150	20	..		1948	60 t/day	
Rye mill	1	44	44	1	..		1968	20 t/day	
Sifting facilities	..	86	86	1	..	Germany, F.R.	1967	4 t/day	
Flour sile	..	87	95	7	..		1962	-	
Grain sile	..	46	50	6	..		1961	-	
Elevators	..	21	27	8	..		1967	4 t/day	
Bag filling machines	4	6	7	9	..		1964	..	
Workshop facilities	..	15	18	15	..	..	..	..
Warehouse facilities	..	11	14	10	..	..	..	..

Further details:

Flour sifters and mixers: installed in 1960 and 1963, supplied by Federal Republic of Germany.
 Pneumatic and mechanic conveying facilities for grain and finished products: installed between 1960 - 1965, supplied by Federal Republic of Germany.

CAPACITY POWER:

Process equipment:
 - electric motors kW 250

Generating equipment:

installed capacity kVA -

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Single primary operative shops	Kind of process involved	Mechanization		Further details
		A. not advanced	B. considerably high standard	
Milling shop		B	I	
Bag filling and shipping shop		B	II	
Transport (external)		B	II	

CAPACITY UTILIZATION:

Full capacity output: US \$ 2,750,000 based on 1- and 3-shift operation (milling shop). No additional labour requirements.

Current utilization: based on 1- and 3-shift operation.

Single products (or processes)	Approximate %									
	1-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	100
Milling shop (3 shifts)										X
Bag filling and shipping shop (1 shift)										X
External transport (1 shift)										X

Under-utilization is mainly due to temporary insufficient supply with raw material and rather low demand for final products.

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output (USD US \$)	No. of persons employed	Total output (USD US \$)
1963	2,290	44	-
1964	2,510	48	-
1965	2,390	44	-
1966	2,270	43	-
1967	2,290	42	-
1968	2,020	38	-

2. Investments in the past:

From 19 62 to 1963	Approximate amount (USD US \$)	Type of investment
From 19 62 to 1963	170	Flour sile
" 1963 " 1964	80	Grain sile
" 1966 " 1967	130	Expansion of buildings
in 1967	170	Milling machinery

3. Future Plan:

From 19 69 to 19 70: 65
 Rationalization of machinery and equipment as well as of primary and auxiliary production facilities.
 3 operatives will then be employed less on the 1st shift.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C = confidential; figures are included in total.

(1968)

Industry: Manufacture of grain mill products (NMC Code: 205)

1. Size groups by number of persons employed						2. Size groups by annual output of sales (USD US \$)					
No. of estab.	No. of empl.	Av. W. & B. per pers. (USD US \$)	Av. sales per pers. (USD US \$)	Av. value added/sales ratio (%)		No. of estab.	No. of empl.	Av. W. & B. per pers. (USD US \$)	Av. sales per pers. (USD US \$)	Av. value added/sales ratio (%)	
up to 19	197	C	C	C		up to 250	83	375	248	20,694	34
20 - 49	78	2,232	1,798	40,033	17	250 - 500	39	597	1,500	23,877	16
50 - 99	65	C	C	C		500 - 1,250	76	1,616	1,733	39,369	15
100 - 499	3	C	C	C		1,250 - 2,500	48	C	C	C	C
over 1,000	-	-	-	-		2,500 - 6,250	26	C	C	C	C
						over 6,250	25	7,514	2,272	58,959	16
TOTAL:	297	14,536	2,089	45,961	17	TOTAL:	297	14,536	2,042	45,960	17

III. COVERED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service

- | | | |
|---|---------------------------------------|--------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export promotion |
| 2. Physical estimates | 6. Industrial training | 9. Admission of foreign labor |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
-----------------	-------------------	-----------------	-------------------	-------------------------

Experts as well as skilled workers could be provided for the installation of mills.

The establishment is also prepared to work as technical consultant for manufacturers of milling machinery and equipment.

III. SUPPLEMENTS & NOTES

Depreciation policy:

The company applies both the straight-line and the accelerated methods of depreciation.

Inventory policy:

The large amount of raw materials and supplies, covering a 2 months production period is mainly due to grain purchases right after harvest time. On the average the value of the stock of finished products amounts to 3.7% of the total value of production.

Current problems:

Although the company is operated by an efficient commercial management, profits have been decreasing recently due to the general structural crisis of the grain milling industry.

Major Products:

Cane sugar refinery. Produces also alcohol, sugar syrup, fodder, and ginned cotton. Capable of processing annually some 1 million t of sugar cane with 3 shifts.

Reporting Unit:

A centralized multi-factory enterprise, founded in 1930. Privately owned, no participation of foreign capital. Business year: 1 July 1965 - 30 June 1966.

I. FIXED CAPITAL ASSETS

(June 1966)		Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
1. Primary process equipment				
TOTAL 3,267.6				
- Process equipment 8,332.7				
- Hand tools & apparatuses 34.9				
- Cost of installation (included in value of equipment)				
2. Primary industrial building				
TOTAL 763.8				
(total floor space: 10,374 m ²)				
1945 1966				
3. Auxiliary facilities				
TOTAL 1,840.5				
- Water, steam, electricity, cooling & storing 56.0 (*)				
- Transportation facilities (2 locomotives and 20 trucks) 666.2				
- Administrative facilities 281.1				
- Housing and welfare facilities 835.2				
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land): 10,971.9				
4. Other fixed capital assets				
TOTAL 2,333.2				
- Land (total acreage: .. m ²) 161.8				
- Long-term investment 1,971.4				

(*) (work-in-process only. The rest is included in 1.2)

DETAIL OF PROCESS EQUIPMENT (no.)	Supplier country	Year of installation	Orig. purchase value (000 US \$)
a) Sugar refinery (U.S.A. and France): 1943 to 1966			
TOTAL 5,295.5			
- Material handling: 4 Electrical cranes (5.5 t each); 3 fixed cranes (12 t total); 5 scales (11,15,15,50,80 t); 1 crusher and 6 grinders (cap. 5,000 t/24 hrs); 2 cane knives w. engines (4 th knives each); 2 tanks (2 million litres)			
- Clarification: 3 clarifiers (480,000 l in total); carbonation tank (16,000 l); 2 filters			
- Evaporation: 5 evaporators with condensers (1,117 m ² in total); 10 calender-vacuum pans with condensers (1,677 m ² in total); 20 open crystallizers type "U" (total 37,500 l)			
- Centrifuge: 19 centrifuges			
- Refinery: 2 vertical-cylinder tanks (10,000 l each); 6 carbonation tanks (total 120,000 l); 6 auto-filters (83.6 m ² each); 2 vertical filters (160 m ² each); 1 trap filter (68.6 m ²)			
b) Alcohol plant (Switzerland): 1943 to 1966			
TOTAL 769.4			
- Distillation: Barbet equipment of 24,000 l/24 hrs; 10 fermentation tanks (104,000 l each); 5 cylindrical cal tubs (total 300,000 l); 1 clarifying centrifuge (cap. 5,500 kg); etc.			
c) Fodder plant (U.S.A. and France): 1962 to 1963			
1 Dehydrator (2.7 t/hr); etc.			
d) Cotton ginning plant (U.S.A.): 1962 to 1963			
TOTAL 390.1			
e) Agricultural machines for cane fields (U.S.A.):			
TOTAL PURCHASE VALUE 1,476.8			

HISTORY OF INVESTMENT: The company invested the following amounts for expansion purposes: (in 000 US \$)

Since 194:	8,770	sugar refinery plant
" 1966	224	alcohol plant
" 1966	19	fodder plant
" 1966	436	cotton ginning plant
" 1966	51	for work-in-process

CAPACITY POWER:		Generating equipment:	
Process equipment:		Installed capacity	
Electric motors:	11,957.5 KW	3 turbo-generators	1,500 KW
		1 turbo-generator	1,250 KW

EXTERNAL CONDITIONS:

Transport:	Long distance, excellent; local area, fair.
Utilities:	Electricity, water, gas, all excellent.
Community:	Residential, fair; health and recreational, educational, excellent.

II. INVENTORIES AND WORKING CAPITAL

(in 000 US \$)

(End of June 1966)		Actual value	
1. Inventories		TOTAL 9,633.1	
TOTAL 42.3			
- Production materials 0.8		- Cash (hand/bank) 767.6	
- Other input materials 10.3		- Market, sec. & bonds 598.5	
- Work-in-process 8.4		- Short-term investment 202.5	
- Finished products 22.8		- Prepaid expenses 8,064.5	
		- Accounts receivable -	
2. Liquid assets			
TOTAL			
3. Desired working capital			
TOTAL			
- Production materials			
- Other input materials			
- Finished products			
- Wages & salaries			
- Other special items			

III. MANNING TABLE

(number of persons)

A - Mobile operators
B - Other operators

(1965/66 average)	Total	1st shift		2nd shift	
		A	B	A+B	A+B
ALL SHOPS & UNITS:	1,359	868	252	232	232
1. Primary operative shops	530	102	85	177	166
a. Sugar refinery plant	(381)	(81)	(45)	(130)	(119)
- Material handling yard	89	9	25	33	22
- Grinding	36	12	-	12	12
- Clarification and evaporation	64	22	-	21	21
- Centrifuge	57	19	-	19	19
- Refinery	63	21	-	21	21
- Packaging	72	4	20	24	24
b. Alcohol plant	(24)	(1)	(7)	(8)	(8)
- Syrup balancing, juice prep.	15	-	5	5	5
- Ferment., pump., distill.	9	-	2	3	3
c. Cotton ginning mill	(117)	(11)	(28)	(39)	(39)
- Material handling	84	-	28	28	28
- Transformation	33	11	-	11	11
d. Fodder plant	(8)	3	5	-	-
2. Auxiliary operative units	549	417	67	65	65
- Repair and maintenance	177	139	19	19	19
- Mechanical shop	51	49	1	1	1
- Utilities control	73	29	22	22	22
- Product & material storage	27	23	2	2	2
- Off-site transport	63	63	-	-	-
- Guards, cleaners, etc.	122	80	22	20	20
- Other service shops	36	34	1	1	1
3. Auxiliary non-operative units	280	264	8	8	8
- Production management (included in general administration)					
- Research & development	82	66	8	8	8
- Sales unit					
- General administration	195	195	-	-	-
- Top management	3	3	-	-	-

WORKING TIME PER OPERATIVE WORKER: For the sugar refinery plant 60 days/yr. and 480 hrs/yr. For the alcohol plant; 90 days/yr. and 720 hrs/yr. For the cotton ginning plant; 156 days/yr. and 1,248 hrs/yr. For the fodder plant.

Normal hours/day: 8 hours

Actual hours/year: 2,168 hours

Actual days/year: 271 days

CAPACITY OF OPERATIVE SHOPS:**Cane receiving and grinding departments:**

5,000 t/day; moderate mechanisation.

Boiling department:

Balanced with the capacity of grinding department. One of the 7 boilers is automated.

Clarification:Clarifiers of total 480,000 l; heaters of total 700 m².**Evaporation:**1 triple effect evaporator (1,767 m²), 2 preheaters (139.5 m² each); 4 quintuple effect evaporators (total 3,860 m²).**Alcohol production:**

The plant has a capacity of 24,000 l/24 hrs; 4,00,000 l for 6-month operation per year. This capacity is designed to be complementary to that of the sugar refinery plant.

Major Products:

Canned fruits and vegetables.

Capable of producing annually 1,200 t of canned fruits and 950 t of canned vegetables based on 1-shift seasonal operation. Full-capacity output amounts to US \$ 1 million.

Reporting Unit:

A one-establishment enterprise; privately owned; founded in 1925; 52 employees. Favourable location with reference to raw material supply and markets. Exports are of minor importance.

I. FIXED CAPITAL ASSETS

(End of 1968)	Original purchase value (1000 US \$)	Replacement value (1000 US \$)	Average (Yrs.)
1. Primary process equipment (including installation cost)			
TOTAL:	99	121	
- Process equipment *	88	107	4
- Hand tools & apparatuses	11	14	5
2. Buildings			
TOTAL:	32	40	
- Primary industrial buildings (total floor space: 812 m ²)	17	21	18
- Auxiliary buildings	4	5	12
- Warehouses	-	-	-
- Office administration buildings	11	14	20
- Housing	-	-	-
3. Auxiliary facilities (excl. buildings)			
TOTAL:	25	32	
- Internal power equipment	3	5	20
- Laboratory facilities	4	4	6
- Means of transportation	16	20	4
- Office equipment	2	3	5
TOTAL PHYSICAL FIXED ASSETS (excluding land):	156	193	
4. Other fixed capital assets			
TOTAL:	11	22	
- Land (total acreage: - m ²)	-	-	-
- Land improvements (t. acc. 2,894 ")	11	22	-
- Others	-	-	-

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII).

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1968 monthly average)	up to 175 US\$	175 - 250 US\$	250 - 375 US\$	375 - 500 US\$	500 - 1,000 US\$	over 1,000 US\$
1. Local non-operatives						
- Managerial staff	-	-	-	-	1	-
- Technical staff	-	1	2	-	-	-
- Commercial staff	2	1	1	-	-	-
2. Local operatives						
- Foremen	-	-	-	-	-	-
- Skilled operatives	-	5	2	-	-	-
- Semi-skilled operatives	1	4	-	-	-	-
- Unskilled operatives	2	4	-	-	-	-
- Part-time operatives	14	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives (*)	12	-	-	-	-	-

(*) part-time workers.

EXTERNAL CONDITIONS:

Transport:	external long distance	-
	internal long distance	fair
	local and city	excellent
Utilities:	electricity	fair
	water	fair
	gas	-
Community:	residence	-
	health and recreation	-
	education	-
Own Welfare Facilities:		-

IV. MANNING TABLE

(Number of persons)

(1968 average)	Total	Shift categories:					
		A	B	C	D	3rd Shift	
		1st Shift	2nd Shift	3rd Shift			
		A	B	C	D	E-B	E-C
ALL SHOPS & UNITS:	52	8	44	-	-	-	-
1. Primary operative shops	35	3	7	19	6	-	-
- Production department	33	3	7	17	6	-	-
- Packing department	2	-	-	2	-	-	-
2. Auxiliary operative units	12	-	12	-	-	-	-
- Repair & maintenance	1	-	1	-	-	-	-
- Mechanical shop	-	-	-	-	-	-	-
- Tooling shop	-	-	-	-	-	-	-
- Utilities control	-	-	-	-	-	-	-
- Product & material storage	4	-	4	-	-	-	-
- Off-site transport	4	-	4	-	-	-	-
- Guards, cleaners, etc.	2	-	2	-	-	-	-
- Other auxiliary op. units	1	-	1	-	-	-	-
3. Auxiliary non operative units	5	5	-	-	-	-	-
- Production management	1	1	-	-	-	-	-
- Research & development	-	-	-	-	-	-	-
- Sales unit	2	2	-	-	-	-	-
- Accounting	2	2	-	-	-	-	-
- General administration	-	-	-	-	-	-	-

III. INVENTORIES

(End of 1968)	Actual value (1000 US \$)	Number of months
Inventories	65	
TOTAL:		
- Production materials	4	0.1
- Other input materials	1	1
- Work-in-process	-	-
- Finished products	60	1.2

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift hours/day	8	-	-	hours
Actual hours/year (*)	260	-	-	hours
Actual days/year	106	-	-	days

(*) Company is operated seasonally.

IV. ANNUAL PRODUCTION

(1965/66)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit ** price in factory (US \$)	Total production value (1965 US \$)
		Unit	Output			
Products for group of products						
- Refined granular sugar	1931/32	t	85,239	90,000	105.60	9,001
- Alcohol	1933/34	000 l	1,729	4,000	168.00	291
- Incrystallisable sugar syrup	1931/32	t	24,292	27,500	12.00 8.38 (Exp)	280
- Fodder	1963/64	t	1,021	4,000	34.28	35
- Cotton in plume	1964/65	bals	16,499	30,000	113.44	1,872
- Cotton seeds	1964/65	t	6,459	..	77.30	499
- Cane waste (fibrous)	1964/65	t	15,529	28,620	9.25	143
TOTAL VALUE OF PRODUCTION						12,121

* Based on the assumption of non-seasonal operation for all the plants, with 3 shifts.

** Does not include any production tax or sales tax.

EXPORTS: Part of incrystallisable sugar syrup is exported at a price of US \$ 8.38 per ton.

COMPETITIVE IMPORTS: There are no competitive imports of cane sugar and alcohol derived thereof in this country.

CAPACITY UTILIZATION: As indicated under "Working Time per Operative Worker" in Section III, the plants for alcohol, fodder and cotton ginning are operated only seasonally. The sugar refinery capacity is satisfactorily utilized.

V. ANNUAL CONSUMPTION

(1965/66)	Quantity consumed			Yield rate	Total consumption value (1965 US \$)
	Unit	Purchase	% Imported		
1. Energy and water					
TOTAL					
- Electricity (internally supplied)	000 KwH	-	-	-	321
- Liquid fuels: Petrol	000 m3	618.9	-	40	-
Raw oil	000 m3	15,670.9	-	166	-
Diesel oil	000 m3	2,007.5	-	55	-
Others	000 m3	48.6	-	61	-
2. Production materials					
TOTAL					
- Cane	t	915,042	-	4,533	-
- Incrystallisable sugar syrup (purchased)	t	7,968	-	111	-
- Seed cotton	t	11,381	-	1,963	-
- Other materials	t	..	-	653	-
3. Other materials & supplies					
TOTAL					
- Packaging					45
- Repair & maintenance					136
- Non-factor service inputs					17
4. Business services purchased					
TOTAL					
- Transport, storage & insurance					440
- Communication, advertisements, etc.					51
5. Work performed by sub-contractors					
TOTAL					
					8,870

VI. VALUE ADDED

(1965/66)	Value (1965 US \$)
1. Wages & salaries	
- Employees in direct production (1,019 persons)	1,340
- Other employees (280 persons)	283
2. Other payments for employees	
3. Annual depreciation	791
4. Rentals paid	491
5. Interests & royalties	-
6. Sales tax	265
7. Other ind. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	81
TOTAL	
3,250	

VII. MONTHLY EARNING RATES

(End of June 1966)	No. of emp.	Average earning rate (1965 US \$)
1. Local non-operatives		
TOTAL		
- Managers	3	707
- Engineers	21	403
- Technicians	22	284
- Accountants	4	362
- Sales officers	-	-
- Other professional staff	4	247
- Clerks & typists	145	138
- Administrator	1	560
- Others (chiefs of material handling)	3	120
2. Local operatives		
TOTAL		
- Supervisors	3	480
- Foremen	35	193
- Machine operators	182	129
- Craftsmen	311	123
- Truck drivers	16	124
- Other full-time operatives	184	80
- Unskilled & part-time operatives	-	-
- Others (price preparators, weighers, guards, mixers, etc)	15	92
3. Foreign employees		
TOTAL		
TOTAL		
8,870		

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)	Sugar factories and refineries (NIC: 207)					
	Industry group	Number of emp.	Number of emp.	Avg. emp. per plant (1965)	Avg. prod. per plant (1965)	Avg. cap. per plant (1965)
1. Size groups by number of persons employed:						
up to 5	535	1,998	53	230	72	
6 - 15	267	2,448	39	344	95	
16 - 250	188	6,383	625	3,123	117	
251 - 500	25	8,998	1,480	6,494	148	
over 500	26	25,493	1,906	6,861	156	
TOTAL						
	981	44,870	1,234	5,611	151	
2. Size groups by value of annual production (1965 US \$):						
up to 2	1,266	5,801	23	140	37	
2 - 4,000	261	22,092	1,066	4,257	180	
over 4,000	17	18,778	1,687	8,379	133	
TOTAL						
	1,544	46,671	1,187	5,493	151	

* Capital is defined as plant and equipment.

IX. SUPPLEMENTS

Future plans: During 1968/69 and 1972/79 approximately US \$ 1,120,000 will be invested in the sugar refinery plant.

Governmental policies: An effective growth-favouring policy - especially favouring renovation of equipment and installation of modern apparatuses - is desired.

Major Products: Cane sugar refinery; also produces sugar syrup, alcohol and molasses.
 Capable of processing annually about 1.5 million t of sugar cane with 3 shifts.

Reporting Unit: An old one-establishment enterprise, founded in 1904. The enterprise was re-instituted into the present form in 1944.

I. FIXED CAPITAL ASSETS (in 000 US \$)

(End of 1965)

	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
1. Primary process equipment	..	13,953	22,495
TOTAL		13,953	22,495
- Process equipment		13,953	22,495
- Hand tools & apparatuses		-	-
- Cost of installation		-	-
2. Primary industrial building	..	2,631	3,229
TOTAL		2,631	3,229
(total floor space: .. m ²)		2,631	3,229
3. Auxiliary facilities		2,272	3,663
TOTAL		2,272	3,663
- Water, steam, electricity, cooling & storing		516	949
- Transportation facilities		953	1,109
- Administrative facilities		216	286
- Laboratory facilities		-	-
- Others		589	1,319
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		18,856	29,387
4. Other fixed capital assets		37	..
TOTAL		37	..
- Land (total acreage: .. m ²)		37	..

DETAIL OF PROCESS EQUIPMENT (a):

	Supplier country	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
Sugar plant	}		13,003	20,885
Distillery		1944	232	549
"Casis" plant		to 1964	550	567
Machinery and equipment for the plantation field			168	493

HISTORY OF INVESTMENT:

The factory was constructed in 1905. The first trial production started in 1906, and the first commercial production one year later.

In 1964 US \$ 10,000,000 were invested for the expansion of the sugar refining capacity and storage facilities.

CAPACITY POWER:

Process equipment:		Generating equipment:	
- Steam engines:	5,700 kW	- Installed capacity:	.. MVA
- Pumps engines:	8,000 "		

EXTERNAL CONDITIONS:

Transport: -

Utilities: Electricity and water, fair.

Community: Residential, health and recreational, educational, fair.

II. INVENTORIES AND WORKING CAPITAL (in 000 US \$)

(End of 1965)

	Actual value	2. Liquid assets	Actual value
1. Inventories	1,475	TOTAL:	5,260
TOTAL:	1,475		
- Production materials	17	- Cash (hand/bank)	39
- Other input materials	1,450	- Market. sec. & bonds	1,699
- Work-in-process	-	- Short-term investment	38
- Finished products	8	- Prepaid expenses	97
		- Accounts receivable	3,387
3. Desired working capital	Number of months	Value	
TOTAL:	12	7,440	
- Production materials	-	-	
- Other input materials	12	640	
- Finished products	-	-	
- Wages & salaries	..	2,000	
- Other special items	..	4,800	

III. MANNING TABLE (number of persons)

	Total	1st shift		2nd shift		3rd shift	
		A	B	A+B	A+B	A+B	A+B
ALL SHOPS & UNITS:	754						
1. Primary operative shops	345	..	..	..	..	..	..
- Sugar mill	321	(3 shifts, but irregular patterns of shift allocation)					
- Distillation of alcohol	24						
2. Auxiliary operative units	399	..	..	..	..	..	..
- Repair and maintenance	327	(includes one loading and transporting and unloading crews)					
- Mechanical shop							
- Utilities control							
- Product & material storage							
- Off-site transport							
- Guards, cleaners, etc.							
- Laboratory	26	(includes technical and managerial control of the sugar plant)					
3. Auxiliary non-operative units	10	10	-	-	-	-	-
- Production management	-	-	-	-	-	-	-
- Research & development	-	-	-	-	-	-	-
- Sales unit	10	10	-	-	-	-	-
- General administration	-	-	-	-	-	-	-

WORKING TIME PER OPERATIVE WORKER:

- Normal hours/day: 8 hours - Normal days/year: 300 days

- Actual hours/year: 1,600 hours

CAPACITY OF OPERATIVE SHOPS:

IV. ANNUAL PRODUCTION

(1965) Products (or group of products)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price on factory (US \$)	Total production value (000 US \$)
		Unit	Output			
- Sugar	..	t	106,278.8	..	105.5	11,214
- Sugar syrup	..	t	38,372.0	..	11.0	442
- Alcohol	..	000 l	1,326.8	..	0.5	637
- Residuals	..	000 l	63.3	..	0.17	11
- Molasses	..	t	103.7	..	72.0	8
TOTAL VALUE OF PRODUCTION						12,312

REPORTS: Part of incrystallizable sugar syrup production is exported at US \$ 11.00 per t.

CAPACITY UTILIZATION: The exact estimate of nominal capacity output was not made available. A rough guesswork was about 150,000 t of refined sugar with 3 shifts.

VI. VALUE ADDED

(1965)	Value (000 US \$)
1. Wages & salaries	
- Employees in direct production (750 persons)	1,261.4
- Other employees (See note in IX)* (.. persons)	596.3
2. Other payments for employees	525.6
3. Annual depreciation	1,407.4
4. Rentals paid	56.0
5. Interest & royalties	815.5
6. Sales tax (not incl. in TOTAL)	(3.3)
7. Other ind. bus. taxes	933.1
8. (-) Subsidies	-
9. Corporate income before tax	(-) 56.4
	5,540.9

VII. MONTHLY EARNING RATES

(End of 1965)	No. of pers. emp.	Average earning rates (US \$)
1. Local non-operatives		
TOTAL:	55	234
- Managers	2	2,000
- Engineers	-	-
- Technicians	-	-
- Accountants	6	320
- Sales officers	-	-
- Other professional staff	7	400
- Clerks & typists	40	104
2. Local operatives		
TOTAL:	..	..
- Supervisors	1	2,000
- Foremen	15	320
- Machine operators	..	240
- Craftsmen	..	240
- Truck drivers	..	..
- Other full-time operatives	..	128
- Unskilled & part-time operatives	..	80
3. Foreign employees		
TOTAL:	3	1,400
- Engineers, trainers and other technical control staff	3	1,400

V. ANNUAL CONSUMPTION

(1965)	Quantity consumed		% imported	Tariff rate	Total consumption value (000 US \$)
	Unit	Purchase			
1. Energy and water					
TOTAL:					345.6
- Solid fuel (Mogassa)	t	270,000			-
- Electricity	000 KwH	160,980			14.4
- Liquid fuel and lubricants: Oil	000 l	25,295.7			265.8
Diesel oil and gasoline	000 l	577.5			24.0
Lubricants	000 l	..			41.4
(Internally supplied) Steam	t	636,000			-
2. Production materials					
Water	000 m3	52,000			-
TOTAL					5,230.3
- Sugar cane	t	1,018,374			5,170.0
- Animal charcoal	"	97,000			24.2
- Lime	"	889			10.2
- Hydrosulphide	"	5			5.2
- Caustic soda	"	35			6.6
- Miscellaneous	"	..			14.1

	Total consumption value (000 US \$)
3. Other materials & supplies	
TOTAL:	375.4
- Packaging	-
- Repair & maintenance	325.7
- Non-factor services inputs	49.7
4. Business services purchased	
TOTAL:	819.8
- Transport, storage & insurance	166.7
- Communication, advertisements, etc.	653.1
5. Work performed by sub-contractors	
TOTAL:	-
	6,771.1

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)					
Industry group: Sugar factories and refineries (HSIC: 207)					
1. Size groups by number of persons employed	Number of estab.	Number of emp.	Avg. W. & S. per pers. (US \$)	Avg. gross prod. val. per pers. (US \$)	Avg. emp. prod. rate* (kg)
up to 5	535	1,998	53	230	72
6 - 15	267	2,448	59	344	95
16 - 250	128	6,323	625	3,123	117
251 - 500	25	8,598	1,490	6,494	148
over 500	26	25,493	1,506	6,861	156
TOTAL	981	44,870	1,234	5,611	151
2. Size groups by value of annual production (000 US \$)	Number of estab.	Number of emp.	Avg. W. & S. per pers. (US \$)	Avg. gross prod. val. per pers. (US \$)	Avg. emp. prod. rate* (kg)
up to 2	1,266	5,801	23	140	87
2 - 4,000	261	22,092	1,066	4,257	181
over 4,000	17	18,778	1,687	8,379	133
TOTAL	1,544	46,671	1,187	5,403	151

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

Future plan:

Within the next 5 years approximately US \$ 1,600,000 will be invested for the expansion of sugar production. The additional labour to be employed will then be 15 persons on each of the 3 shifts.

*** Salaries of "Other employees"**

The detail of this figure (which is not consistent with the number of employees given in III) was not made available. The negative corporate income before tax, which could be well covered by these extra salaries, might be attributed to a sloppy accounting procedure - confusion of annual operating account with capital account expenditures.

Major Products: Animal feeds. Capable of producing annually 10,900 t of animal feeds on 2-shift operation.

Reporting Unit: A privately owned one-establishment enterprise, founded in 1957, no participation of foreign capital.

I. FIXED CAPITAL ASSETS

(End of 1966/67)

	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
1. Primary process equipment			
TOTAL		23.4	26.6
- Process equipment		19.1	21.3
- Hand tools & apparatuses		0.4	0.5
- Cost of installation		3.9	4.8
2. Primary industrial building			
TOTAL		52.6	52.6
(total floor space: 2,400 m ²)	1957	52.6	52.6
3. Auxiliary facilities			
TOTAL		52.0	64.0
- Water, steam, electricity, cooling & storing		-	-
- Transportation facilities	1966/67	32.0	36.0
- Administrative facilities	1963	20.0	24.0
- Laboratory facilities		-	-
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		128.0	143.2
4. Other fixed capital assets			
TOTAL		24.8	51.5
- Land (total acreage: 1,680 m ²)		24.8	51.5

DETAIL OF PROCESS EQUIPMENT (no.)	Supplier country	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
- 1000 lbs scales	4 USA	1963/66/68	3.8	4.4
- 140 lbs scales	1 "	1966	0.3	0.3
- Universal centrifugal pump	1 "	1963	0.1	0.1
- Electrical pump	1 "	1963	0.1	0.1
- Vertical mixers	2 "	1963	4.2	4.6
- Horizontal mixers	2 "	1963/68	3.5	3.9
- Galvanized sheet granaries	5 "	1966/67	1.5	1.7
- Hammer mills	2 "	1963/68	4.0	4.4
- Auxiliary equipment	" "	1963/67	1.0	1.8

HISTORY OF INVESTMENT:

Construction of the factory started in 1955. Both trial and commercial production started in 1957. In the same year profits accrued for the first time after utilising 50% of capacity. The following investments were made: (in 000 US \$)

Year	Amount	Category	Purpose
1966	30	Machinery	Replacement
1967	6	Machinery	Expansion

CAPACITY POWER:

Process equipment:		Generating equipment:	
Electric motor:	30 kW	Installed capacity:	- kVA

EXTERNAL CONDITIONS:

Transport: Long distance and local area, excellent.
Utilities: Electricity, fair; water, excellent.
Community: Residential, health and recreational, educational, fair.

II. INVENTORIES AND WORKING CAPITAL

(in 000 US \$)

(End of 1966/67)

	Actual value	2. Liquid assets	Actual value
1. Inventories		TOTAL:	171.9
TOTAL	87.6		
- Production materials	63.1	- Cash (hand/bank)	14.3
- Other input materials	2.6	- Market. sec. & bonds	-
- Work-in-process	7.0	- Short-term investment	-
- Finished products	14.9	- Prepaid expenses	-
		- Accounts receivable	157.6

3. Desired working capital

	Number of months	Value
TOTAL		200.0
- Production materials	4	170.0
- Other input materials	4	20.0
- Finished products	-	-
- Wages & salaries	3	10.0
- Other special items	-	-

III. MANNING TABLE

(number of persons)

A - Shift operation
B - Other operation

	Total	No shift		Tot shift A+B	Tot shift A+B
		A	B		
ALL SHOPS & UNITS:	37	26	11	-	-
1. Primary operative shops	20	5	5	10	-
- Total plant	20	5	5	10	-

2. Auxiliary operative units	11	10	1	-	-
- Repair and maintenance	-	-	-	-	-
- Mechanical shop	-	-	-	-	-
- Utilities control	-	-	-	-	-
- Product & material storage	1	1	-	-	-
- Off-site transport	-	-	-	-	-
- Guards, cleaners, etc.	10	9	1	-	-
3. Auxiliary non-operative units	6	6	-	-	-
- Production management	-	-	-	-	-
- Research & development	-	-	-	-	-
- Sales unit	2	2	-	-	-
- General administration	4	4	-	-	-

WORKING TIME PER OPERATIVE WORKER:

Normal hours/day:	7.50	hours	Normal days/year:	260	days
Actual hours/year:	1,950	hours			

CAPACITY OF OPERATIVE SHOPS:

IV. ANNUAL PRODUCTION

(1966/67)	Pr. of total prod.	Quantity produced		Standard capacity output	Unit price a factory (US \$)	Total production value (US \$)
		Unit	Output			
- Animal feeds	1957	000 lbs	12,381	24,000	31.4	388.8
- Others	..	..	..	..	..	61.0
TOTAL VALUE OF PRODUCTION						449.8

REPORTS:

Part of animal feed production is exported at a unit price of US \$ 31.4.

COMPETING IMPORTS:

Similar products are imported at a unit price which is usually 25% - 35% higher than the price for locally produced products. The protective tariff rate for imported products is US \$ 0.05 per gross kilo and 20% ad valorem.

CAPACITY UTILIZATION:

Existing capacity is underutilized due to lack of sufficient working capital. In order to achieve full utilization 52 additional man-hours/year would be required on the 3rd shift.

V. ANNUAL CONSUMPTION

(1966/67)	Quantity consumed				Total consumption value (US \$)	
	Unit	Purchase	% imported	Tariff rate		
1. Energy and water						
TOTAL: 6.9						
- Electricity	000 kWh	210.7			4.7	
- Liquid fuels and lubricants:						
Diesel oil					1.5	
Other lubricants					0.3	
- Water					0.4	
2. Production materials						
TOTAL: 340.8						
				per gross val. kg US \$		
- Fish meat	000 lbs	314	95	free	7	23.9
- Corn	" "	2,843	10	0.08	10	85.2
- Sorghum	" "	2,841	-	0.08	10	85.2
- Soy bean	" "	313	100	0.25	15	23.9
- Alfalfa	" "	232	100	0.25	20	10.2
- Miscellaneous	" "	5,111	-	free	100	112.4

VI. VALUE ADDED

(1966/67)	Value (US \$)
1. Wages & salaries	
- Employees in direct production (13 persons)	14.9
- Other employees (14 persons)	26.5
2. Other payments for employees	1.4
3. Annual depreciation	7.6
4. Rent paid	-
5. Interest & royalties	7.7
6. Sales tax (not incl. in TOTAL)	(1.5)
7. Other ind. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	16.0
	74.1

VII. MONTHLY EARNING RATES

(End of 1966/67)	No. of emp.	Average earning rate (US \$)
1. Least non-operative	8	311
TOTAL:		
- Managers	1	800
- Engineers	-	-
- Technicians	-	-
- Accountants	1	200
- Sales officers	2	320
- Other professional staff	1	560
- Clerks & typists	3	100
2. Least operative	29	54
TOTAL:		
- Supervisors	-	-
- Foremen	-	-
- Machine operators	20	50
- Craftsmen	-	-
- Truck drivers	3	92
- Other full-time operatives	6	48
- Unskilled & part-time operatives	-	-
3. Foreign employees	-	-
TOTAL:		

	% inv.	Total consumption value (US \$)
3. Other materials & supplies		18.0
TOTAL:		
- Packagings (paper bags)		14.7
- Repair & maintenance	10	1.3
- Non-factor service inputs		2.0
4. Business services purchased		10.0
TOTAL:		
- Transport, storage & insurance		3.8
- Communication, advertisements, etc.		6.2
5. Work performed by sub-contractors		-
TOTAL:		
		375.7

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(196)

Industry group: _____ (NIC:)

1. Size group by number of persons employed up to	Number of estab.	Number of emp.	Av. ann. gross prod. (US \$)		Av. emp. gross prod. rate* (US \$)
			per estab.	per emp.	
No data available.					
TOTAL					
2. Size group by value of annual production (US \$) up to					
TOTAL					

* Capital & depreciation physical capital costs.

IX. SUPPLEMENTS

Governmental policies:

It is desirable to have more fiscal incentives in the industrial promotion law.

Future aims:

By 1971, approximately US \$ 160,000 will have been invested for expansion purposes. By then 6 persons will be employed on the 3rd shift.

Major Products: Macaroni and similar products, powdered soups. Capable of producing annually 590 t of macaroni and similar products and 120,000 dozen-packets of soups based on 1-shift operation.

Reporting Unit: A one-establishment enterprise founded in 1953, privately owned, no participation of foreign capital.

I. FIXED CAPITAL ASSETS

(End of 1966/67)

	Year of installation	Orig. purchase value USD US \$	Replacement value USD US \$
1. Primary process equipment			
TOTAL:		37.3	54.8
- Process equipment		30.5	46.0
- Hand tools & apparatuses	various	0.8	0.8
- Cost of installation		6.0	8.0
2. Primary industrial building			
TOTAL:	1955	17.4	22.0
(total floor space: 780 m ²)		17.4	22.0
3. Auxiliary facilities			
TOTAL:		20.6	24.0
- Water, steam, electricity, cooling & storing	1955	1.0	1.4
- Transportation facilities	1961/65	18.8	21.6
- Administrative facilities	1960	0.8	1.0
- Laboratory facilities		-	-
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		75.3	100.8
4. Other fixed capital assets			
TOTAL:		6.6	11.0
- Land (total acreage: 7,800 m ²)		6.6	11.0

DETAIL OF PROCESS EQUIPMENT (no.):

	Supplier country	Year of installation	Orig. purchase value USD US \$	Replacement value USD US \$
- Stamping machine	Spain	1962	3.4	4.4
- Braibranti machine	Italy	1958	4.3	5.6
- Automatic microbraibranti machine	Italy	1960	4.4	5.6
- Automatic packing machine	Mexico	1962	4.3	5.0
- Soup mixers	Sweden, FR.Germ.	1960/63	4.5	4.8
- Packing machine	Spain	1963	3.2	10.0
- Compressing machine	USA	1963	4.0	6.0
- Prodrier	Italy	1958	1.3	1.2
- Drier	Italy	1958	1.1	3.4

HISTORY OF INVESTMENT:

Construction of the factory started in 1953. Both trial and commercial production started in 1955. Profits accrued for the first time in 1956 when 50% of the capacity was utilized.

CAPACITY POWER:

Process equipment:
- Electric motors: 24 kW
- Other fixtures: 24 "

Generating equipment:

- Installed capacity: - kVA

EXTERNAL CONDITIONS:

Transport: Long distance and local area, fair.

Utilities: Electricity, fair; water, excellent.

Community: Residential and educational, fair; health and recreational, poor.

II. INVENTORIES AND WORKING CAPITAL

(in USD US \$)

(End of 1966/67)

	Actual value		Actual value
1. Inventories	23.4	2. Liquid assets	5.2
TOTAL:		TOTAL:	
- Production materials	5.2	- Cash (hand/bank)	1.7
- Other input materials	15.7	- Market. sec. & bonds	-
- Work-in-process	-	- Short-term investment	-
- Finished products	2.5	- Prepaid expenses	-
		- Accounts receivable	3.5
3. Desired working capital			
	Number of months	Value	
TOTAL:		37.2	
- Production materials	3	19.2	
- Other input materials	3	6.0	
- Finished products	3	1.2	
- Wages & salaries	3	9.2	
- Other special items	3	1.6	

III. MANAGING TABLE

(number of persons)

A - Skilled operator
B - Other operator

(1966/67 average)

	Total	A	B	Total	Total
		1st shift		2nd shift	
		A+B	A+B	A+B	A+B
ALL SHOPS & UNITS:	40	40	-	-	-
1. Primary operative shops	18	5	13	-	-
- Total plant	18	5	13	-	-
2. Auxiliary operative units	8	8	-	-	-
- Repair and maintenance	1	1	-	-	-
- Mechanical shop	5	5	-	-	-
- Utilities control	-	-	-	-	-
- Product & material storage	1	1	-	-	-
- Off-site transport	-	-	-	-	-
- Guards, cleaners, etc.	-	-	-	-	-
- Packing	1	1	-	-	-
3. Auxiliary non-operative units	14	14	-	-	-
- Production management	-	-	-	-	-
- Research & development	-	-	-	-	-
- Sales unit	9	9	-	-	-
- General administration	5	5	-	-	-

WORKING TIME PER OPERATIVE WORKER:

- Normal hours/day: 8 hours - Normal days/year: 260 days
- Actual hours/year: 2,080 hours

CAPACITY OF OPERATIVE SHOPS:

The heating department has a daily dehydrating capacity of 30 gallons. Its capacity is fully utilized.

IV. ANNUAL PRODUCTION

(1966/67) Products for group of products	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price in factory US \$	Total production value 1966 US \$
		Unit	Output			
- Macaroni and similar products	1953	100 lbs	429,7	1,300	176	76.3
- Powdered soups	1953	dozen	30,395	120,000	1.5	46.7
TOTAL VALUE OF PRODUCTION						123.0

VI. VALUE ADDED

(1966/67)	Value 1966 US \$
1. Wages & salaries	
- Employees in direct production (18 persons)	9.0
- Other employees (23 persons)	34.8
2. Other payments for employees	5.9
3. Annual depreciation	10.0
4. Rentals paid	2.9
5. Interest & royalties	2.8
6. Sales tax (not incl. in TOTAL)	(0.2)
7. Other ind. bus. taxes	0.4
8. (-) Subsidies	-
9. Corporate income before tax	3.3
TOTAL	69.1

COMPETITIVE IMPORTS:

Protective tariff rates are imposed on imported macaroni and similar products of either 10% ad valorem and of US \$ 0.60 per gross kilo. The national production of powdered soups is protected by a tariff rate of 10% ad valorem and of US \$0.75 per gross kilo.

CAPACITY UTILIZATION:

Underutilization of capacity due to lack of working capital (production materials). In order to utilize the total capacity additional 176 man-hours would be required annually on the 2nd shift.

VII. MONTHLY EARNING RATES

(End of 1966/67)	No. of emp.	Average monthly earnings 1966 US \$
1. Least non-operative TOTAL:	14	154
- Managers	1	480
- Engineers	-	-
- Technicians	-	-
- Accountants	1	160
- Sales officers	9	148
- Other professional staff	-	-
- Clerks & typists	3	60
2. Least operative TOTAL:	27	56
- Supervisors	1	6
- Foremen	-	-
- Machine operators	4	48
- Craftsmen	1	96
- Truck drivers	5	96
- Other full-time operatives	13	38
- Unskilled & part-time operatives	1	60
- Others	2	60
3. Foreign employees TOTAL:	-	-

V. ANNUAL CONSUMPTION

(1966/67)	Quantity consumed		% imported	Tariff rate	Total consumption value 1966 US \$	
	Unit	Purchase				
1. Energy and water TOTAL:					4.5	
- Electricity	000 Kwh	68.7			2.1	
- Liquid fuels and lubricants: Gasoline and diesel oil	m3	30			2.4	
2. Production materials TOTAL:					36.9	
- Flour	t	150.5	-	0.20	10	31.7
- Refined salt	000 lbs	5	-	0.05	10	0.4
- Salt	" "	25.3	-	0.10	10	0.4
- Corn flour	" "	3.1	-	0.40	10	0.5
- Lard	" "	2.3	-	0.50	10	0.5
- Sugar	" "	4.0	-	0.15	10	0.4
- Monosodic glutamate	" "	6.0	100	0.05	10	2.6
- Asparagus	" "	0.2	-	0.50	10	0.2
- Tomatoes	" "	0.1	-	0.50	10	0.2

	\$ inv.	Total consumption value 1966 US \$
3. Other material & supplies TOTAL:		3.6
- Packaging (cellulose and polyeth. bags)	10	1.6
- Repair & maintenance	20	1.4
- Non-factor service inputs		0.6
4. Business services purchased TOTAL:		8.9
- Transport, storage & insurance		1.0
- Communication, advertisements, etc.		7.9
5. Work performed by sub-contractors TOTAL:		-
TOTAL		53.9

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(196)

Industry group: _____ (HSIC:)

1. Size group by number of persons employed up to	Number of units	Number of emp.	Avg. U.S. \$ per unit	Avg. gross prod. val. per unit US \$	Avg. emp. gross prod. value US \$
No data available.					
TOTAL					
2. Size group by value of annual production 1966 US \$ up to					
TOTAL					

IX. SUPPLEMENTS

Governmental policies:

Property taxes, import duties, the increase of Social Security rates, etc. affect the profitability of the enterprises.

Large-scale technical assistance programmes would favourably affect the viability of the enterprises.

* Capital is defined as physical capital assets.

MAJOR PRODUCTS: Soft drinks and soda water.
Capable of producing daily 4,000 cases (each containing 24 bottles or 1 to 1.5 gallon) 3-shift operation.

REPORTING UNIT: A one-establishment enterprise founded in 1951; privately owned. No foreign capital participation.

I. FIXED CAPITAL ASSETS (in 000 US \$)		Year of	Orig. purchase value	Replacement value
(End of 1967)		summi.		
1. Primary process equipment				
Total:				
- Process equipment			142	..
- Hand tools and apparatuses	1958/67		7	..
- Cost of installation				
2. Primary industrial building				
Total:				
	1951/57/58		74	..
(total floor space: 6,365.13 m ²)				
3. Auxiliary facilities				
Total:				
- Water, steam, electricity, cooling and storing	1954/58/62/63		14	..
- Transportation facilities (total land: ..)			63	..
- Administrative facilities			-	..
- Laboratory facilities			-	..
TOTAL PHYSICAL FIXED CAPITAL ASSETS (incl. land):				
			296	..
4. Other fixed capital assets				
Total:				
- Land (total acreage: .. m ²)			14	..

DETAIL OF 1.1. (supplier):		Year of	Orig. purchase value	Replacement value
		summi.		
Syrup sizing tank (1)	(UK)	1952	2	..
Lee plant (1)	(UK)	1952	14	..
Water treatment plant (1)	(UK)	1952	7	..
Filter press (1)	(USA)	1957	1	..
GM-4-50 Filter unit (1)	(USA)	1958	21	..
Carbo cooler (1)	(USA)	1958	24	..
Hydrostat bottle washer (1)	(USA)	1958	39	..
CO ₂ Gas fittings	(USA)	1958	1	..
Syrup room equipment (1)	(USA)	1958	8	..
Conveyor (1)	(USA)	1958	3	..
Boiler (1)	(USA)	1958	5	..
GM 12 Tumbler sizer (1)	(USA)	1958	5	..
Air compressor (1)	(USA)	1961	1	..
Rising vessel (1)	(Tanzania)	1964	2	..
Cooling tower (1)	(Tanzania)	1966	5	..

HISTORY OF INVESTMENT

The construction of the factory and the trial as well as commercial production was started in 1951. The first profits were made in 1956 when total output reached 423,300 bottles per year.

Investments amounting to US\$ 173,700 were made as follows:
(in 000 US\$)

1957	11	Additional land
1958	48	Additional building
1958	115	Plant expansion

OUTPUT DATA:
- **Production capacity:** 100.9 MW
- **Operating equipment:** - NVA
- **Installed capacity:** - NVA

GENERAL COMMENTS:
- **Location:** Long distance : fair; local area : excellent

UTILITIES: Electricity, water and gas : fair

COMMUNITY: Residential, educational, health and recreational facilities : all fair.

II. INVENTORIES AND WORKING CAPITAL (in 000 US \$)		Actual value	Actual value
(End of 1967)			
1. Inventories		77	223
Total:			
- Production materials		21	107
- Other input materials		54	-
- Work-in-process		2	-
- Finished products		3	7
2. Liquid assets			109
Total:			
- Cash (hand/bank)			
- Market sec. & bonds			
- Short-term investment			
- Prepaid expenses			
- Accounts receivable			

3. Desired working capital	No. of months	Value
Total:		139
- Production materials	4	99
- Other input materials	4	5
- Other special items	4	24
- Finished products	-	-
- Wages and salaries	1	11

* B - Machine operators
* C - Other operatives

III. MANNING TABLE

(1967 average)	Total	1st shift			2nd shift			3rd shift		
		B ^a	C ^a	B ^c	C ^c	B ^c	C ^c	B ^c	C ^c	
TOTAL EMPLOYED:	173	121	26	26	26	26	26	26	26	
1. Primary operative phone	114	4	60	25	25	25	25	25	25	
Bottling dept.	114	4	60	25	25	25	25	25	25	

2. Auxiliary operative white	15	11	1	1
- Repair and maintenance	5	3	1	1
- Tooling shop	-	-	-	-
- Mechanical shop	2	2	-	-
- Utilities control	1	1	-	-
- Product and material storage	5	5	-	-
- Off-site transport	-	-	-	-
- Guards, cleaners, etc.	2	2	-	-
- Turnboys	20	20	-	-
3. Auxiliary non-operative white	24	24	-	-
- Production management	6	6	-	-
- Research and development	-	-	-	-
- Sales unit	10	10	-	-
- Accounting	-	-	-	-
- General administration	8	8	-	-

CAPACITY OF OPERATIVE SHOPS:

WORKING TIME PER OPERATIVE WORKER:	
- Normal hours/day:	8 hours
- Normal days/year:	.. days
- Actual hours/year:	4,817 hours

The bottling department is fully automated.

IV. ANNUAL PRODUCTION (in 000 US \$)

(1967)

Products (or group of products)	Yr. of first prod.	Quantity produced		Nominal capacity ^(*) (000 gal)	Unit price ex factory (US \$)	Total production value
		Unit	Output			
Soft drinks	1951	gall.	1,153,573	1,200,000 to 1,500,000	0.9	1,092
Boda water	1951	gall.	70,366		0.6	39
Ice	1951	t	347		30.5	11
Total value of production						1,142

(*) based on a 3-shift operation.

Daily capacity is 96,000 bottles (4,000 cases).

VI. VALUE ADDED (in 000 US \$)

(1967)

	Value
1. Wages & salaries	
- Employees in direct production (149 persons)	129
- Other employees (24 persons)	
2. Other payments for employees	8
3. Annual depreciation	26
4. Rentals paid	-
5. Interests and royalties	-
6. Sales tax	-
7. Other ind. bus. tax (excise duty) (-) subsidies	273
8. Corporate income before tax	176
TOTAL VALUE ADDED:	612

VII. MONTHLY WAGING RATES (in US \$)

(End of 1967)

	No. of empl.	Average monthly wages
1. Local non-managerial		
Total	17	149
- Managers	-	-
- Engineers	-	-
- Technicians	1	64
- Accountants	-	-
- Sales officers	10	200
- Clerks and typists	8	92
2. Local managerial		
Total	149	34
- Supervisors	-	-
- Foreman	3	98
- Machine operators	9	36
- Craftsmen	7	60
- Truck drivers	1	56
- Other fulltime operators	90	32
- Unskilled operat.)	39	27
- Part-time operat.)	-	-
3. Foreign employees		
Total	5	478
- Managerial staff	3	700
- Engineers, trainees and other techn. control staff	1	120
- Sales manager	1	168

V. ANNUAL CONSUMPTION (in 000 US \$)

(1967)

1. Energy and water	Quantity consumed	%	Tariff rate	Total consumption value
Electricity	000 Kwh 387.45	-	-	18
Diesel fuel	galls. 8,700	-	-	9
Lubricants	galls. 338	-	-	4 (0.2)
Water	galls. 7,676	-	-	5
2. Production materials				
Total				441
Rice	galls. 5,547	100	-	198
Syrup	t 635	-	-	132
60g gas	t 84	100	-	25
Gross carts	gross 139,915	-	30 % ext.	39
Bottles	pieces ..	-	15 % ext.	47

3. Foreign employees

Total

5 478

Managerial staff 3 700

Engineers, trainees and other techn. control staff 1 120

Sales manager 1 168

4. Other materials and supplies

Total

30

Packaging (cases) 9

Parts etc. for equipm. maintenance 17

Materials etc. for non-manuf. activ. 4

5. Business services purchased

Total

41

Transport, storage + insurance * 8

Gen. advertising + other bus. activ. 33

6. Work performed by sub-contractors

Total

-

TOTAL VALUE OF CONSUMPTION:

530

* Purchased separately

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY (in US \$)

(1965)

21

1. Size groups by establishments	No. of establs.	No. of empl.	Avr. U.S. \$ per emp.	Avr. gross prod. val. / emp. ann.	Avr. emp. / gross prod. ratio *
20 - 49	3	106	..	..	..
50 - 99	1	93	..	..	..
100 - 499	2	349	..	..	..
over 500	-	-	-	-	-
total	11	614	848	11,236	
2. Size groups by scale of production of establishments:					
up to 2	2				
2 - 49	8				
50 - 100	-				No data available
100 - 249	-				
250 - 499	-				
500 - 1,000	-				
1,000 - 4,000	-				
over 4,000	-				
total					

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

NEW AREA: 231 - (1)

MAIN PRODUCT: Spun rayon fabric. Capable of producing 4,100,000 m² on 2-shift operation.

INDUSTRY TYPE: A one-establishment enterprise founded in 1959. Private corporation. Foreign capital participation: 49 %.

I. FIXED CAPITAL ASSETS (in 000 US \$)		Year of	Orig. purchase	Replacement
(End of 1967)		1959	value	value
1. Primary process equipment				
Total:				
- Process equipment		1959	308	305
- Hand tools and apparatuses			-	-
- Cost of installation			-	-
2. Primary industrial buildings				
Total:				
(total floor space: 3,427 m ²)		1959	110	126
3. Auxiliary facilities				
Total:				
- Water, steam, electricity, cooling and storing			21	-
- Transportation facilities (total land: ..)			-	-
- Administrative facilities			19	-
- Laboratory facilities			53	-
TOTAL PHYSICAL FIXED CAPITAL ASSETS (incl. land):				
			511	531
4. Other fixed capital assets				
Total:				
- Land (total acreage: 7,525 m ²)			..	..
DETAILS OF I.T. (supplier):				
		Year of	Orig. purchase	Replacement
		1959	value	value
Weaving looms (190)	(90% Japan, 10% FRG)	1959	308	305
Preparatory machines (72)			-	-

ANALYSIS OF INVESTMENT

Construction of the factory as well as trial and commercial production was first started in 1959.

The first profits occurred in 1961.

Investments since 1961 are only minor.

Electricity:		Emergency equipment:	
- installed capacity:	214 kW	- installed capacity:	- kW

Location: Long distance and local area: fair

Utilities: Electricity, gas: fair; water: poor

Community: Residential: excellent (50 % of workers have own houses provided on loan from company); health and recreational and educational: fair.

II. INVENTORIES AND WORKING CAPITAL (in 000 US \$)		Actual	Actual
(End of 1967)		value	value
1. Inventories		72	-
Total:			
- Production materials		48	-
- Other input materials		0.1	-
- Work-in-process		8	-
- Finished products		16	-
2. Liquid assets			
Total:			
- Cash (hand/bank)		-	-
- Market. sec. & bonds		-	-
- Short-term investment		-	-
- Prepaid expenses		-	-
- Accounts receivable		-	-
3. Desired working capital			
Total:		210 (*)	
- Production materials		4	
- Other input materials		3	
- Finished products		3	
- Wages and salaries		2	

III. MANNING TABLE

(1967 average)	Total	1st shift			2nd shift			3rd shift		
		B*	C*	Total	B*	C*	Total	B*	C*	Total
TOTAL EMPLOYED:	515	296			219			-		
1. Primary operative shops	308	173	33	198	-	-	-	-	-	-
Dyeing shop	54	10	18	26	-	-	-	-	-	-
Warping shop	32	16	4	12	-	-	-	-	-	-
Winding shop	144	71	3	70	-	-	-	-	-	-
Reaching-in shop	14	6	1	7	-	-	-	-	-	-
Weaving shop	154	70	7	77	-	-	-	-	-	-
2. Auxiliary operative units	112	85			27			-		
- Repair and maintenance	29	26			3			-		
- Tooling shop	-	-			-			-		
- Mechanical shop	2	2			-			-		
- Utilization control	10	10			-			-		
- Product and material storage	42	28			14			-		
- Off-site transport	5	5			-			-		
- Guards, cleaners, etc.	24	14			10			-		
3. Auxiliary non-operative units	5	5			-			-		
- Production management	1	1			-			-		
- Research and development	-	-			-			-		
- Sales unit	-	-			-			-		
- Accounting	-	-			-			-		
- General administration	4	4			-			-		

CAPACITY OF OPERATIVE SHOPS:**WORKING TIME PER OPERATIVE WORKER:**

- Normal hours/day: 8 (incl. 5)	hours
- Normal days/year: 297	days
- Actual hours/year: 2,316	hours

The weaving department is moderately automated and mechanized, the other departments are neither automated nor mechanized. This rating is based on normal Asian standard.

Rate of capacity utilization

Weaving department	60 %
other departments	50 %

The major reasons for under-utilization of existing capacity are due to labour problems (60 %), seasonal factors (20 %) and technology (20 %).

V. ANNUAL PRODUCTION

(1968)	Yr. of first prod.	Quantity produced		Av. unit price on factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Products for group of products					
Canned fruits	1925	kg	983,540	0.4	356
Canned vegetables	1928	kg	734,120	0.3	254
TOTAL VALUE OF PRODUCTION:					610

VI. VALUE ADDED

(1968)	Total value (000 US \$)
1. Annual wages & salaries	77
- Operative workers (44 persons)	56
- Non-operative workers (8 persons)	21
2. Other payments for employees	15
3. Annual depreciation	8
- Machinery & equipment	6
- Buildings & other facilities	2
- Non-physical capital assets	-
4. Rentals paid	2
5. Interests & royalties	9
6. Sales tax	7
7. Other indirect business taxes (*)	2
8. (-) Subsidies	-
9. Corporate income before tax	30
(*) Motor vehicle tax. TOTAL VALUE ADDED:	150

DESCRIPTION OF MAJOR PRODUCTS:

Fruits and vegetables, canned or bottled.

MARKET ASPECTS:

Consumers of products:

Wholesalers, servicing bakeries and pastry shops; chain stores.

Sales organization:

Sales agents as well as a co-operative purchasing agency for bakeries.

Share in the domestic market:

Less than 1%.

Competition in the market:

Mainly competing with other domestic canneries.

EXPORT:

Total annual export: US \$ 6,500.

Major products	To Western countries	To Eastern countries	To Developing countries
Canned fruits	100%	-	-
Canned vegetables	100%	-	-

Export price policy:

Export prices are adapted to EEC-market prices.

VII. ANNUAL CONSUMPTION

(1968)	Quantity consumed	% import	Average input value (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity		
1. Energy and water				
TOTAL:				7
- Electricity	000 kWh	55	-	3
- Light fuel oil	t	93	-	2
- Water	000 m3	4 (*)	-	2
(*) Not including internal supply of 8,000 m3.				
2. Production materials				
TOTAL:				352
- Fruits	t	1,180	-	181
- Vegetables	t	930	-	163
- Preservatives	t	28	-	8
3. Other materials & supplies				
TOTAL:				54
- Packaging material				48
- Parts, supplies & services				3
- Other materials & supplies				3
4. Business services purchased				
TOTAL:				47
- Transportation, storage & insurance				21
- Communication, advertising & other business services				25
5. Work performed by subcontractors				
TOTAL:				-
TOTAL VALUE OF CONSUMPTION:				460

IV. ANNUAL PRODUCTION (in 000 US \$)

(1967)

Products (or group of products)	Yr. of first mfg.	Quantity produced	Nominal capacity output	Unit price as factory output (US \$)	Total production value
Spun rayon fabrics	1959	000m2 2,493	4,100	0.45/m2	1,122
Yarn waste		..		..	4
Total value of production					1,126

VI. VALUE ADDED (in 000 US \$)

(1967)

	Value
1. Wages & salaries	
- Employees in direct production (510 persons)	243
- Other employees (5 persons)	14
2. Other payments for employees	25
3. Annual depreciation	26
4. Rentals paid	-
5. Interests and royalties	4
6. Sales tax	-
7. Other ind. bus. tax (Excise duty) (-) subsideion	61
8. Corporate income before tax	95
TOTAL VALUE ADDED:	468

Competitive Imports

C.i.f. price of competitive import amounts to US\$ 0.34 per unit. The protective tariff rate being imposed on imported products is 100 % ad valorem.

VII. MONTHLY EARNING RATES (in US \$)

(End of 1967)

	No. of empl.	Average earnings (US \$)
1. Local non-operative		
Total:	4	..
- Managers	1	..
- Engineers	-	-
- Technicians	-	-
- Accountants	-	-
- Sales officers	-	-
- Clerks and typists	3	63
2. Local operatives		
Total:	507	41
- Supervisors	2	91
- Foreman	24	63
- Machine operators	320	42
- Craftsmen	38	53
- Truck drivers	5	49
- Other fulltime operators	52	28
- Unskilled operat.)	66	28
- Part-time operat.)		
3. Foreign employees		
Total:	2	525
- Managerial staff	1	700
- Accountant	1	350

V. ANNUAL CONSUMPTION (in 000 US \$)

(1967)

1. Energy and water	Quantity consumed		%	Tariff rate	Total consumption value
	Unit	Value			
Electricity	000 kWh	..			20
Solid fuels: charcoal	t	7.3			1
Liquid fuels and lubricants: diesel oil	galls.	16,317			4
Motor lubricants	galls.	800			3
2. Production materials					478
Spun rayon yarn	t	440.5	100	30 %	443
Eye stuffs	t	7.5	100	free	26
Chemicals	t	2.5	100	free	5
Starch	t	16.5	100	free	4

3. **Other materials and supplies**

Total consumption value

Total:	37
- Packaging (jute cloth, metal hoops, cardboard boxes)	9
- Parts etc. for equip. maintenance	28
- For non-manufact. activities	-
4. Business services purchased	
Total:	123
- Transport, storage and insurance	18
- Comm. advertising and o. bus. act.	105
5. Work performed by sub-contractors	
Total:	-
TOTAL VALUE OF CONSUMPTION:	658

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY (in US \$)

(1967)

ISIC-code : 23

1. Size groups by establishments	No. of establs.	No. of empl.	Av. U.S. \$		Av. gross prod. val./ gross prod. value *
			per estab.	per empl.	
10 - 19	3	77	..	..
20 - 49	23	888	..	..
50 - 99	53	3,951	..	..
100 - 499	76	15,381	..	..
over 500	3	1,674	..	..
total	158	21,911	319	3,612	
2. Size groups by scale of production of establishments:					
up to 2					
2 - 9					
10 - 49					
50 - 99					
100 - 499					
500 - 1,000					
1,000 - 4,000					
over 4,000					
total					

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

Governmental policies

Government grants import licenses for input materials to manufacture up to 2,500,000 m2 of fabrics.

The company reports that the income tax was too high and that the excise duty on finished goods was unacceptably.

Major Products: Rayon and synthetic-fibre fabrics. Capable of producing annually more than 1,000,000 yds on 3-shift operation.

Reporting Unit: A one-establishment enterprise, founded in 1966, 50% foreign capital participation, 45% exports.

I. FIXED CAPITAL ASSETS

(End of 1967/68)

	Year of installation	Orig. purchase value (000 US \$)	(*) Replacement value (000 US \$)
1. Primary process equipment			
TOTAL		1,144	1,025
- Process equipment		1,144	943
- Hand tools & apparatuses		10	42
- Cost of installation		incl. above	incl. above
2. Primary industrial building	1967	384	381
TOTAL			
(total floor space: ... m ²)		341	341
3. Auxiliary facilities		252	200
TOTAL			
- Water, steam, electricity, cooling & storing	1967	214	197
- Transportation facilities	1967	-	-
- Administrative facilities	1967	31	27
- Laboratory facilities		-	-
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		1,820	1,646
4. Other fixed capital assets		120	120
TOTAL			
- Land (total acreage: 71,640 m ²)		120	120

DETAIL OF PROCESS EQUIPMENT (no.)

	Supplier country	Year of installation	Orig. purchase value (000 US \$)	(*) Replacement value (000 US \$)
- Warper machine	Japan	1967	21	21
- Jersey machine	"	"	69	70
- 7 1/2" loom	"	"	202	141
- 67" loom	"	"	150	100
- Winding machine (20 spindles)	"	"	2	2
- Spinning machine	"	"	2	2
- Dyeing and finishing equipment	"	"	723	640

HISTORY OF INVESTMENT:

Construction of the factory started in 1966. Trial as well as commercial production started in 1967. Profits accrued for the first time in May 1968 when 90% of the capacity were utilized.

ADVANTAGES CONNECTED WITH THE PARTICIPATION OF FOREIGN CAPITAL:

- Employment of foreign high-level technicians.
- Import of patents and "know-how"

(*) "Replacement value" on this page stands for "re-sale value" rather than the purchase value of new functional equivalents.

CAPACITY POWER:

Process equipment	Generating equipment
Total capacity power 1,650 kW	Installed capacity - kVA

EXTERNAL CONDITIONS

Transport: Long distance and local area, excellent.

Utilities: Electricity, water and gas, excellent.

Community: -

II. INVENTORIES AND WORKING CAPITAL (in 000 US \$)

(1967/68 Annual average)

	Actual value	2. Liquid assets	Actual value
1. Inventories		TOTAL	172
TOTAL	520		
- Production materials	240	- Cash (hand/bank)	240
- Other input materials	95	- Market, sec. & bonds	-
- Work-in-process	71	- Short-term investment	215
- Finished products	114	- Prepaid expenses	11
		- Accounts receivable	256
3. Desired working capital			
TOTAL		Number of months	Value
			896.8
- Production materials	3	267	
- Other input materials	3	52	
- Finished products	2	180	
- Wages & salaries	2	83	
- Other special items	-	-	

III. MANNING TABLE

(1967/68 average)

	Total	A = Machine operators B = Other operators		
		1st shift A	2nd shift B	3rd shift A+B
ALL SHOPS & UNITS:	530	207	97	82
1. Primary operative shops	305	88	38	82
- weaving department	200	53	19	67
- Dyeing department	100	35	19	30
2. Auxiliary operative units	25	25	-	-
- Repair and maintenance	-	-	-	-
- Mechanical shop	-	-	-	-
- Utilities control	-	-	-	-
- Product & material storage	-	-	-	-
- Off-site transport	-	-	-	-
- Guards, cleaners, etc.	-	-	-	-
- Others (auxiliary workers)	25	25	-	-
3. Auxiliary non-operative units	56	56	-	-
- Production management	-	-	-	-
- Research & development	29	29	-	-
- Sales unit	-	-	-	-
- General administration	27	27	-	-

WORKING TIME PER OPERATIVE WORKER:

Normal hours/day	8 hours	Normal days/year	312 days
Actual hours/year	2,946 hours		

CAPACITY OF OPERATIVE SHOPS:

See page 2 IV.

IV. ANNUAL PRODUCTION

(1967/68)	Yr. of prod.	Quantity produced		Unit price in factory (US \$)	Total production value (US \$ '000)	
		Unit	Output			
- Polyester and rayon fabrics	1967	yds.	1,312,666	2,187,770	1.62	2,126
TOTAL VALUE OF PRODUCTION						2,126

COMPETITIVE IMPORTS:

Polyester and rayon fabrics are imported at a c.i.f. price of US \$ 2.02 per yard. Protective tariff rate amounts to US \$ 2.92.

EXPORTS:

45% of total production is exported at unit price between US \$ 1.68 and US \$ 1.73.

Great importance of the free trade area of the Central American Common Market.

CAPACITY UTILIZATION:

Only 60% of the nominal capacity output could be reached due to first year of operation.

VI. VALUE ADDED

(1967/68)	Value (US \$ '000)
1. Wages & salaries	
- Employees in direct production (350 persons)	259
- Other employees (.. persons)	84
2. Other payments for employees	30
3. Annual depreciation	156
4. Rentals paid	2
5. Interest & royalties	95
6. Sales tax	-
7. Other ind. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	119
	745

VII. MONTHLY EARNING RATES

(End of 1967/68)	No. of pers. emp.	Average earning (US \$)
1. Local non-operatives		
TOTAL:	11	176
- Managers	-	-
- Engineers	-	-
- Technicians	1	260
- Accountants	2	260
- Sales officers	1	100
- Other professional staff	3	100
- Clerks & typists	4	120
2. Local operatives		
TOTAL:	..	..
- Supervisors	-	-
- Foremen	4	120
- Machine operators	..	60
- Craftsmen	..	100
- Truck drivers	2	70
- Other full-time operatives	..	50
- Unskilled & part-time operatives	..	36
3. Foreign employees		
TOTAL:	8	647
- Managerial staff	1	760
- Engineers, trainers and other technical control staff	3	686
- Other non-operatives	4	590

V. ANNUAL CONSUMPTION

(1967/68)	Quantity consumed			Total consumption value (US \$ '000)
	Unit	Purchase	% imported	
1. Energy and water				73
TOTAL:				73
- Electricity	000 KwH	..	..	31
- Liquid fuels and lubricants	000 l	..	..	2
- Gas	000 m3	..	..	19
- Steam	000 m3	..	..	18
- Water	000 m3	..	..	3
2. Production materials				1,223
TOTAL:				1,223
- Synthetic fibres	lbs	587,744	100	1,064
- Polyester and rayon	"	..	"	97
- Dyes	"	..	"	41
- Chemicals	"	..	"	21
- Resins and gumming	"	..	"	..

	% imp.	Total consumption value (US \$ '000)
3. Other material & supplies		75
TOTAL:		75
- Packaging	10	30
- Repair & maintenance	100	40
- Non-factor service inputs		5
4. Business services purchased		10
TOTAL:		10
- Transport, storage & insurance		10
- Communication, advertisements, etc. (included in the selling expenses)		-
5. Work performed by sub-contractors		-
TOTAL:		-

1,381

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(196)	Industry group: _____ (ISIC: _____)		Av. W. & S. per pers. (US \$)		Av. gross prod. val. per pers. (US \$)		Av. emp. gross prod. rate* (%)	
1. Size group, number of pers. employed up to	Number of units	Number of empl.						
No data available.								
TOTAL	_____	_____	_____	_____	_____	_____	_____	_____
2. Size group by value of annual production (US \$ '000) up to								
TOTAL	_____							

IX. SUPPLEMENTS

Future plan:

Within a period of 2 years approx. US \$ 104,920 will be invested to expand the weaving and finishing departments. 100 persons are to be employed additionally on the 1st shift, 100 on the 2nd shift and 50 on the 3rd shift. 48 new looms will be purchased.

* Capital is defined as physical capital assets.

Major Products: Cotton fabrics and gray goods. Actual output in 1966 approximately 15 million m. 3-shift operation.

Reporting Unit: A centralized multi-factory enterprise, founded in 1919; private corporation, no participation of foreign capital.

I. FIXED CAPITAL ASSETS		Year of installation	Orig. purchase value (1000 US \$)	(*) Replacement value (1000 US \$)
(End of 1966)				
1. Primary process equipment				
TOTAL			..	1,512
- Process equipment			..	892
- Hand tools & apparatuses			..	620
- Cost of installation			-	-
2. Primary industrial building			..	482
TOTAL			..	482
(total floor space: 12,600 m ²)			..	482
3. Auxiliary facilities			..	132
TOTAL			..	132
- Water, steam, electricity, cooling & storing			..	48
- Transportation facilities			..	44
- Administrative facilities			..	40
- Laboratory facilities			-	-
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):			..	2,126
4. Other fixed capital assets		
TOTAL		
- Land (total acreage: 17,063 m ²)		

DETAIL OF PROCESS EQUIPMENT (no.):	Supplier country	Year of installation	Orig. purchase value (1000 US \$)	(*) Replacement value (1000 US \$)
- Pickers	3 USA	1960	5	5
- Carding machines	56 USA, UK, FR.Germ.	1960/64	85	81
- Drawing frame heads	40 FR.Germ.	1960/64	52	45
- Roving frame spindles	684 USA	1960	64	53
- Spinning frame spindles	16,352 FR.Germ., USA	1960	316	316
- Winder's spindles	700 FR.Germ., USA	1960/63/1965	91	75
- Quiller spindles	164 FR.Germ., USA	1960/63	83	61
- Twister spindles	144 USA	1960	1	1
- Direct warpers	6 USA	1960/65	7	7
- Sizing machines	5 USA	1960/65	23	20
- Drapper looms	661 USA	1960/65/1966/67	213	228

(*) "Replacement value" in this case stands for "re-sale value" rather than the purchase value of new functional equivalents.

CAPACITY POWER:	Generating equipment: installed capacity: - kVA
Process equipment:	
- Electric motor: - kW	

EXTERNAL CONDITIONS:
Transport: Long distance, local area, excellent.
Utilities: Electricity, water, gas, excellent.
Community: Residential, health and recreational, educational, excellent.

II. INVENTORIES AND WORKING CAPITAL		(in 1000 US \$)	
(End of 1966)			
1. Inventories	Actual value	2. Liquid assets	Actual value
TOTAL:	1,023	TOTAL:	291
- Production materials	117	- Cash (hand/bank)	29
- Other input materials	-	- Market, sec. & bonds	-
- Work-in-process	497	- Short-term investment	18
- Finished products	409	- Prepaid expenses	-
		- Accounts receivable	244
3. Desired working capital	Number of months	Value	
TOTAL:		1,992	
- Production materials	..	180	
- Other input materials	..	200	
- Finished products	3	720	
- Wages & salaries	0.5	78	
- Other special items	..	814	

III. MANNING TABLE		(number of persons)		
(1966 average)				
	Total	1st shift A	2nd shift B	3rd shift A+B
ALL SHOPS & UNITS:	941	497	222	222
1. Primary operative shops	710	171	95	222
- Spinning	216	59	13	72
- Weaving	393	99	32	131
- Finishing	58	13	7	19
- Packing	33	-	33	-
- Miscellaneous	10	-	10	-
2. Auxiliary operative units	201	201	-	-
- Repair and maintenance	-	-	-	-
- Mechanical shop	57	57	-	-
- Utilities control	-	-	-	-
- Product & material storage	-	-	-	-
- Off-site transport	-	-	-	-
- Guards, cleaners, etc.	59	59	-	-
- Others (auxiliary workers)	85	85	-	-
3. Auxiliary non-operative units	30	30	-	-
- Production management	2	2	-	-
- Research & development	-	-	-	-
- Sales unit	-	-	-	-
- General administration	28	28	-	-

WORKING TIME PER OPERATIVE WORKER:			
- Normal hours/day:	8	hours	- Normal days/year: 277 days
- Actual hours/year:	2,200	hours	

CAPACITY OF OPERATIVE SHOPS:	
Operative shops	Processing capacity
Pickers	652.7 lbs./hour
Carding machines	612.1 " "
Drawing frames	601.2 " "
Roving frames	598.6 " "
Spinning frames	617.0 " "
Winding	902.5 " "
Quilling	282.7 " "
Warping	594.5 " "

IV. ANNUAL PRODUCTION

(1966)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price on factory (US \$)	Year production value (000 US \$)
		Unit	Output			
Products for group of products						
- Cotton fabrics (weighing from 80 to 210g/m ²)	..	e	10,830,000	..	0.22	2,382.5
- Gray goods	..	n	4,252,000	..	..	..
TOTAL VALUE OF PRODUCTION						..

COMPETITIVE IMPORTS:

The c.i.f. price of US \$ 0.38/a is subject to a tariff rate of US \$ 2.50 per kg and of 10% ad valorem.

EXPORTS:

5,740,000 e of cotton fabrics were exported at a price of US \$ 0.22/e.

Specific collateral benefits connected with exports: Free trade among member countries of the Central American Common Market and protection of this market by relatively high duties for products from non-member countries.

VI. VALUE ADDED

(1966)	Value (000 US \$)
1. Wages & salaries	
- Employees in direct production (911 persons)	664
- Other employees (38 persons)	103
2. Other payments for employees	-
3. Annual depreciation	637
4. Rentals paid	-
5. Interest & royalties	107
6. Sales tax	-
7. Other ind. bus. taxes	-
8. (-) Subsidies	209
9. Corporate income before tax	1,720

VII. MONTHLY EARNING RATES

(End of 1966)	No. of pers. empl.	Average earning rates (US \$)
1. Local non-operatives		
TOTAL:	21	178
- Managers	1	480
- Engineers	-	-
- Technicians	2	440
- Accountants	13	136
- Sales officers	-	-
- Other professional staff	2	160
- Clerks & typists	3	100
2. Local operatives		
TOTAL:	201	65
- Supervisors	-	-
- Foremen	-	-
- Machine operators	-	-
- Craftsmen	57	61
- Truck drivers	-	-
- Other full-time operatives	144	67
- Unskilled & part-time operatives	-	-
3. Foreign employees		
TOTAL:	4	825
- Managerial staff	1	900
- Engineers, trainers and other technical control staff	3	900

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed				Total consumption value (000 US \$)
	Unit	Purchase	% imported	Tariff rate	
1. Energy and water					178
TOTAL:					178
- Electricity	000 Kwh	..			134
- Fuels and lubricants	000 l	..			44
2. Production materials					1,059
TOTAL:					1,059
- Cotton	bales	7,771	-	-	954
- Dyes	..	..	100	US \$ 0.05 per kg and 10% ad valorem	48
- Chemicals	..	..	100	"	13
- Finishing operations	..	..	100	"	44

	Total consumption value (000 US \$)
3. Other material & supplies	
TOTAL:	126
- Packagings	16
- Repair & maintenance	110
- Non-factor service inputs	-
4. Business services purchased	
TOTAL:	-
- Transport, storage & insurance	-
- Communication, advertisements, etc.	-
5. Work performed by sub-contractors	
TOTAL:	-

	1,363

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(196)	Industry group:		(NIC:)		
1. Size groups by number of persons employed up to	Number of estab.	Number of empl.	Avg. gr. & S. per pers. (US \$)	Avg. gross prod. val. per pers. (US \$)	Avg. emp. prod. rate* (M)
No data available.					
TOTAL					
2. Size groups by value of annual production (000 US \$) up to					
TOTAL					

IX. SUPPLEMENTS

Future plan:

Within a 5 years' period approx. US \$ 1,200,000 will be invested to expand the spinning and weaving departments.
150 persons are to be employed additionally on the 1st shift, and 100 on the 2nd and 3rd shifts, each.

* Capital & defined as physical capital assets.

Major Products: Woolen yarn, fabrics, blankets, etc.
 Capable of producing approximately 550 t annually, based on 3-shift operation.

Reporting Unit: An old one-establishment enterprise; privately owned; founded in 1888.

I. FIXED CAPITAL ASSETS		Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
(End of 1966)				
1. Primary process equipment				
TOTAL				
- Process equipment				
- Hand tools & apparatuses				
- Cost of installation				
2. Primary industrial building				
TOTAL				
(total floor space: 40,000 m ²)				
3. Auxiliary facilities				
TOTAL				
- Meter, steam, electricity, cooling & storing				
- Transportation facilities				
- Administrative facilities				
- Laboratory facilities				
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):				
4. Other fixed capital assets				
TOTAL				
- Land (total acreage: 200,000 m ²)				

DETAIL OF PROCESS EQUIPMENT (no.):	Supplier country	Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
Spinning frames	FR.Germ.	(*)	541.9	
Cards	FR.Germ.		152.1	
Looms	USA		462.6	
Fleishing equipment	FR.Germ.		354.5	..
Dyeing equipment	Italy, FR.Germ.		150.3	
Warpers	FR.Germ.		58.7	

(*) Years of installation of equipment are varying, but the bulk of the "original purchase values" represents the investments made in the recent past. See below.

HISTORY OF INVESTMENT:

The construction of the factory was first started in 1888. The first trial as well as commercial production, started in 1888. The following investments for renovation purposes have been made recently:

1961	approx. US \$ 363,000 *	Weaving and spinning
1963	" " 478,000	" " "
1966	" " 344,000	Finishing and dyeing

* Not yet included in the figures for the year of reference for this profile.

CAPACITY POWER:	Generating equipment:
Process equipment:	Installed capacity
Electric motor: .. kW	- IVA

EXTERNAL CONDITIONS:

Transport: Long distance, local area, excellent.

Utilities: Electricity, water, fair.

Community: Residential, health and recreational, educational, fair.

II. INVENTORIES AND WORKING CAPITAL		(in 1000 US \$)	
(End of 1966)			
1. Inventories		2. Liquid assets	
TOTAL		TOTAL	
- Production materials		- Cash (hand/bank)	
- Other input materials		- Market. sec. & bonds	
- Work-in-process		- Short-term investment	
- Finished products		- Prepaid expenses	
		- Accounts receivable	
3. Desired working capital		TOTAL	
TOTAL		5,280	
- Production materials		6 960	
- Other input materials		6 240	
- Finished products		6 2,400	
- Wages & salaries		6 640	
- Other special items		6 1,040	

III. MANNING TABLE		(number of persons)		A - Machine operators		B - Other operators	
(1966 average)		Total	1st shift	2nd shift	3rd shift		
			A	B	A+B	A+B	
ALL SHOPS & UNITS:							
		517	400		74	43	
1. Primary operative shops							
- Woolen spinning		29	16	2	10	1	-
- Worsted spinning		95	42	5	25	3	18
- Weaving department		117	48	11	28	7	19
- Finishing department		63	63	-	-	-	-
- Control department		95	95	-	-	-	-
2. Auxiliary operative units							
- Repair and maintenance		3	3				
- Mechanical shop		5	5				
- Utilities control		2	2				
- Product & material storage		2	2				
- Off-site transport		2	2				
- Guards, cleaners, etc.		3	3				
- Others (part-time)		36	36				
3. Auxiliary non-operative units							
- Production management		28	28				
- Research & development		10	10				
- Sales unit		7	7				
- General administration		20	20				

WORKING TIME PER OPERATIVE WORKER:

Normal hours/day: 8 hours - Normal days/year: 285 days

Actual hours/year: 2,280 hours

CAPACITY OF OPERATIVE SHOPS:

The installed capacities of different operative shops are considered to be well balanced.

But part of the finishing and mending work is done by subcontractors. (See V.5.)

IV. ANNUAL PRODUCTION

(1966)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit ** price on factory (US \$)	Total production value (1000 US \$)
		Unit	Output			
Production for group of products						
- Woollen cashmeres	1920	t	165.7	200	10.88/kg	1,803
- Woollens	1888	t	68.9	100	7.12/kg	491
- Blankets	1885	t	117.9	150	5.76/kg	679
- Worsted yarn	1920	t	52.1	100	8.40/kg	438
- Miscellaneous and scraps			..	..	..	225
TOTAL VALUE OF PRODUCTION						3,636

* Nominal capacity output is estimated on a 3-shift basis for the spinning and weaving department.

** Not including sales tax.

REPORTS: None.

CAPACITY UTILIZATION: The overall rate of utilisation is 75%, as against the nominal maximum production capacity. But the reporting enterprise considers this much rate of utilisation as being normal.

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed			Total consumption value (1000 US \$)
	Unit	Purchase	% Imported	
1. Energy and water				
TOTAL: 69				
- Electricity	000 Kwh	3,120		51
- Liquid fuels and lubricants	000 l	1,300		18
2. Production materials				
TOTAL: 1,529				
- Wool	t	504.5	70	1,374
- Chemicals	t	37.3	-	155

VI. VALUE ADDED

(1966)	Value (1000 US \$)
1. Wages & salaries	
- Employees in direct production (482 persons)	726
- Other employees (65 persons)	375
2. Other payments for employees	36
3. Annual depreciation	167
4. Rentals paid	102
5. Interest & royalties	107
6. Sales tax (not incl. in TOTAL)	(12)
7. Other ind. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	110
	1,623

VII. MONTHLY EARNING RATES

(End of 1966)	No. of emp.	Average earning rates (US \$)
1. Local non-operative		
TOTAL: 33 465		
- Managers	4	1,600
- Engineers	-	-
- Technicians	-	-
- Accountants	5	480
- Sales officers	5	480
- Other professional staff	7	320
- Clerks & typists	12	160
2. Local operative		
TOTAL: 476 175		
- Supervisors	3	800
- Foremen	15	520
- Machine operators	437	160
- Craftsmen	13	160
- Truck drivers	2	160
- Other full-time operatives	6	120
- Unskilled & part-time operatives		
3. Foreign employees		
TOTAL: 8 690		
- Managerial staff	1	1,600
- Engineers, trainers and other techn. control staff	7	560

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)
Industry group: Spinning, weaving and finishing textiles (HSIC: 231)

1. Size groups by number of persons employed	Number of establishments	Number of emp.	Av. U.S. & C. per emp. (US \$)	Av. gross prod. val. per emp. (US \$)	Av. emp. gross prod. rate* (US \$)
26 - 75	334	15,397	1,051	7,933	73
76 - 100	79	6,986	1,047	6,499	73
101 - 250	185	28,633	1,122	6,417	90
over 250	118	59,811	1,332	5,472	89
TOTAL	1,518	118,283	1,192	6,122	86

2. Size groups by units of annual production (1000 US \$)	Number of establishments	Number of emp.	Av. U.S. & C. per emp. (US \$)	Av. gross prod. val. per emp. (US \$)	Av. emp. gross prod. rate* (US \$)
40 - 120	231	7,663	608	2,287	130
120 - 240	156	8,933	743	3,006	118
240 - 400	116	8,772	994	4,172	93
400 - 1,600	272	36,613	1,160	6,306	81
over 1,600	120	51,532	1,484	7,886	83
TOTAL	2,010	119,156	1,183	6,090	86

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

Commission work: Inspection and mending are done by sub-contractors. (Family enterprises)

Future plan: Within a period of 5 years, approximately US \$ 1,200,000 will be invested for expansion of the spinning and weaving departments.

Government policies: No particular observations.

Major Products:

Synthetic-fibre fabrics (spinning, weaving and finishing). Annual capacity output is approximately 3,500,000 - 4,000,000 m of finished fabrics based on 3-shift operation.

Reporting Unit:

A one-establishment enterprise, founded in 1948; private corporation with no foreign capital participation.

I. FIXED CAPITAL ASSETS

(End of 1967)	Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
1. Primary process equipment			
TOTAL:		2,404	..
- Process equipment		2,404	..
- Hand tools & apparatuses		-	..
- Cost of installation		-	..
2. Primary industrial building			
TOTAL:		559	..
(total floor space: 15,000 m2)		559	..
3. Auxiliary facilities			
TOTAL:		156	..
- Water, steam, electricity, cooling & storing		-	..
- Transportation facilities		50	..
- Administrative facilities		107	..
- Laboratory facilities		-	..
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		3,119	
4. Other fixed capital assets			
TOTAL:		10	..
- Land (total acreage: 175,000 m2)		10	..

DETAIL OF PROCESS EQUIPMENT (no.):	Supplier country	Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
------------------------------------	------------------	----------------------	-----------------------------------	--------------------------------

Spinning plant: Scutchers (2), Cards (17), Drawers (2) Speed frames (11) Spinning frames (34)

Weaving plant: Cone winders (5), Twistors (20), Firm winders (2) Warper (1), Sizing machine (1), Looms (138)

Dyeing and finishing plant: Washers (4), Boil off (1), Winches (15), Jiggers (2) Beater (1), Pre-drier (1), Clip frame (1), Singeing machines (2), Curing oven (1), Press (1), Decatizer (1) Shearing machine (1), Needle frame (1) others (1)

Primary process equipment supplied by U.S.A. in 1948

HISTORY OF INVESTMENT:

The factory was constructed in 1945; the first trial production started in 1947 and the first commercial production started in 1948. The factory made its first profits in 1950. The following investments for expansion purposes were made:

Year	approx	U.S.	\$	Department
1950	"	"	59,500	Spinning department
1950	"	"	19,600	Weaving department
1952	"	"	2,080	Power plant
1964	"	"	115,840	Weaving department
1965	"	"	174,100	"
1966	"	"	261,000	Dyeing and finishing department

CAPACITY POWER:

Process equipment:	
Electric motors	1,118 kW
- Other Prime movers	1,600 "

Generating equipment:

Installed capacity - kVA

EXTERNAL CONDITIONS

Transport: Long distance and local area, excellent.
Utilities: Electricity, fair; water, gas, excellent.
Community: Residential, health and recreation, educational, excellent

II. INVENTORIES AND WORKING CAPITAL

(in 1000 US \$)

(End of 1967)	Actual value	2. Liquid assets	Actual value
1. Inventories		TOTAL:	1,175
TOTAL:	2,403		
- Production materials	226	- Cash (hand/bank)	224
- Other input materials	156	- Market. sec. & bonds	-
- Work-in-process	797	- Short-term investment	442
- Finished products	1,224	- Prepaid expenses	30
		- Accounts receivable	479
3. Desired working capital			
	Number of months	Value	
TOTAL:		2,541	
- Production materials	1	153	
- Other input materials	1	54	
- Finished products	3	976	
- Wages & salaries	1	146	
- Other special items	..	1,212	

III. MANNING TABLE

(number of persons)

A - Machine operators
B - Other operatives

(1967 average)	Total	1st shift A	2nd shift B	3rd shift A+B
ALL SHOPS & UNITS:	525	346	133	116
1. Primary operative shops	369	164	105	100
Preparation of yarn	39	14	13	12
Spinning	113	49	30	34
Preparation of fabric	60	21	21	18
Weaving	101	49	24	28
Dyeing	21	9	7	5
Finishing	35	22	10	3
2. Auxiliary operative units	83	51	22	10
- Repair and maintenance	7	6	1	-
- Mechanical shop	22	13	6	3
- Utilities control	18	13	3	2
- Product & material storage	18	10	5	3
- Off-site transport	2	2	-	-
- Guards, cleaners, etc.	6	2	2	2
- Others	10	5	5	0
3. Auxiliary non-operative units	143	131	6	6
- Production management	18	6	6	6
- Research & development	-	-	-	-
- Sales unit	-	-	-	-
- General administration	125	125	-	-

WORKING TIME PER OPERATIVE WORKER:

shift	1	2	3	Normal days/year
- Normal hours/day	8.5	8.5	7	290
- Actual hours/year	2465	2465	2030	290 days

CAPACITY OF OPERATIVE SHOPS:

Number of spindles in the spinning department is 22,000; the capacity utilization rate is 95%. No special automation techniques are employed.

IV. ANNUAL PRODUCTION

(1967)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit * price in factory (M\$ @)	Total ** production value (000 US \$)
		Units	Output			
Polyester - wool fabrics	1967	m	92,000	..	2.3	212
Polyester - rayon fabrics	"	m	958,000	..	1.6	1,533
Rayon - acetate fabrics	"	m	1,961,000	..	1.2	2,353
Polyester - cotton fabrics	"	m	166,000	..	2.2	365
Others	"	m	77,000	..	1.1	252
Net annual accumulation of inventories of finished goods						+ 115
TOTAL VALUE OF PRODUCTION:						4,825

* Does not include sales tax

** The value of each item corresponds to the annual sales, not adjusted for inventory change. Total value of production is therefore adjusted for the net annual accumulation of inventories

Exports: None

Capacity utilization:

The overall rate of utilization, on a 3-shift basis, is estimated to be around 85% - which is considered quite normal and acceptable for current business purposes.

VI. VALUE ADDED

(1967)	Value (000 US \$)
1. Wages & salaries	
- Employees in direct production (451 persons)	573
- Other employees (144 persons)	448
2. Other payments for employees	581
3. Annual depreciation	192
4. Royalties paid	-
5. Interest & royalties	86
6. Sales tax (not incl in TOTAL)	(36)
7. Other ind. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	463
	2,343

VII. MONTHLY EARNING RATES

(End of 1967)	No. of pers. emp.	Average monthly rate (M\$ @)
1. Local non-operatives		
TOTAL:	..	..
- Managers	..	confidential
- Engineers	..	"
- Technicians	..	"
- Accountants	3	720
- Sales officers	-	-
- Other professional staff	-	-
- Clerks & typists	125	144
2. Local operatives		
TOTAL:	664	111
- Supervisors	1	720
- Foremen	13	320
- Machine operators	432	104
- Craftsmen	3	376
- Truck drivers	4	184
- Other full-time operatives	11	64
- Unskilled & part-time operatives	-	-
3. Foreign employees		
TOTAL:	2	880
- Managerial staff	1	1,120
- Engineers, trainers, other tech. control staff	1	640

V. ANNUAL CONSUMPTION

(1967)	Quantity consumed			Total consumption value (000 US \$)
	Unit	Purchase	% imported	
1. Energy and water				
TOTAL:				168
- Electricity	000 KwH	7,536	-	122
- Petroleum, cruds	000 l	3,000	-	41
- Gas	000 m3	540	-	5
2. Production materials				
TOTAL:				1,811
- Wool fibre	t	13.5	Mainly imported	41
- Rayon fibre	"	607.9		523
- Acetate fibres	"	192.0		220
- Polyester fibres	"	136.0		372
- Dyeing material	"	120.0		61
- Yarn	"	38.0		227
- Others (aniline, chemicals)	"		389	

3. Other materials & supplies

TOTAL:	Total consumption value (000 US \$)
TOTAL:	323
- Packagings	10
- Repair & maintenance	375
- Non-factor service inputs	7
4. Business services purchased	
TOTAL:	88
- Transport, storage & insurance	28
- Communication, advertisements, etc.	59
5. Work performed by sub-contractors	
TOTAL:	-
	2,482

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)

Industry group: Spinning, weaving and finishing textiles (ISIC: 231)

1. Size groups by number of persons employed	Number of establ.	Number of empl.	Avg. W. & S. per pers. (M\$ @)	Avg. gross prod. val. per pers. (M\$ @)	Avg. emp. gross prod. rate* (%)
up to 25	802	7,456	764	6,226	91
26 - 75	334	15,397	1,051	7,333	73
76 - 100	79	6,986	1,047	6,499	73
101 - 250	185	28,633	1,122	6,417	90
over 250	118	59,811	1,332	5,472	89
TOTAL	1,518	118,283	1,192	6,129	86
2. Size groups by scale of annual production (000 US \$)					
up to 40	1,115	5,643	364	1,308	95
40 - 120	231	7,663	608	2,287	130
120 - 240	156	8,933	743	3,006	118
240 - 400	116	8,772	994	4,172	93
400 - 1,600	272	36,613	1,160	6,306	81
over 1,600	120	51,532	1,484	7,886	83
TOTAL	2,010	119,156	1,183	6,090	86

* Capital is defined as physical capital cost.

IX. SUPPLEMENTS

GOVERNMENT POLICIES:

No particular observations.

FUTURE PLAN:

Within a period of 5 years approximately U.S. \$2,000,000 will be invested. This investment will affect the spinning, weaving and finishing department.

Major Products: Cotton and synthetic-fibre fabrics.
 Capable of producing annually up to 11,250,000 m of fabrics based on 3-shift operation.

Reporting Unit: A one-establishment enterprise, founded in 1946; privately owned; no foreign capital.

I. FIXED CAPITAL ASSETS			Orig. purchase value (1958 US \$)	Replacement value (1958 US \$)
(End of 1966)				
1. Primary process equipment		Year of installation		
TOTAL			4,328	6,808
- Process equipment		1947-1966	3,680	6,000
- Hand tools & apparatuses			8	8
- Cost of installation			640	800
2. Primary industrial building			456	..
TOTAL:			456	..
(total floor space: 20,000 m ²)				
3. Auxiliary facilities			416	..
TOTAL:			416	..
- Water, steam, electricity, cooling & storing		1946	352	..
- Transportation facilities		to		..
- Administrative facilities		1965	64	..
- Laboratory facilities				..
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):			5,200	..
4. Other fixed capital assets			24	..
TOTAL:			24	..
- Land (total acreage: 25,000 m ²)			24	..

DETAIL OF PROCESS EQUIPMENT (no.):	Supplier country	Year of installation	Orig. purchase value (1958 US \$)	Replacement value (1958 US \$)
Battery frames	2	USA	3,680	6,000
Cards	60			
Drawing frames	10			
Combers	14			
Speed frames	66			
Twisters	9			
Warpers	5			
Sizing machines	2			
Looms	444			

HISTORY OF INVESTMENT:

The construction of the factory was first started in 1946. The first commercial production started in 1948. The factory made its first profits in 1949. During the period from 1948 to 1966 approximately US \$ 3,360,000 were invested for expansion of the production facilities.

CAPACITY POWER:	Generating equipment:
Process equipment:	Installed capacity:
- Electric motor: 2,239 kW	- tVA

EXTERNAL CONDITIONS:

Transport: Long distance and local area, excellent.

Utilities: Electricity, excellent; water, fair.

Community: Residential, health and recreational, fair; educational, poor (but has no significant influence on production efficiency as production process is highly mechanised).

II. INVENTORIES AND WORKING CAPITAL		(in 1958 US \$)	
(End of 1966)			
1. Inventories	Actual value	2. Liquid assets	Actual value
TOTAL:	1,810	TOTAL:	2,896
- Production materials	280	- Cash (hand/bank)	96
- Other input materials	330	- Market. sec. & bonds	-
- Work-in-process	200	- Short-term investment	-
- Finished products	1,000	- Prepaid expenses	400
		- Accounts receivable	2,400

3. Desired working capital	Number of months	Value
TOTAL:	-	-
- Production materials		
- Other input materials		
- Finished products		
- Wages & salaries		
- Other special items		

III. MANNING TABLE	(number of persons)		A - Machine operators		B - Other operators	
	Total	1st shift	2nd shift	2nd shift	2nd shift	2nd shift
(1966 average)		A	B	A+B	A+B	A+B
ALL SHOPS & UNITS:	766	349	231	186	231	186
1. Primary operative shops	711	318	-	218	175	
- Department of preparation, spinning and weaving:						
Operatives	580	253	-	183	144	
Substitutes	131	(distributed over three shifts as required, e.g.				
		65	-	35	31)	
2. Auxiliary operative units	54	30	13	11		
- Repair and maintenance	23	15	5	3		
- Mechanical shop	-	-	-	-		
- Utilities control	-	-	-	-		
- Product & material storage	24	13	6	5		
- Off-site transport	-	-	-	-		
- Guards, cleaners, etc.	7	2	2	3		
3. Auxiliary non-operative units	1	1	-	-		
- Production management	1	1	-	-		
- Research & development	-	-	-	-		
- Sales unit	-	-	-	-		
- General administration	-	-	-	-		

WORKING TIME PER OPERATIVE WORKER:		
- Normal hours/day:	7.5 hours	- Normal days/year: 300 days
- Actual hours/year:	2,280 hours	

CAPACITY OF OPERATIVE SHOPS:

There are 22,000 spindles used.

The design of fabrics according to orders.

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (1.1):	Number	Original Purchase Value (000 US \$)	Replacement value (000 US \$)	Av. Age (yrs)	Remarks	
					SH Purchased second-hand OR Obsolete R Renard ST Self constructed	Further details
Stalk removing machines	6	14	17	5	-	
Stoning machines	4	18	22	6	SH	
Steriliser and boiling facilities	1	13	15	3	-	
Peeling machines	2	9	11	4	SH	
Canning machines	2	3	4	2	SH	
Juice separators	2	2	3	3	SH	
Lift trucks	4	7	8	4	SH	
Fork truck	1	6	7	3	SH	
Other machines (e.g. testing machines for cane and jars)	..	17	20	3	BC/Ob	

CAPACITY POWER:

Process equipment:
electric motors kW 132

Generating equipment:
installed capacity kVA -

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanisation:		Automation:		Further details
		A not advanced B considerably high standard	C modern standard D appreciably short of today's standard E almost outdated	I fully automated II semi-automated	III non-automated	
Production department		C		II		
Packing department		C		II		

CAPACITY UTILIZATION:

Full-capacity output: Approximate US \$ 1 million based on seasonal 1-shift operation; could be reached with 3 additional non-operative and 20 - 25 operatives.

Current utilization: based on seasonal 1-shift operation.

Major products (or processes)	Approximate %						
	to 20	40	60	70	80	90	100
Production						X	
Packing							X

Utilisation of plant capacity depending on harvest and supply of seasonal labour.

IX. HISTORY & PLAN

1. Performance in the past:	Total output (000 US \$)	No. of persons employed	Total square (000 US \$)
Year: 1963	370	61	-
1964	590	63	-
1965	730	64	-
1966	550	57	-
1967	680	55	3
1968	610	52	7

2. Investments in the past:	Approximate amount (000 US \$)	Type of investment
From 1960 to 1962 :	50	Buildings, machinery and equipment.
" 1965 " 1967 :	60	Machinery and equipment.
in 1968 :	60	Expansion of machinery.

3. Future Plan:

From 1969 to 1970 :	40	Rationalisation of machinery and equipment, primary and auxiliary production facilities in order to reduce labour costs. Expansion of auxiliary production facilities.
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X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C - confidential; figures of these size groups are included in total.

(1967) Food manufacturing industries, including beverage industries. (ISIC Code: 20; 21)

1. Size groups by number of persons employed						2. Size groups by average size of sales					
No. of estab.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. sales per pers. (US \$)	Av. value added/sales ratio (%)		No. of estab.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. sales per pers. (US \$)	Av. value added/sales ratio (%)	
up to 19	7,882	44,352	1,309	22,771	25	up to 250	7,140	42,437	634	11,980	16
20 - 49	1,761	54,400	1,646	20,243	31	250 - 500	1,459	34,814	1,440	15,054	33
50 - 99	955	64,116	1,757	18,841	35	500 - 1,250	1,572	71,695	2,475	17,386	C
100 - 499	22	C	C	C	C	1,250 - 2,500	721	68,083	C	18,446	C
500 - 999	94	62,891	2,005	18,548	43	2,500 - 6,250	478	93,506	C	19,225	37
over 1,000	49	120,344	1,953	18,803	38	over 6,250	271	215,144	2,024	23,416	34
TOTAL:	11,663	525,697	1,835	19,730	35	TOTAL:	11,641	525,687	1,778	19,730	34

IV. ANNUAL PRODUCTION

(1966) Products for group of products	Vr. of first prod.	Quantity produced		Nominal capacity output	Unit ** price on factory (US \$) (average)	Total production value (1966 US \$)
		Unit	Output			
Various kinds of fabrics (a very wide range of production, i.e. gabardines, poplins, etc.)	..	000 m	8,000 *	11,250	795	6,368
TOTAL VALUE OF PRODUCTION						6,368

* 9,000,000 m were produced but 8,000,000 m after shrinking.

** Price does not include sales tax.

VI. VALUE ADDED

(1966)	Value (1966 US \$)
1. Wages & salaries	
- Employees in direct production (580 persons)	984
- Other employees (125 persons)*	432
2. Other payments for employees	380
3. Annual depreciation	255
4. Rentals paid	-
5. Interest & royalties	4
6. Sales tax (not incl. in TOTAL)	(200)
7. Other ind. bus. taxes	20
8. Various (finishing tolls, etc.)	1,528
9. Corporate income before tax	760
	4,363
* (include substitutes)	*****

CAPACITY UTILIZATION:

The overall capacity utilization is about 80%. The great variety of yarn-mix and designs for fabrics, which is necessary to meet specific orders, is liable for the underutilization of the installed capacity of process equipment. But from the standpoint of the enterprise's viability in the given market conditions, this is considered normal.

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed			Total consumption value (1966 US \$)
	Unit	Purchase	% imported	
1. Energy and water				159
- Electricity	000 kWh	9,280	-	144
- Petroleum	..	..	..	15
- Water	000 m3	..	..	1 *
2. Production materials				1,528
- Cotton	t	1,400	10	920
- Crelen	t	174	-	472
- Acrylan	t	26	100	64
- Various	t	75	100	72

* fixed quota, US \$ 130 per 2 months.

VII. MONTHLY EARNING RATES

(End of 1966)	No. of pers. emp.	Average earning rate (US \$)
1. Local non-operatives		
TOTAL:	29	383
- Managers	2	2,000
- Engineers	6	520
- Technicians	1	800
- Accountants	-	-
- Sales officers	-	-
- Other professional staff	-	-
- Clerks & typists	20	160
2. Local operatives	..	..
TOTAL:	..	..
- Supervisors	1	1,600
- Foremen	..	..
- Machine operators	..	..
- Craftsmen	20	160
- Truck drivers	..	..
- Other full-time operatives	..	..
- Unskilled & part-time operatives	..	..
3. Foreign employees	-	-
TOTAL:	-	-

	% imported	Total consumption value (1966 US \$)
3. Other materials & supplies		297
TOTAL:		297
- Packaging		5
- Repair & maintenance	90	280
- Non-factor service inputs		12
4. Business services purchased		21
TOTAL:		21
- Transport, storage & insurance		21
- Communication, advertisements, etc.		-
5. Work performed by sub-contractors		-
TOTAL:		-
		2,005

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)
Industry group: Spinning, weaving and finishing textiles (ISIC: 231)

1. Size groups by number of persons employed	Number of empl.	Number of empl.	Av. W. & G. per pers.		Av. sp. prod. rate* (t)
			W. & G. (US \$)	Av. gross prod. val. (US \$)	
up to 25	802	7,456	764	6,226	90
26 - 75	334	15,397	1,051	7,933	73
76 - 100	79	6,986	1,047	6,499	73
101 - 250	185	28,633	1,122	6,417	90
over 250	118	59,811	1,332	5,472	90
TOTAL	1,518	118,283	1,192	6,122	86

2. Size groups by rate of annual production (1966 US \$)	Number of empl.	Number of empl.	Av. W. & G. per pers.		Av. sp. prod. rate* (t)
			W. & G. (US \$)	Av. gross prod. val. (US \$)	
up to 40	1,115	5,643	364	1,308	95
40 - 120	231	7,663	608	2,287	130
120 - 240	156	8,933	743	3,006	118
240 - 400	116	8,772	994	4,172	93
400 - 1,600	272	36,613	1,160	6,306	81
over 1,600	120	51,532	1,484	7,886	83
TOTAL	2,010	119,156	1,183	6,090	86

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

Future plan:

No specific plan.

Government policies:

No particular complaint heard.

Major Products:

Sacks and cordages of hard-fibres (palm, kenaf, hemp, etc.). Capable of producing annually about 4.5 million sacks (for coffee, wheat, rice packaging) with 3 shifts.

Reporting Unit:

A one-establishment enterprise, founded in 1954. Privately owned, with no foreign capital participation.

I. FIXED CAPITAL ASSETS

(End of 1966)	Year of installation	Orig. purchase value 1955 US \$	Replacement value 1955 US \$	
1. Primary process equipment				
TOTAL:		1,053	..	
- Process equipment		923	..	
- Hand tools & apparatuses		2	..	
- (o)		128 *	..	
2. Primary industrial building		229	..	
TOTAL:		229	..	
(total floor space: 16,965 m ²)				
3. Auxiliary facilities		216	..	
TOTAL:				
- Water, steam, electricity, cooling & storing		166	..	
- Transportation facilities		13	..	
- Administrative facilities		19	..	
- Laboratory facilities		18	..	
- Others (furniture and utensils)			..	
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		1,498	..	
4. Other fixed capital assets		41	..	
TOTAL:		41	..	
- Land (total acreage: 33,620 m ²)			..	
(*) Machinery and equipment not directly in connection with production process (boilers, decomposed machinery, etc.)			..	
DETAILS OF PROCESS EQUIPMENT (m²):	Supplier country	Year of installation	Orig. purchase value 1955 US \$	Replacement value 1955 US \$
Shaker			4	..
Cards			77	..
Drawers			174	..
Spinning machines			355	..
"Tréfilés"			8	..
Loom shuttles			13	..
Winding machines			9	..
Warping machines	Mostly		31	..
Looms	1952		167	..
Irons	to	
Reversing sacks machines	1953		7	..
Inspecting and marking machines			6	..
Hydraulic presses			6	..
Sewing machines			11	..
Sizing machines			5	..
Wrapping machine			4	..
Others			10	..

HISTORY OF INVESTMENT:

Construction of the factory started in 1952. The first trial as well as commercial production took place in 1954. First profits accrued in 1954.

CAPACITY POWER:

Process equipment: 891 kW
- Electric motors:

Generating equipment:

Installed capacity: - kVA

EXTERNAL CONDITIONS:

Transport: Long distance, excellent.

Utilities: Electricity, fair.

Community: -

II. INVENTORIES AND WORKING CAPITAL

(in 1955 US \$)

(End of 1966)	Actual value	2. Liquid assets	Actual value
1. Inventories	582	TOTAL:	965
TOTAL:			
- Production materials	138	- Cash (hand/bank)	15
- Other input materials	211	- Market, sec. & bonds	-
- Work-in-process	54	- Short-term investment	176
- Finished products	179	- Prepaid expenses	-
		- Accounts receivable	774
3. Desired working capital	Number of months	Value	
TOTAL:	-	-	
- Production materials			
- Other input materials			
- Finished products			
- Wages & salaries			
- Other special items			

III. MANNING TABLE

(number of persons)

A - Machine operators
B - Other operators

(1966 average)	Total	1st shift A + B	2nd shift A + B	3rd shift A + B
ALL SHOPS & UNITS:	663	331	206	126
1. Primary operative shops	539	188	68	225
- Preparation department	78	28	6	28 6 8 2
- Spinning department	66	22	5	22 5 10 2
- Weaving department	191	90	3	90 3 4 1
- Finishing department	204	48	54	48 54 - -
2. Auxiliary operative units	100	51	40	9
- Repair and maintenance	43	20	18	5
- Mechanical shop	44	24	20	-
- Utilities control	1	1	-	-
- Product & material storage	6	4	1	1
- Off-site transport	1	1	-	-
- Guards, cleaners, etc.	5	1	1	3
3. Auxiliary non-operative units	24	24	-	-
- Production management	-	-	-	-
- Research & development	-	-	-	-
- Sales unit	2	2	-	-
- General administration	19	19	-	-
- Others	3	3	-	-

WORKING TIME PER OPERATIVE WORKER:

- Normal hours/day: 1st 8 2nd 7.3 3rd 7 hours - Normal days/year: 292 292 292 days
- Actual hours/year: 2336 2131.6 2044 hours

CAPACITY OF OPERATIVE SHOPS:

The capacity of finishing department is utilized up to 80%.

IV. ANNUAL PRODUCTION

(1966)	Pr. of first prod.	Quantity produced		Nominal capacity output	Unit price on factory AUS \$	Total production value 1000 US \$
		Unit	Output			
- Coffee sacks	..	000 pcs	800	..	0.48/pc	348
- Sugar sacks	..	" "	1,000	..	0.56/pc	560
- Wheat sacks	..	" "	400	..	0.48/pc	192
- Rice sacks	..	" "	600	..	0.37/pc	222
- Cordages for packing	..	" "	450	..	0.56/pc	252
- Various sacks	..	" "	800	..	0.48/pc	384
TOTAL VALUE OF PRODUCTION						1,958

CAPACITY UTILIZATION:

The overall rate of utilization is 80%. (Estimate geared to the performance of the finishing department). Under-utilisation, mainly due to the shortage of demand. Additional 8 man-hours would be needed on 1st shift, 7.5 on 2nd shift and 7 on 3rd shift per working day, for the full utilisation of the present capacity.

EXPORTS: None.

VI. VALUE ADDED

(1966)	Value 1000 US \$
1. Wages & salaries	
- Employees in direct production (650 persons)	466
- Other employees (13 persons)	108
2. Other payments for employees	171
3. Annual depreciation	77
4. Rent/leas paid	-
5. Interest & royalties	18
6. Sales tax	-
7. Other ind. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	28
	868

VII. MONTHLY EARNING RATES

(End of 1966)	No. of empl.	Average earning rate US \$
1. Local non-operative		
TOTAL:	22	258
- Managers	1	1,000
- Engineers	-	-
- Technicians	1	400
- Accountants	1	400
- Sales officers	2	800
- Other professional staff	3	160
- Clerks & typists	14	128
2. Local operative		
TOTAL:	438	92
- Supervisors	1	320
- Foremen	12	80
- Machine operators	398	91
- Craftsmen	18	96
- Truck drivers	1	72
- Other specific category	2	240
- Unskilled & part-time operatives	6	64
3. Foreign employees		
TOTAL:	-	-

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed			Total consumption value 1000 US \$
	Unit	Purchase	% Imported	
1. Energy and water				
TOTAL:				44.3
- Water	000 m3	54		3
- Electricity	000 Kwh	1,768		31
- Liquid fuels and lubricants:				
Diesel oil	000 l	182		5
Others	000 l	132		5
- Steam	000 m3	1,098		0.3
2. Production materials				
TOTAL:				758.3
- Palma Zamandosa fibre	t	4,415.3		715
- Palma Pita "	"	1.6		0.2
- Sanevieria "	"	57.7		25
- Kenaff "	"	6.6		2
- Hemp "	"	87.7		16
- Jute "	"	0.3		0.1

	Total consumption value 1000 US \$
3. Other materials & supplies	
TOTAL:	189
- Packagings (own fabric)	95
- Repair & maintenances	89
- Non-factor service inputs	5
4. Business services purchased	
TOTAL:	94
- Transport, storage & insurance	92
- Communication, advertisements, etc.	2
5. Work performed by sub-contractors	
TOTAL:	51

1,037

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)

Industry group: Spinning, weaving and finishing textiles (HSIC:231)

1. Size groups by number of persons employed:	Number of estab.	Number of empl.	Av. W. & S.		Av. emp. rate* (%)
			per pers. AUS \$	per pers. US \$	
up to 25	802	7,456	764	6,226	90
26 - 75	334	15,397	1,051	7,933	73
76 - 100	79	6,986	1,047	6,499	73
101 - 250	185	28,633	1,122	6,417	90
over 250	118	59,811	1,332	5,472	89
TOTAL	1,518	118,283	1,192	6,129	86

2. Size groups by scale of annual production 1000 US \$:	Number of estab.	Number of empl.	Av. gross prod. val. per pers.		Av. emp. rate* (%)
			AUS \$	US \$	
up to 40	1,115	5,643	364	1,308	95
40 - 120	231	7,663	608	2,287	130
120 - 240	156	8,933	743	3,006	118
240 - 400	116	8,772	994	4,172	93
400 - 1,600	272	36,613	1,160	6,306	81
over 1,600	120	51,532	1,484	7,886	83
TOTAL	2,010	119,156	1,183	6,090	86

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

Government policies:

No comments.

Commission work:

Total commissions paid annually amount to US \$

Percentage of commission paid is 2%, except for rice

sacks (1,5%).

Major Products:

Men's cloth. Capable of producing annually 800,000 m of wool-polyester cloth and of 155,000 m pure wool cloth based on 2-shift operation. Full-capacity output amounts to US \$ 1.1 million.

Reporting Unit:

A one-establishment enterprise; joint stock company; founded in 1928; partly modernized in 1960. 283 employees. 36% exports with favourable outlooks for further improvement. No licensed production. No own research.

I. FIXED CAPITAL ASSETS

(End of 1967)

	Original purchase value 1000 US \$	Replacement value 1000 US \$	Average (Yrs.)
1. Primary process equipment (including installation cost)			
TOTAL	1,062	1,355	
- Process equipment *	1,055	1,355	7
- Hand tools & apparatuses	7	..	
2. Buildings			
TOTAL	601	951	
- Primary industrial buildings (total floor space: 1,924 m ²)	14 ^R	..	53
- Auxiliary buildings	434	..	9
- Warehouses	9	..	50
- Office administration buildings	10	..	1
- Housing	-	-	-
3. Auxiliary facilities (excl. buildings)			
TOTAL	132	194	
- Internal power equipment (steam)	99	..	10
- Laboratory facilities	27	..	5
- Means of transportation	3	..	7
- Office equipment	20	..	2
- Office equipment	23	..	9
TOTAL PHYSICAL FIXED ASSETS (excluding land):	1,795	2,400	
4. Other fixed capital assets			
TOTAL	8	116	
- Land (total acreage: .. m ²)	-	-	-
- Land improvements (total 14,455 m ²)	8	116	..
- Others	-	-	-

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII.)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1967 monthly average)

	up to 100 100 US\$	100 - 140 140 US\$	140 - 160 160 US\$	160 - 240 240 US\$	240 - 560 560 US\$	over 560 US\$
1. Local non-operative						
- Managers	-	-	-	-	3	-
- Engineers	-	-	-	1	1	-
- Technicians	-	1	-	3	3	-
- Accountants	-	-	-	1	1	-
- Sales officers	2	3	1	4	1	2
- Clerks and typists	3	12	3	2	1	-
- Warehouse clerks	-	1	3	1	-	-
2. Local operative						
- Supervisors	-	-	-	-	-	-
- Foremen	-	1	2	12	-	-
- Skilled operatives	-	-	-	-	-	-
- Machine operators	-	128	14	-	-	-
- Craftsmen	-	5	1	4	-	-
- Truck drivers	-	2	1	1	-	-
- Unskilled operatives	3	7	2	-	-	-
- Other full-time operatives	-	1	-	-	-	-
- Part-time operatives	-	-	-	-	-	-
- Pattern weaving	1	-	2	-	-	-
- Power plant	-	2	-	-	-	-
- Shop council	-	1	-	-	-	-
3. Auxiliary non-operative						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	1	-	-	-
- Unskilled operatives	5	36	-	-	-	-

EXTERNAL CONDITIONS:

Transport:	external long distance	fair	
	internal long distance	excellent	
	local and city	"	
Utilities:	electricity	fair	
	water	poor	see page 4/XII
	gas	-	
Community:	residence	insignificant	
	health and recreation	"	
	education	"	
Own Welfare Facilities:	Company subsidized lunch; loyalty bonus for workers distributed according to period of employment.		

III. INVENTORIES

(End of 1967)

	Actual value 1000 US \$	Number of months
Inventories		
TOTAL	1,302	
- Production materials	436	3
- Other input materials	52	2
- Work-in-process	221	1
- Finished products	544	2

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	
(*) Shift hours/day:	8	8	-	hours
- Actual hours/year:	1,428	..	-	hours
- Actual days/year:	21	216	-	days
(*) Normal; actual: 9.1 hrs. day.				

IV. MANNING TABLE

(number of persons)

Shift categories: A. Supervisory staff and foremen (for all shifts)
B. Skilled operatives
C. Semi-skilled operatives (machine operators)
D. Unskilled operatives

(End of 1967)

	Total	to Shift				2nd Shift B-C	3rd Shift D-E
		A	B	C	D		
ALL SHOPS & UNITS:	283	64	-	161	-	58	-
1. Primary operative shops	190	12	-	119	4	55	-
- Preparation (slubbing) department (*)	79	2	-	39	-	38	-
- Weaving department	43	8	-	18	-	17	-
- Dyeing department	6	1	-	3	2	-	-
- Finishing department	24	1	-	23	-	-	-
- Sewing department	38	-	-	36	2	-	-
(*) Including a winding, twisting, warping, feeding-in and weft bobbin shop.							
2. Auxiliary operative units	50	9	-	38	-	3	-
- Repair & maintenance	15	3	-	11	-	1	-
- Mechanical shop	-	-	-	-	-	-	-
- Tooling shop	-	-	-	-	-	-	-
- Utilities control	2	1	-	1	-	-	-
- Product & material storage	12	5	-	7	-	-	-
- Off-site transport	6	-	-	5	-	1	-
- Guards, cleaners, etc.	9	-	-	8	-	1	-
- Pattern weaving and power plant	6	-	-	6	-	-	-
3. Auxiliary non-operative units	43	43	-	-	-	-	-
- Production management	3	3	-	-	-	-	-
- Research & development	2	2	-	-	-	-	-
- Sales unit	16	16	-	-	-	-	-
- Accounting	21	21	-	-	-	-	-
- General administration	1	1	-	-	-	-	-

V. ANNUAL PRODUCTION

(1967)	Yr. of first prod.	Quantity produced		Avg. unit price on factory RUB @	Total output value (000 US\$)
		Unit	Quantity		
Products for group of products					
Polyester/pure wool cloth	1959	m	770,000	3.14	2,419
Pure wool cloth	1928	m	140,000	4.56	638
Revenue from contract and commission work		..	..	..	5
Waste		..	..	..	0.4
TOTAL VALUE OF PRODUCTION:					3,062 *****

VI. VALUE ADDED

(1967)	Total value (000 US \$)
1. Annual wages & salaries	483
- Operative workers (222 persons)	327
- Non-operative workers (63 persons)	156
2. Other payments for employees	117
3. Annual depreciation	102
- Machinery & equipment	65
- Buildings & other facilities	35
- Non-physical capital assets	2
4. Rentals paid	-
5. Interest & royalties	42
6. Sales tax	29
7. Other indirect business taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	4
TOTAL VALUE ADDED:	847 *****

DESCRIPTION OF MAJOR PRODUCTS:

Cloth is either manufactured out of polyester and wool or out of pure wool only. The patterns of the cloth are very fashionable. Orders have to be placed well in advance since weaving-mills producing fashionably designed cloths are particularly depending on customers' acceptance of new designs which are presented twice a year. Each main season lasts for about 4 months with terms of delivery increasing accordingly.

MARKET ASPECTS:

Consumers of products:

Manufacturers of men's wear, to a smaller extent textile whole-salers.

Sales organization:

The enterprise mainly works to order.

Market and competition:

Extent of the market: 300 - 400 customers; keen international competition.

Share in the domestic market: the company produces about 15% of the cloth needed by the national men's clothing industry.

Competition in the market: prices for men's cloth are under constant pressure due to excess-production of the whole textile industry.

Imports seem to be a little cheaper than equivalent domestic products which are almost equally priced.

EXPORT:

Total annual export: US \$ 1,030,000.

Major products	To Western countries	To Eastern countries	To Developing countries
Cloth for men's wear	64%	32%	4%

Export price policy:

Export prices are usually lower than domestic prices; this is possible because of tax exemptions and export bounties.

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import price (000 US \$)	Total consumption value (000 US \$)	Average import duties (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity					
1. Energy and water							
TOTAL:					78		
- Electricity	000 kWh	2,757	-	-	58		
- Fuel oil	t	864	-	-	19		
- Water	000 m ³	12	-	-	1		
2. Production materials							
TOTAL:					1,754		
- Yarns: Polyester/pure wool	t	313	12	8	1,414		
- Yarns: Pure wool	t	65	12	2	340		
3. Other materials & supplies							
TOTAL:					148		
- Packaging material (wrapping paper, wooden boxes)					8		
- Parts, supplies & services					1		133
- Other materials & supplies							7
4. Business services purchased							
TOTAL:					56		
- Transportation, storage & insurance							31
- Communication, advertising & other business services							25
5. Work performed by subcontractors							
TOTAL:					179		
TOTAL VALUE OF CONSUMPTION:							2,215 *****

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (1.1):	Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Av. Age (yrs)	Supplier country	Year of installation	Operation	Output capacity	Remarks:	
									III: Purchased second-hand	IV: Obsolete
Preparation machines (slubbers) (*)	40	256	..	7						
Twisting machines	5	121	..	1						
Autocones (fully automated)					Germany	1967	2-shift	3 tons/week		
Quick traverse winder					"	1968	2-shift	3 tons/week		
Twisting machine					Switzerl.	1966	3-shift	3 tons/week on 1 machine		
Warping machine					"	1960	2-shift	650,000 (warp) meters		
Weft bobbin machine					"	1961	2-shift	2,3 tons/week		
Mechanical weaving looms	79	245	..	7	(4 woofs)	1967	2-shift	220 m		
Dyeing machine	7	80	..	6						
Finishing machines	23	176	..	6						
Washing machines					Germany	1960	12 hrs/day	120-150 pieces/week		
Boiling and crabbing machine					Germany	"	"	125 pieces/week		
Tentering frames					"	"	"	200 pieces/day		
Warping machines					"	1960	9 hrs/day	30 pieces/day		
Power presses										
Suction-type tenter										
Shrinking machine										
Stamping press										
Finishing machine										
Other machines	7	17	..	7						
Air conditioning plants	2	101	..	7						
Scales, elevators, packaging, lifting fac.	..	54	..	7	Ob					

(*) Consisting of various spooling, twisting and warping machines

CAPACITY POWER:

Process equipment:
- electric motors kW 700

Generating equipment:
- installed capacity kVA -

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization:		Automation:		Output capacity	Capacity utilization
		A: most advanced	B: considerably high standard	C: moderate standard	D: appreciably short of today's standard			E: almost outdated	F: fully automated	G: semi-automated
Winding department (autocones)	Rewinding from bobbins (cones) to cross coils	A	II			15 t of yarn/week	25%
Double winding department	Rewinding from bobbins to cross coils, conventional process	C	III				90%
Yarn dyeing department	Utilization of special yarn dyeing machines	C	-			9 t of yarn/week	95%
Twisting department	Dyed yarn is twisted to increase strength	B	III			9 t of yarn/week	95%
Warping department	Well-known conventional production processes	A	III			1,300,000 m	90%
Weft bobbin department		C	II			1 - 5 t/week	30%
Weaving department		B	II			1,000,000 meters	95%
Finishing department		C	II			500 bales of cloth/week	30%

CAPACITY UTILIZATION:

Full-capacity output: 100 3,300,000
20 additional operatives would be required on the first shift.

Current utilization: Based on 2-shift operation.

Major products (or processes)	Approximate %					
	up to 20	20-40	40-60	60-70	70-80	80-100
Cloth for men's wear						x

IX. HISTORY & PLAN

1. Performance in the past:

Year:	Total output (1000 US \$)	No. of persons employed	Total exports (1000 US \$)
1963	3,430	330	660
1964	2,840	270	200
1965	2,700	281	210
1966	2,960	278	810
1967	3,060	285	1,030
1968	..	..	..

2. Investments in the past:

From 19 68 to 19 65:	Approximate amount (1000 US \$)	Type of investment
From 19 68 to 19 65:	150	Office equipment and machinery (e.g. mechanical looms)
" 1959 " 1960:	380	Buildings and various new machines
" 1960 " 1962:	890	Completion of buildings; installation of a dyeing and a finishing shop

3. Future Plan:

From 19 68 to 19 71:	Approximate amount (1000 US \$)	Type of investment
From 19 68 to 19 71:	390	Purchase of dressing, tentering and twisting machines; general rationalization of machinery and equipment. No additional operatives will be required.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1964)
Industry Spinning, weaving and finishing textiles (ISIC Code: 231)

1. Size groups by number of persons employed:	No. of estab.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)	2. Size groups by annual rate of production (1000 US \$):	No. of estab.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)
up to 19	223	856	1,108	7,001	46	up to 20	147	172	847	4,776	58
20 - 99	73	3,642	1,403	9,811	40	20 - 40	23	127	1,174	4,726	55
100 - 499	66	15,304	1,480	7,444	41	40 - 200	72	1,323	1,114	5,153	49
500 - 999	11	1,243	1,451	5,449	39	200 - 400	29	1,254	1,293	6,600	50
over 1,000	5	9,915	1,596	6,014	44	400 - 2,000	73	10,957	1,328	7,059	42
						over 2,000	31	23,631	1,562	6,212	40
TOTAL:	378	37,000	1,490	6,365	41	TOTAL:	370	37,364	1,490	6,965	41

XII. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service

- | | | |
|---|---------------------------------------|----------------------------------|
| 1. Engineering study | 3. Technical and managerial personnel | 5. Import and export transaction |
| 2. Financial assistance | 4. Industrial training | 6. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of project
8				There are almost no possibilities to import raw materials from developing countries since only well-known synthetic fibres are used.
9				The enterprise is interested to employ foreign labourers in order to reduce the constant lack of unskilled operatives.

XIII. SUPPLEMENTS & NOTES

History of production and investment:

Production was started in 1928. The first basic modernization took place in 1960 with particular emphasis on improving existing buildings and acquiring new ones. Since only a few new machines were installed, the modernization efforts did not change the profitability of the company too much. Therefore, the break-even point could not be surpassed again until 1966 with an output approaching US \$ 2,900,000. Domestic and world market prices for men's cloth had been rather low which also accounted for the losses and the low profits the company had to face. Company received considerable financial backing by a large bank, the company's major shareholder. After the anticipated additional investments (mainly machinery) have been realized the company expects to become more profitable.

Bottlenecks:

The twisting, winding and sewing departments were lacking skilled personnel. The existing capacity of the dyeing and finishing departments proved to be too small. Power supply cannot be increased unless a new transformer is installed. Severe shortage of water during summertime. Company-owned wells are inefficient, additional costs caused by water bought from public utility company. Lack of water affects the dyeing and washing departments.

Contract and commission work:

The company finished cloth for other enterprises on commission basis. In 1967, the total commission work was of minor importance with receipts amounting to US \$ 5,000 only. Some 10 subcontractors, however, performed commission work for the company: spinning of yarns and sewing of woven cloth. Commission paid: US \$ 180,000.

Inventory policy:

On the average, the value of finished products in stock amounts to 10% of total production value. Although the company mainly produces to order, finished products frequently are not called off by the customers right away.

Depreciation policy:

Straight-line method only.



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XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|---|---------------------------------------|-----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export transactions |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labor |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of services	Country or region	No. of projects	Field of industry	Description of projects
------------------	-------------------	-----------------	-------------------	-------------------------

The establishment is interested to employ foreign operatives.

Other possibilities for co-operation with developing countries, however, are not possible since the establishment is far too small.

XII. SUPPLEMENTS & NOTES

Depreciation policy:

The company applies both the straight-line and accelerated methods of depreciation.

Inventory policy:

On the average the value of the stock of finished products amounts to 10% of the total value of production. Company has to purchase fruits and vegetables in large quantities during harvest time. Sales of final products are usually delayed by several months.

Major Products: Canned meat, fruits and vegetables; jams, fruit juices, frozen vegetables, and farinaceous products.

Capable of producing a total revenue output of US \$ 10.5 million based on 1-shift operation.

Reporting Unit: A one-establishment enterprise, privately owned, no participation of foreign capital. Although the company was

founded almost 100 years ago, the machinery and equipment utilized are on the average not older than 6 years.

Moderate product research activity (8 employees; US \$ 20,000.- research expenses annually). 409 employees.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (1000 US \$)	Replacement value (1000 US \$)	Avg. age (Yrs.)
1. Primary process equipment (including installation cost)			
TOTAL	1,912	2,013	7
- Process equipment *	1,912	2,013	7
- Hand tools & apparatuses	-	-	-
2. Buildings			
TOTAL	2,734	2,877	40
- Primary industrial buildings (total floor space: 9,078 m ²)	1,593	1,676	40
- Auxiliary buildings	380	400	40
- Warehouses	446	470	40
- Office administration buildings	175	184	40
- Housing	140	147	-
3. Auxiliary facilities (incl. buildings)			
TOTAL	483	509	6
- Internal power equipment	265	279	5
- Laboratory facilities	14	15	5
- Means of transportation	97	103	3
- Office equipment	107	112	10
TOTAL PHYSICAL FIXED ASSETS (excluding land):	5,129	5,399	-
4. Other fixed capital assets			
TOTAL	439	462	-
- Land (total acreage: 25,106 m ²)	-	-	-
- Land improvements (t.acr. 19,409 ")	439	462	-
- Others	-	-	-

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII.)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1967 monthly average)	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1. Local non-operatives						
- Managers	-	-	-	-	1	4
- Engineers	-	-	-	-	1	-
- Technicians	-	-	-	1	-	-
- Accountants	-	-	4	2	2	-
- Sales officers (+advert.)	-	-	-	18	4	-
- Clerks and typists	-	6	19	5	-	-
- Others (laboratory assistants, foremen, purchasers)	-	-	3	4	7	-
2. Local operatives						
- Supervisors	-	-	-	-	-	-
- Foremen	-	-	-	7	1	-
- Skilled operatives	-	-	-	-	-	-
- Machine operators	-	-	29	60	10	-
- Craftsmen	-	-	-	10	50	-
- Truck drivers	-	-	-	5	10	-
- Unskilled operatives	-	16	45	5	-	-
- Other full-time operatives	-	-	-	10	-	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	35	35	-	-

EXTERNAL CONDITIONS:

Transport:	external long distance	fair
	internal long distance	excellent
	local and city	fair
Utilities:	electricity	excellent
	water	fair
	gas	insignificant
Community:	residence	fair
	health and recreation	fair
	education	excellent
Own Welfare Facilities:		canteen, housing

III. INVENTORIES

(End of 1967)	Actual value (1000 US \$)	Number of months
Inventories		
TOTAL:	1,694	-
- Production materials	240	1
- Other input materials	2	0.6
- Work-in-process	-	-
- Finished products	1,316	3.1
- Packing material (cans, cartons)	136	1.2

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
- Shift hours/day:	9.2(*)	9.2(*)	-	hours
- Actual hours/year:	2,043	2,041	-	hours
- Actual days/year:	222	222	-	days

(*) high figure due to overtime during season.

IV. MANNING TABLE

(number of persons)

Shift categories: A. Supervisory staff and foremen (for all shifts)
 B. Skilled operatives
 C. Semi-skilled operatives (machine operators)
 D. Unskilled operatives

(1967 average)	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	B-D	B-D
ALL SHOPS & UNITS:	409	80	327			2	-
1. Primary operative shops	251	11	238			2	-
- Fruit and vegetable processing	82	4	78			-	-
- Meat processing	74	5	69			-	-
- Farinaceous products processing	32	1	29			2	-
- Sterilisation, packing	63	1	62			-	-
2. Auxiliary operative units	97	8	89			-	-
- Repair & maintenance	40	3	37			-	-
- Mechanical shop	-	-	-			-	-
- Tooling shop	-	-	-			-	-
- Utilities control	-	-	-			-	-
- Product & material storage	1	1	-			-	-
- Off-site transport	34	4	30			-	-
- Guards, cleaners, etc.	19	-	19			-	-
- Others	3	-	3			-	-
3. Auxiliary non-operative units	61	61	-			-	-
- Production management	2	2	-			-	-
- Research & development	3	3	-			-	-
- Sales unit	35	35	-			-	-
- Accounting	12	12	-			-	-
- General administration	9	9	-			-	-

V. ANNUAL PRODUCTION

(1967)	Yr. of prod.	Quantity produced		Av. unit price on factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Canned meat	..	t	5,015	0.79/kg	3,968
Canned vegetables	..	"	4,329	0.33/kg	1,441
Canned fruits	..	"	257	0.35/kg	91
Jams	..	"	941	0.50/kg	469
Juices	..	"	56	0.45/kg	25
Frozen vegetables	1960	"	7	0.43/kg	3
Farinaceous products	1932	"	1,901	0.44/kg	839
TOTAL VALUE OF PRODUCTION:					6,836

VI. VALUE ADDED

(1967)	Total value (000 US \$)
1. Annual wages & salaries	850
- Operative workers (329 persons)	571
- Non-operative workers (70 persons)	279
2. Other payments for employees	200
3. Annual depreciation	244
- Machinery & equipment	136
- Buildings & other facilities	104
- Non-physical capital assets	4
4. Rentals paid (incl. discounts)	210
5. Interest & royalties	4
6. Sales tax	348
7. Other indirect business taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	261
TOTAL VALUE ADDED: 2,117	

DESCRIPTION OF MAJOR PRODUCTS:

Canned meat:	in cans weighing between	100 - 500 g,	1,000 - 3,000 g
Canned vegetables:	" " " "	70 - 10,000 g	
Canned fruits:	" " " "	250 - 5,000 g	
Jams:	" glasses " "	250 - 5,000 g	
Juices:	" bottles " "	500 - 2,500 g	
Farinaceous products:	" packages of 250, 500, and 5,000 g.		

All products: Serial production, non perishable, seasonally independent, ready for use, high quality, prompt delivery.

MARKET ASPECTS:

Consumers of products: Households, restaurants.
Sales organization: Company representatives sell to wholesalers.
Extent of the market: Products are distributed all over the country.
Share in the domestic market: 50 - 60% of canned meat, 20 - 30% of canned fruits and vegetables, 10% of farinaceous products.
Competition: Farinaceous products: too many producers and decreasing consumption.
 Canned fruits and vegetables: very slow increase in consumption results in excess capacities. Insufficient market transparency due to dirigistic measures.

EXPORT: Can be considered as insignificant.
 Total annual export:

Major products	To Western countries	To Eastern countries	To Developing countries

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import prices	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL:					
- Electricity	000 kWh	1,165			95
- Fuel oil	t	1,603			28
- Diesel oil	t	32			37
- Petrol, fuel gas	t	41			3
- Gas	000 m3	38			1
- Water	000 m3	335			20
2. Production materials					
TOTAL:					
- Meat	t	2,392	-		1,428
- Storable meat (*)	"	184	100		129
- Fruits and vegetables	"	2,988	-		361
- Storable fruits and vegetables	"	657	90		133
- Semolina	"	1,951	-		391
- Ingredients (spices, sugar, frozen eggs, etc.)	"	1,199	10-50		439

(*) including US \$ 21,000 for purchase and storage costs.

3. Other materials & supplies		Total consumption value (000 US \$)
TOTAL:		
- Packaging material (cans, glasses, cups, bottles, cartons, labels)		1,261
- Parts, supplies & services		18
- Other materials & supplies		18
4. Business services purchased		Total:
TOTAL:		
- Transportation, storage & insurance			225
- Communications, advertising & other business services		186
5. Work performed by subcontractors		Total:
TOTAL:		
		15
TOTAL VALUE OF CONSUMPTION:		4,719

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (I.1):	Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Av. Age (yrs)	Remarks	Further details:
Canned fruit and vegetable processing equipment	1	555.8	585.0	appr. 7	-	Canning and packing equipment for meat processing supplied by Germany in 1966. 8 hrs daily running time. Output 20 t/day, current utilisation 80%. Sterilisation equipment supplied by the Netherlands in 1964/65. 8 hrs daily running time (24 hrs during season). Output 250 t/day. Utilisation rate depending on preceding production process.
Frozen fruit and vegetable processing equipment	1	75.1	79.1	7	-	
Canned meat processing equipment	1	441.9	465.2	2	-	
Farinaceous products processing equipment	1	252.0	265.3	8	-	
Sterilisation and packing equipment	1	476.7	501.8	5	-	
Repair shop equipment, filling station	..	40.1	42.2	10	-	
Lift truck, forwarding equipment, others	..	70.7	74.4	10	-	

CAPACITY POWER:
Process equipment:
- electric motors 600 kW

Generating equipment:
- installed capacity - kVA

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanisation:		Automation:		Further details:
		Manuf.	Autom.	I. fully automated	II. semi-automated	
Fruit and vegetable canning	preparation, sterilisation, canning	B	III			Output: 200 t/day, operating only 4 weeks/year, seasonal production Utilisation rate: approx. 20%; also used for own demand on work-in-process inputs. Output: 20 t/day; utilisation rate: 80%. Output: 10 t/day; utilisation rate: 50%. Output: 250 t/day; utilisation rate depends on preceding production process.
Deep freezing	" " "	B	III			
Meat canning	" " "	A	III			
Farinaceous products processing	pressing, drying, packing	B	III			
Sterilisation and packaging	-	A	III			

CAPACITY UTILIZATION:

Full capacity output: US \$ 10,450,000. The 1967-output amounted to US \$ 6,840 due to decreasing sales of farinaceous products and insufficient rise of demand for canned fruits and vegetables.

Current utilization: (*)

Major products for processing	Approximate %							
	up to 20	20-40	40-50	50-60	60-70	70-80	80-90	90-100
Fruit and vegetable canning								X
Deep freezing	X							
Meat canning								X
Farinaceous products processing				X				

(*) Based on 1-shift operation, however, during season company runs 2 - 3 shifts.

IX. HISTORY & PLAN

Year	Total output (1000 US \$)	No. of persons employed	Total exports (1000 US \$)
1963	5,180	430	-
1964	5,500	440	-
1965	5,770	440	-
1966	5,880	450	-
1967	6,540	440	-
1968	6,970	420	-

From	To	Approximate amount (1000 US \$)	Type of investment
1955	1958	336	Machinery and miscellaneous equipment
1959	1962	1,716	Buildings and machinery
1963	1967	1,007	Machinery and miscellaneous equipment

In 1967 investments amounted to US \$ 68,000.

3. Future Plan.
From 1970 to 1975 : 774
Expansion of process equipment; rationalization of product-mix; machinery and fabrication process; specialization of product-mix; introduction of new products and new fabrication methods. No additional operatives will be employed.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(196)

No data available for ISIC-code 201.

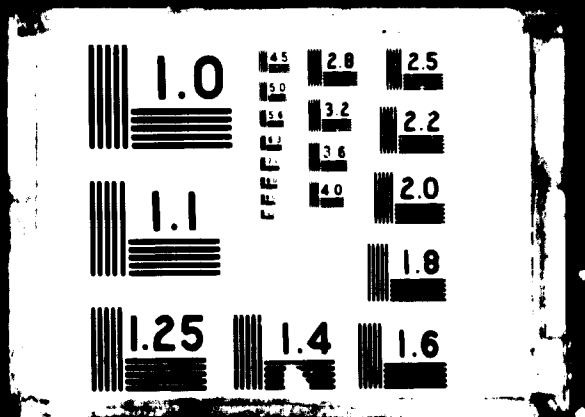
1. Size groups by number of persons employed: up to	No. of estab.	No. of empl.	Av. W. & B. per pers. (US \$)	Av. gross prod. val./per pers. (RUB \$)	Av. value added/gross prod. ratio (%)	2. Size groups by annual sale of production (1000 US \$): up to	No. of estab.	No. of empl.	Av. W. & B. per pers. (US \$)	Av. gross prod. val./per pers. (RUB \$)	Av. value added/gross prod. ratio (%)
TOTAL:											

4

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Major Products:

Rayon lining, rayon and synthetic fabrics, ribbons.
In 1966/67 the company produced some 3 billion m of lining, 2.5 million m of other rayon fabrics and 3.6 billion m of ribbons based on 2- to 3-shift operation.

Reporting Unit:

A two-establishment enterprise, originally founded in 1826, privately owned. One of the largest manufacturers of lining in the country. Equipped with rather modern machinery. Business year: 1 August 1966 - 31 July 1967. 430 employees.

I. FIXED CAPITAL ASSETS

(31/7/1967)	Original purchase value (1000 US \$)	Replacement value (1000 US \$)	Average (Yrs.)
1. Primary process equipment (including installation cost)			
TOTAL	1,392	1,562	-
- Process equipment *	1,346	1,511	12
- Hand tools & apparatuses	46	51	-
2. Buildings			
TOTAL	503	673	-
- Primary industrial buildings (total floor space: 13,200 m ²)	271	379	20*
- Auxiliary buildings	87	93	
- Warehouses	74	75	
- Office administration buildings	35	71	
- Housing	36	55	15
3. Auxiliary facilities (excl. buildings)			
TOTAL	330	369	-
- Internal power equipment	193	217	15
- Laboratory facilities	13	14	10
- Means of transportation	50	56	6
- Office equipment	14	82	10
TOTAL PHYSICAL FIXED ASSETS (excluding land)	2,225	2,604	-
4. Other fixed capital assets			
TOTAL	36	209	-
- Land (total acreage: 80,000 m ²)	5	39	-
- Land improvements (i.e. 20,000 m ²)	17	155	-
- Others (incl. intangible assets)	14	15	10

* Partly built before 1900

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1966/67 monthly average)	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1. Local non-operatives						
- Managers	-	-	-	-	-	-
- Engineers	-	-	-	-	2	2
- Technicians	-	-	-	-	3	-
- Accountants	-	-	-	3	3	-
- Sales officers	-	12	5	8	5	-
- Clerks and typists	-	6	5	14	-	-
- Others (supervisors and foremen)	-	-	3	22	15	-
2. Local operatives						
- Supervisors (*)	-	-	-	-	-	-
- Foremen	-	-	-	-	-	-
- Skilled operatives (**)	-	-	-	-	-	-
- Machine operators	-	37	28	75	-	-
- Craftsmen	-	4	9	30	-	-
- Truck drivers	-	-	2	2	-	-
- Unskilled operatives	-	27	28	-	-	-
- Other full-time operatives	-	57	23	1	-	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

(*) The company considers supervisors and foremen as local non-operatives.

(**) "Skilled operatives" are included in "machine operators" and "other full-time operatives".

EXTERNAL CONDITIONS:

Transport:	external long distance	fair
	internal long distance	"
	local and city	"
Utilities:	electricity	fair
	water	"
	gas	partly excellent, partly poor
Community:	residence	fair
	health and recreation	"
	education	"
Own Welfare Facilities:	cafeteria	

III. INVENTORIES

(31/7/1967)	Actual value (1000 US \$)	Number of months
Inventories		
TOTAL:	827	-
- Production materials	131	3
- Other input materials	4	3
- Work-in-process	310	3
- Finished products	380	4

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift hours/day: (*)	8	8	8	hours
Actual hours/year	1,865	1,890	1,870	hours
Actual days/year	222	222	222	days

(*) Normal; actual: 8.4 (1st shift), 8.5 (2nd shift); 8.4 (3rd shift).

IV. MANNING TABLE

(number of persons)

Sub-categories: A: Supervisory staff and foremen (for all shifts)
B: Skilled operatives
C: Semi-skilled operatives (machine operators)
D: Unskilled operatives

(1966/67 average)	Total	1st Shift				2nd Shift	
		A	B	C	D	B-D	B-D
ALL SHOPS & UNITS:	431	108	201			87	32
1. Primary operative shops	268	37	6	102	3	86	34
- Plant A: Weaving	24	4	-	11	-	9	-
- Plant B:							
Fabric weaving department	161	25	6	46	3	47	34
Ribbon weaving department	39	5	-	17	-	17	-
Dyeing department	44	3	-	28	-	13	-
2. Auxiliary operative units	97	11	84			1	1
- Repair & maintenance	36	3	33			-	-
- Mechanical shop	-	-	-			-	-
- Tooling shop	-	-	-			-	-
- Utilities control	4	3	1			-	-
- Product & material storage	10	4	6			-	-
- Off-site transport	9	1	8			-	-
- Guards, cleaners, etc.	13	-	11			1	-
- Others	25	-	25			-	-
3. Auxiliary non-operative units	66	60	6			-	-
- Production management	4	4	-			-	-
- Research & development	-	-	-			-	-
- Sales unit	33	29	4			-	-
- Accounting	20	20	-			-	-
- General administration	9	7	2			-	-

V. ANNUAL PRODUCTION

(1967)	Yr. of flax prod.	Quantity produced		Avg. unit price on factory (US \$)	Total output value (1000 US\$)
		Unit	Quantity		
Products (or group of products)					
Linen yarns	1967	t	788		1,406
Linen threads	1967	t	225		606
Raw material and yarn scraps	1967	t	175		27
Revenue from commission work					10
TOTAL VALUE OF PRODUCTION:					2,049 *****

VI. VALUE ADDED

(1967)	Total value (1000 US \$)
1. Annual wages & salaries	526
- Operative workers	385
(311 persons)	
- Non-operative workers	141
(48 persons)	
2. Other payments for employees	125
3. Annual depreciation	115
- Machinery & equipment	98
- Buildings & other facilities	14
- Non-physical capital assets	3
4. Rentals paid	1
5. Interests & royalties	30
6. Sales tax	46
7. Other indirect business taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	56
TOTAL VALUE ADDED:	899 *****

DESCRIPTION OF MAJOR PRODUCTS:

Linen yarns and linen threads - continuous production process. Standardization of products envisaged.
High quality of yarns and threads due to tensile strength and parding.

MARKET ASPECTS:

Consumers of products:

Textile weaving mills, shoe manufacturing industry, carpet-weaving mills.

Sales organization:

Own sales organization in domestic market. Sales agents in foreign markets.

Market and competition:

The establishment supplies some 15 foreign countries with its products. Share in the domestic market for linen yarns and linen threads amounts to 60%. Presently the flax weaving industry is changing from flax to synthetic yarns and threads. Reduction of number of competing establishments.

Export price policy:

Prices are adapted to prevailing market conditions. Favourable conditions for exports to the U.S. and Sweden.

EXPORT: US \$ 1.1 million

Total annual export:

Major products	To Western countries	To Eastern countries	To Developing countries
Linen yarns	56%	40%	4%
Linen threads	92%	-	8%

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import duties		Total consumption value (1000 US\$)
	Unit	Quantity		% of value		
1. Energy and water						42
TOTAL:						42
- Electricity	000 kWh	394				15
- " " "	" "	4,052 (*)				-
- Fuel oil (heavy)	t	1,101				25
- Gasoline	" 1	12				2
(*) Internally supplied.						
2. Production materials						504
TOTAL:						504
- Flax and hards	t	1,330	100	-		623
- Yarns	"	2.4	100	16		7
- Synthetic fibres	"	2	60	-		4
- Cotton wool	"	17	100	5.2		23
- Ramie fibres	"	7	100	16		22
- Yarns for refinement	"	24	100	16		70
- Chemicals	"	227.3	-	-		55

	Total consumption value (1000 US \$)
3. Other materials & supplies	172
TOTAL:	38
- Packaging material (bobbins, cases, paper bags, cartons)	
- Parts, supplies & services	130
- Other materials & supplies	4
4. Business services purchased	131
TOTAL:	66
- Transportation, storage & insurance	
- Communication, advertising & other business services	65
5. Work performed by subcontractors	1
TOTAL:	
TOTAL VALUE OF CONSUMPTION:	1,150 *****

VII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (U.I.):

	Number	Original Purchase Value (1959 US \$)	Replacement value (1959 US \$)	Avg. Age (yrs)	Remarks	Further details
Hackling machines	6	-	179	15		Frequent adaptation of process equipment to meet requirements of production process. Output depending on quality of input materials. Modern carding systems (linesystem) produce about 120 to 140 kg/hr; hot water frames with 200 spindles produce about 6 to 7 kg/hr and hard-yarn systems consisting of two interesting and one carding machine manufacture about 100 to 120 kg/hr.
Carding frames	9	-	236	15		
Combing machines	26	-	163	10		
Carding machines and systems	10	-	624	15		
Hot water frames	25	-	363	10		
Gill spinning machines	8	-	302	15		
Winding frames	14	-	136	15		
Twisting frames	8	-	147	10		
Polishing machines	4	-	17	20		
Dyeing and bleaching equipment	5	-	22	8		
Driers	11	-	72	5		
Centrifuges	2	-	12	5		

Remarks:
 SH: Purchased second-hand
 OS: Obsolete
 R: Rented
 SC: Self-constructed

CAPACITY POWER:

Process equipment:
 - electric motors kW 1,700

 Generating equipment:
 - installed capacity kVA 800

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization:		Automation:		Further details: Output capacity:
		A. most advanced	B. considerably high standard	C. moderate standard	D. appreciably short of today's standard		I. fully automated	II. semi-automated	III. non-automated
Hackling				C	III	1.5-1.7 t/day - flax fibres
Harde preparation				A	III	4 t/day - cards
Carding				A	III	5 t/day - fibres
Fine spinning				C	III	moistened : 3 t/day - yarns dry: 1.5 t/day
Winding				C	III	4.5 t/day - yarns
Twisting				A	III	1 t/day - threads
Dyeing and bleaching				C	II	2-2.5 t/day - yarns

CAPACITY UTILIZATION:

Full-capacity output: US \$ 2.9 million. Could only be achieved with 25 additional operatives on the 1st and 2nd shift each

Current utilization: Based on 2-shift operation.

Major products (or processes)	Approximate %								
	up to 30	40	50	60	70	80	90	100	
Hackling				X					
Harde preparation								X	
Carding								X	
Fine spinning					X				
Winding						X			
Twisting							X		
Dyeing and bleaching									X

Due to changes in market conditions and consumer taste reduction of consumption of linen products. Substitution of linen by synthetic fibres. Existing capacity cannot be fully utilized.

IX. HISTORY & PLAN

1. Performance in the past:

Year:	Total output (1959 US \$)	No. of persons employed	Total square (1959 US \$)
1963	2,250	621	1,090
1964	2,240	554	1,200
1965	1,830	414	840
1966	2,180	390	1,040
1967	2,040	368	1,090
1968	2,160	359	1,250

2. Investments in the past:

From 1956 to 1964 :	Approximate amount (1959 US \$)	Type of investment
	132	Expansion of process equipment
1967 :	86	

3. Future Plan:

From 1969 to 1972 :	Approximate amount (1959 US \$)	Type of investment
	774	Introduction of new products, machinery and production processes.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1964)

Industry Spinning, weaving and finishing textiles (ISIC Code: 231)

1. Size groups by number of persons employed:	No. of estab.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. gross prod. val./ per pers. (US \$)	Av. value added/gross prod. ratio (%)	2. Size groups by annual value of production (1959 US \$):		Av. W. & S. per pers. (US \$)	Av. gross prod. val./ per pers. (US \$)	Av. value added/gross prod. ratio (%)	
						No. of estab.	No. of empl.				
up to 19	221	855	1,108	7,001	47	up to 20	147	172	847	4,776	58
20 - 99	-	3,542	1,403	9,811	41	20 - 40	23	127	1,174	5,796	55
100 - 499	66	15,304	1,481	7,444	41	40 - 200	72	1,323	1,114	5,154	49
500 - 999	11	7,748	1,451	5,449	40	200 - 400	29	1,254	1,293	6,600	51
over 1,000	5	9,915	1,596	6,014	45	400 - 2,000	73	10,857	1,398	7,059	42
						over 2,000	34	23,631	1,569	6,912	41
TOTAL:	378	37,364	1,489	6,865	42	TOTAL:	378	37,364	1,489	6,865	42

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services:

- | | | |
|--|---------------------------------------|-----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Imports and export transaction |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, maintenance & replacement | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of services	Country or region	No. of projects	Field of industry	Description of projects
				<p>The company could render various services in the field of flax spinning:</p> <ol style="list-style-type: none"> 1. Feasibility and pre-feasibility studies could be prepared. 2. "Know-how" agreements could be signed. 3. Any arrangement could be made for the supply of new and second-hand machinery. Complete plants could be procured. 4. Delegation of experts possible on short-term basis. 5. The company reports interest to train operatives. 6. The company seems to be willing even to barter its products for imported high quality raw material. 7. Foreign labourers could be admitted.

XII. SUPPLEMENTS & NOTES

Bottlenecks and current problems:

Main bottlenecks are the lack of semi-skilled operatives (machine operators).

Inventory policies:

Because 9% of the raw materials is imported, stocks have to cover at least the 3-4 months supply period.

On the average 1% of total production is kept on stocks which almost equals a 2 months' output.

Contract and commission work:

The company bleached yarns on commission basis. Total commission received amounted to US \$ 10,000.

Major Products: Yarns and threads, record.
Capable of producing annually 2,600 t of yarn and threads and 2,300 t of cord fabric for tyres based on 3-shift operation. Full-capacity output amounts to US \$ 8 million.

Reporting Unit: A one-establishment enterprise; founded in 1960; privately owned; 415 employees; no exports.

I. FIXED CAPITAL ASSETS

(End of 1968)

	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average (Yrs.)
1. Primary process equipment (including installation cost)	1,055	1,124	
TOTAL	1,055	1,124	11
- Process equipment *	6,133	6,713	11
- Hand tools & apparatuses	22	36	13
2. Buildings		2,107	
TOTAL			
- Primary industrial buildings (total floor space: 57,000 m ²)		1,400	11
- Auxiliary buildings		100	11
- Warehouses		100	11
- Office administration buildings		100	11
- Housing		100	11
3. Auxiliary facilities (excl. buildings)		360	
TOTAL			
- Internal power equipment		360	12
- Laboratory facilities		13	11
- Means of transportation		3	11
- Office equipment		14	11
TOTAL PHYSICAL FIXED ASSETS (excluding land):		10,141	
4. Other fixed capital assets		112	
TOTAL			
- Land (total acreage: 219,000 m ²)	33	312	-
- Land improvements (t. acc. 1.4, 1968)	17	500	-
- Others			-

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII).

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1968 monthly average)

	up to 175 US\$	175-250 US\$	250-375 US\$	375-500 US\$	500-1,000 US\$	over 1,000 US\$
1. Local non operatives						
- Managerial staff	-	-	-	-	5	2
- Technical staff	-	3	19	3	2	-
- Commercial staff	2	5	17	5	-	-
2. Local operatives						
- Foremen	-	5	2	-	-	-
- Skilled operative	8	104	14	-	-	-
- Semi-skilled operative	49	157	11	-	-	-
- Unskilled operative	27	22	-	-	-	-
- Part-time operatives	7	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operative	1	7	1	-	-	-
- Unskilled operative	5	7	-	-	-	-
- Semi-skilled operative	3	16	1	-	-	-

EXTERNAL CONDITIONS:

Transport	external long distance	fair
	internal long distance	fair
	local and city	fair
Utilities:	electricity	excellent
	water	excellent
	gas	-
Community	residence	fair
	health and recreation	-
	education	fair
(b) Welfare Facilities:		Aid and pension fund.

III. INVENTORIES

(End of 1968)

	Actual value (000 US \$)	Number of months
Inventories	1,071	
TOTAL	1,071	
- Production materials	45	1
- Other input materials	47	1
- Work-in-process	29	1
- Finished products	333	1

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift hours/day (*)	8	8	8	hours
Actual hours/year	1,400	1,400	1,400	hours
Actual days/year	237	237	237	days

(*) Actual, normal shift hours.

IV. MANNING TABLE

(Number of persons)

(As per 30/9/1968)

Shift categories: A. Supervisory staff and foremen (for all shifts)
B. Skilled operatives
C. Semi-skilled operatives (machine operators)
D. Unskilled operatives

	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	B-D	B-D
ALL SHOPS & UNITS:	515	68	273		143	31	
1. Primary operative shops	380	25	35	141	28	124	27
- Spinning department	196	12	22	99	12	50	3
- Dyeing department	87	6	7	26	6	35	7
- Cord-twisting and weaving department	83	5	6	23	8	26	15
- Bleaching department	14	2	-	4	2	4	2
2. Auxiliary operative units	97	5	69		19	4	
- Repair & maintenance	32	1	26		5	-	
- Mechanical shop	-	-	-		-	-	
- Tooling shop	-	-	-		-	-	
- Utilities control	8	1	3		2	2	
- Product & material storage	17	2	12		3	-	
- Off-site transport	11	-	13		4	2	
- Guards, cleaners, etc.	11	-	8		3	-	
- Others	11	1	7		2	-	
3. Auxiliary non-operative units	38	38	-		-	-	
- Production management	5	5	-		-	-	
- Research & development	2	2	-		-	-	
- Sales unit	9	9	-		-	-	
- Accounting	13	13	-		-	-	
- General administration	9	9	-		-	-	

V. ANNUAL PRODUCTION

Products (or group of products)	Yr. of first prod.	Quantity produced		Av. unit price as factory (US \$)	Total output value (000 US\$)
		Unit	Quantity		
Yarns and threads	1934	t	2,627	1,544.7	4,053
Cord fabric for tyres	1936	t	2,304	1,471.2	3,391
Others	..				144
Revenue from commission work					17
TOTAL VALUE OF PRODUCTION:					7,613

VI. VALUE ADDED

(1968)	Total value (000 US \$)
1. Annual wages & salaries	
- Operative workers	
1. 447 persons	310
- Non-operative workers	
1. 68 persons	313
2. Other payments for employees	135
3. Annual depreciation	37
- Machinery & equipment	316
- Buildings & other facilities	46
- Non-physical capital assets	3
4. Rentals paid	10
5. Interests & royalties	73
6. Sales tax	153
7. Other indirect business taxes (*)	31
8. (-) Subsidies	-
9. Corporate income before tax	148
(*) car tax.	
TOTAL VALUE ADDED:	2,213

DESCRIPTION OF MAJOR PRODUCTS:

Yarns and threads of various thicknesses made from cotton and staple fibres;
cord for tyres.

MARKET ASPECTS:

Consumers of products:

weaving mills and yarn-dealers; manufacturers of tyres.

Sales organisation:

Independent representatives on commission basis.

Share in the domestic market:

Company is of regional importance only. In the southern part of the country it holds approx. 2 - 3% of the market.

EXPORT:

Total annual export: No exports.

Major products	To Western countries	To Eastern countries	To Developing countries

VII. ANNUAL CONSUMPTION

(1968)	Quantity consumed		% import	Average import duties	Total consumption value (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity				
1. Energy and water						
TOTAL:					252	
- Electricity	000 kWh	10,316	-	-	224	
- Coal	t	..	-	-	1	
- Wood	t	..	-	-	2	
- Heavy fuel oil	t	1,240	-	-	25	
2. Production materials						
TOTAL:					4,775	
- Cotton	t	1,493	-	-	967	
- Staple fibres	t	919	-	-	480	
- Synthetic	t	376	-	-	603	
- Wool	t	12	-	-	29	
- Rayon	t	2,233	-	-	2,500	
- Purchased yarns	t	227	-	-	196	
3. Other materials & supplies						
TOTAL:						240
- Packaging material (cartons, wrapping paper)						17
- Parts, supplies & services						95
- Other materials & supplies						128
4. Business services purchased						
TOTAL:						127
- Transportation, storage & insurance						53
- Communication, advertising & other business services						74
5. Work performed by subcontractors						
TOTAL:						3
TOTAL VALUE OF CONSUMPTION:						5,397

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (U.I.):

Number	Original Purchase Value (1963 US \$)	Replacement value (1963 US \$)	Av. Age (yrs)	Remarks		Supplier country	Daily running time
				SI Purchased second-hand	SC Self-constructed		
Ring spinning frames	97	988	1,400	10			
Cards	125	331	635	6		Germany, F.R.G.	2 shifts
Automatic winding frames	6	176	218	5			
Winding frames	7	96	122	7			
Flyer frames	16	180	229	4		Germany, F.R.G.	1-2 shifts
Stretching machines	18	91	113	6			
Combing machines	6	71	39	4		Germany, F.R.G.	1-2 shifts
Rule breakers with cleaners	17	115	148	4		Germany, F.R.G.	2 shifts
Doubling frames	15	175	223	6		Germany, F.R.G.	2 shifts
Cord-aggregates	16	700	812	3			
Cord-ring doubling frames	3	14	26	1		Germany, F.R.G.	2 shifts
Cord-loom	12	113	135	6			
Double twisting machines	8	100	126	6			
Kettles	7	170	223	6			
Drying equipment	4	170	223	6			
Others	4						
Other universal machines	11	170	120	1			

CAPACITY POWER:
 Process equipment:
 electric motors kW 4,129
 Generating equipment:
 installed capacity kVA 1,400

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechan.		Autom.		Further details
		Mechan.	Autom.	Mechan.	Autom.	
Spinning department		8	11			
Twisting department		7	111			
Cord-twisting and weaving dept.		8	11			
Bleaching department		8	11			

CAPACITY UTILIZATION:

Full capacity output: 100% (1963)

Current utilization: 80% (1963)

Major products (or processes)	Approximate %					
	to 20	40	60	80	90	100
Spinning department						
Twisting department						
Cord-twisting and weaving department						
Bleaching department						

IX. HISTORY & PLAN

	Total output (1963 US \$)	No. of persons employed	Total capacity (1963 US \$)
1. Performance in the past:			
Year: 1963	5,260	526	-
1964	6,250	558	-
1965	6,930	557	-
1966	7,340	554	-
1967	6,820	483	-
1968	7,610	515	-
2. Investments in the past:			
From 1960 to 1961:	1,550		Expansion of industrial buildings.
" 1962 " 1963:	3,650		Machinery and other process equipment
3. Future Plan:			
From 1970 to 1972:	1,500-1,750		Expansion and rationalization of process and auxiliary equipment, specialisation of product-mix and machinery.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(C = confidential; these figures are included in total.)

(1962)
 Industry Spinning, weaving, and finishing textiles (HSIC-Code: 231)

1. Size groups by number of persons employed						2. Size groups by annual sale of sales (1963 US \$)					
No. of estab.	No. of emp.	Av. W. & S. per pers. (US \$)	Av. sales per pers. (US \$)	Av. value added/sales ratio (%)		No. of estab.	No. of emp.	Av. W. & S. per pers. (US \$)	Av. sales per pers. (US \$)	Av. value added/sales ratio (%)	
up to 19	3,000	19,168	1,000	7,200	48	up to 1,250	5,200	155,439	0	6,062	C
20 - 99	1,790	21,632	1,319	7,523	49	1,250 - 2,500	429	99,931	0	7,608	C
100 - 199	503	21,009	1,632	7,140	46	2,500 - 6,250	279	131,380	1,619	8,143	45
200 - 499	463	19,271	1,564	7,026	45	6,250 - 12,500	104	102,694	1,692	8,830	44
500 - 999	150	10,343	1,031	7,338	45	12,500 - 25,000	33	69,005	1,616	7,947	43
over 1,000	88	10,014	1,630	7,013	46	over 25,000	8	36,275	1,638	8,672	45
TOTAL:	6,003	591,707	1,590	7,803	46	TOTAL:	6,053	594,707	1,537	7,803	45

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services:

- | | | |
|--|--------------------------------------|----------------------------------|
| 1 Engineering study | 5 Technical and managerial personnel | 8 Import and export transactions |
| 2 Financial assistance | 6 Industrial training | 9 Admission of foreign labour |
| 3 Industrial services | 7 Technical consultancy | |
| 4 Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
-----------------	-------------------	-----------------	-------------------	-------------------------

The establishment is willing to train workers and managerial staff as well as to employ foreign operatives.

XII. SUPPLEMENTS & NOTES

Contract and commission work:

The company finished tirecord on commission basis.

Total commission received amounted to US \$ 17,000.

On the other hand, rewinding of yarns and threads amounting to US \$ 3,500 was done by sub-contractors.

Major bottlenecks in the past and current problems:

The lacking labour force was compensated by over-time work.

Depreciation policy:

The company applied both the straight line and the declining balance methods.

Inventories policy:

On the average the value of finished products in stock approximates 4.4 of the total value of production.

Major Products: Secondary processing of nylon yarn. Synthetic fibre suitable for weaving into hosiery - 3-shift operation. The capacity revenue output is about US \$ 360,000.

Reporting Unit: A one-establishment, small-sized enterprise; privately owned by foreign entrepreneurs; incorporated in 1961; commercial production initiated 1963. Heavily licensed, patented production process. The business year 1968 stands for the period March 1, 1968 to February 28, 1969.

I. FIXED CAPITAL ASSETS

(End of 1968)	Original purchase value (000 US \$)	Replacement value (**) (000 US \$)	Average age (Yrs)
1 Primary process equipment (including installation cost)	114	..	4
TOTAL	114	..	..
- Process equipment *	112	..	..
- Hand tools & apparatuses	2	..	..
2 Buildings (rented facilities)(***)	..	..	2.1
TOTAL	..	..	..
- Primary industrial buildings (total floor space: 325 m ²)	-	-	-
- Auxiliary buildings	-	-	-
- Warehouse	-	-	-
- Office administration buildings	included above	-	-
- Housing	..	..	..
- Leasehold improvements	..	..	..
3 Auxiliary facilities (excl buildings)	..	..	..
TOTAL	..	..	..
- Internal power equipment	..	..	..
- Laboratory facilities	included above	..	..
- Means of transportation	1	..	..
- Office equipment	2	..	..
TOTAL PHYSICAL FIXED ASSETS (excluding land)	116	..	..
4 Other fixed capital assets (rented)	-	-	-
TOTAL	-	-	-
- Land (total acreage: .. m ²)	-	-	-
- Land improvements	-	-	-
- Others	-	-	-

(**) Replacement value estimated to be approximately equal to original purchase price.
 (***) Annual rental is approximately equal to 10% of purchase price.

*Nk Details of process equipment and capacity of primary production shops are given on Page three, Section VIII.

II. MONTHLY GROSS WAGES AND SALARIES

(1968 monthly average)	35 -105 US\$	130 -140 US\$	about 250 US\$	over 900 US\$
1. Local non-operatives	-	-	-	-
- Managers	-	-	-	-
- Engineers	-	-	-	-
- Technicians	-	-	1	-
- Accountants	-	-	-	-
- Sales officers	-	-	-	-
- Clerks and typists	-	1	1	-
2. Local operatives	-	-	-	-
- Supervisors	-	-	1	-
- Foremen	-	-	-	-
- Skilled operatives	-	-	-	-
- Machine operators	17	-	-	-
- Craftsmen	-	-	-	-
- Truck drivers	-	-	-	-
- Unskilled operatives	-	-	-	-
- Other full-time operatives	3	-	-	-
- Part-time operatives	-	-	-	-
3 Foreign employees	-	-	-	1
- Managerial staff	-	-	-	-
- Technical staff	-	-	-	-
- Other skilled operatives	-	-	-	-
- Unskilled operative	-	-	-	-

EXTERNAL CONDITIONS

Transport	external long distance	poor
	internal long distance	good-fair
	local and city	good
Utilities	electricity	fair-good
	water	fair-good
	gas	-
Community	residence	poor-fair
	health and recreation	poor-fair
	education	fair-good
Own Welfare Facilities		none

III. INVENTORIES

(End of 1968)	Actual value (000 US \$)	Number of months
Inventories	43	1.1.2
TOTAL	43	1.1.2
- Production materials	15	1.1.2
- Other input materials	3	3
- Work-in-process	-	-
- Finished products	25	1

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	
Shift hours/day	7.1.2	7.1.2	7.1.2	hours
Actual hours/year	1,230	1,800	1,800	hours
Actual days/year	150	240	240	days

IV. MANNING TABLE

(1968 average)	Total	1st Shift				2nd Shift		3rd Shift	
		A	B	C	D	B-D	B-D		
ALL SHOPS & UNITS:	26	2	11			7	6		
1 Primary operative shops	18	1	6			6	5		
- Throwing shop	6	-	2			2	2		
- Dyeing shop	3	-	1			1	1		
- Winding shop	3	-	1			1	1		
- Inspecting shop	3	-	1			1	1		
- Packing shop	2	-	1			1	-		
- Supervisor	1	1	-			-	-		
2 Auxiliary operative units	4	-	2			1	1		
- Repair & maintenance	2	-	-			1	1		
- Mechanical shop	-	-	-			-	-		
- Tooling shop	-	-	-			-	-		
- Utilities control	-	-	-			-	-		
- Product & material storage	2	-	2			-	-		
- Off-site transport	-	-	-			-	-		
- Guards, cleaners, etc.	-	-	-			-	-		
3 Auxiliary non-operative units	4	1	3			-	-		
- Production management	1	1	-			-	-		
- Research & development	-	-	-			-	-		
- Sales unit	-	-	-			-	-		
- Accounting	1	-	1			-	-		
- General administration	2	-	2			-	-		

(*) The factory supervisor oversees all aspects of production and maintenance.

V. ANNUAL PRODUCTION

(1968)	Yr. of first prod.	Quantity produced		Av. unit price ex factory (US \$)	Total output value (000 US\$)
		Unit	Quantity		
Products (or group of products)					
Processed synthetic yarn	1963	kg	78,500	4.15	326
Revenue from commission work (1 order)					3
TOTAL VALUE OF PRODUCTION					329

VI. VALUE ADDED

(1968)	Total value (000 US \$)
1. Annual wages & salaries	32.5
- Operative workers (22 persons)	18.7
- Non-operative workers (4 persons)	13.8
2. Other payments for employees	6
3. Annual depreciation	10
- Machinery & equipment	13.6
- Buildings & other facilities	2.5
- Non-physical capital assets	-
4. Rentals paid	32
5. Interests & royalties	-
6. Sales tax	-
7. Other indirect business taxes	0.5
8. (-) Subsidies	-
9. Corporate income before tax	32
TOTAL VALUE ADDED:	119

DESCRIPTION OF MAJOR PRODUCTS:

Processed nylon fibre: synthetic yarns of variable thickness which are processed to acquire certain characteristics, such as absorptiveness, elasticity, body, which are considered desirable for such end products as women's sweaters, and men's and boy's socks.

MARKET ASPECTS:

Consumers of products:

Textile manufacturers located for the most part at a considerable distance from the plant, though none are outside of the country of production. Exports are limited through international licensing agreements.

Sales organisation:

Through a small group of agents who cover the textile producing region of the country. Also through managing director.

Market and competition:

Within country (see above) there is nearly no competition in the production of this licensed product. However, there are a large number of reasonable substitutes.

EXPORT:

Total annual export: None - as result of international licensing agreement.

Major products	To Western countries	To Eastern countries	To Developing countries

VII. ANNUAL CONSUMPTION

(1968)	Quantity consumed		% import	Average import duties	Total consumption value (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity				
1. Energy and water						
TOTAL:					4	
- Electricity (power)	000 kWh	118,500	-	-	3	
- " (lights)	000 kWh	13,391	-	-	1	
2. Production materials						
TOTAL:					165	
- Nylon yarn	kg	74,500	-	-	165	
3. Other materials & supplies						
TOTAL:						12
- Packaging material (cones, bags, boxes, etc.)						9
- Parts, supplies & services						3
- Other materials & supplies						0.3
4. Business services purchased						
TOTAL:						22
- Transportation, storage & insurance						5
- Communication, advertising & other business services						17
5. Work performed by subcontractors						
TOTAL:						7
TOTAL VALUE OF CONSUMPTION:						210

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (U.I.):

Number	Original Purchase Value (1000 US \$)	Replacement value (*) (1000 US \$)	Av. Age (yrs)	Remarks:	Further details:
				SH Purchased second hand UB Obsolete R Rented SC Self-constructed	
2	45	-	8		- Equipment is very well maintained and operated about 120 hours per week on the average.
2	15	-	6		- Whole equipment supplied by USA.
1	10	-	8		

(*) The management estimates that replacement value of this very well maintained equipment is approximately equal to purchase price.

CAPACITY POWER:

Process equipment:
electric motors kW 35

Generating equipment:
installed capacity kVA -

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization:		Further details:
		Mechan.	Autom.	
Throwing	Machines are loaded and unloaded by hand. Other operations are automatic.	A	II	Inspection is carried out on each batch of products to guarantee a minimum strength of the processed yarn.
Laying		A	II	
Winding		A	II	
Inspecting	Labour intensive operations.	C	III	
Packing	rather discontinuous process.	C	III	

CAPACITY UTILIZATION:

Full capacity output: Approx. US \$ 360,000, based on a 3-shift operation.

Current utilization:

Major products (or processes)	Approximate %					
	up to 20	40	60	80	90	100
Processed nylon fibre						x

IX. HISTORY & PLAN

1. Performance in the past:

Year:	Total output (1000 US \$)	No. of persons employed	Total output (1000 US \$)
1963			
1964	not available		
1965			
1966-67	255	15	-
1967-68	230	15	-
1968-69	320	25	-

2. Investments in the past:

From	Approximate amount (1000 US \$)	Type of investment
1962 to 1963	5,406	Capital equipment, renthold improvements.
1966	32	Additional capital equipment and facility improvements.

3. Future Plan:

A study is currently underway to determine development plan. It is anticipated that a new unit will have to be constructed and that a quantum lump in investment, employment and productivity will be necessary.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1967)

Industry: Silk, cotton, and synthetic fibres (ISIC-Code: 231 1)

1. Size groups by number of persons employed:	No. of units	No. of empl.	Av. W. & S. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)	2. Size groups by annual cash of production (1000 US \$):		Av. W. & S. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)
						No. of units	No. of empl.			
up to 99	74	72	1,730	6,350	32					
100 - 499	41	232	1,360	6,150	35					
500 - 999	6	28	1,480	6,150	36					
over 1,000	2	1,000	1,880	5,100	41					
TOTAL:	54	415	1,360	5,700	37					

Not available.

TOTAL:

V. ANNUAL PRODUCTION

(1966/67)	V. of prod.	Quantity produced		Av. unit price in factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Rayon lining	1946	000 m	3,022	523.5	1,582
Other rayon fabrics	1927	" "	2,541	270.7	688
Synthetic fabrics	1952	" "	263	429.6	113
Natural silk fabrics	1880	" "	5	3,800.0	19
Elastic gum fabrics	1930	" "	3	1,000.0	3
Various ribbons	1826	" "	3,610	54.3	196
Revenue from commission work					23
TOTAL VALUE OF PRODUCTION:					2,624

VI. VALUE ADDED

(1966/67)	Total value (000 US \$)
1. Annual wage & salaries	659
- Operative workers (323 persons)	384
- Non-operative workers (108 persons)	275
2. Other payments for employees	94
3. Annual depreciation	104
- Machinery & equipment	59
- Buildings & other facilities	45
- Non-physical capital assets	5
4. Rentals paid	8
5. Interests & royalties	4
6. Sales tax	94
7. Other indirect business taxes	50
8. (-) Subsidies	-
9. Corporate income before tax	67
TOTAL VALUE ADDED:	
	1,080

DESCRIPTION OF MAJOR PRODUCTS:

Rayon lining
Other rayon fabrics
Synthetic fabrics
Silk fabrics
Elastic gum fabrics
Ribbons

Except for "other rayon fabrics", "synthetic fabrics" and "ribbons", which are more or less of a fashionable type, all other items are standard type. Units run from 30 - 50 m each. All products are manufactured in series, can be delivered immediately and are easily transportable for exports.

MARKET ASPECTS:

Re-sales:

Lining, ribbons.

Export price policy:

No special price policy applied.

Consumers of products:

Clothing industry, whole-salers. Approximately 2,000 customers.

Sales organization:

The company employs own representatives at home and abroad. Products partly manufactured to order.

Durability of products:

2 years.

Competition:

Staple goods are facing very keen competition.

Share in the domestic market:

Lining approximately 30%; not determinable for other products.

EXPORT:

Total annual export: US \$ 450,000.

Major products	To Western countries	To Eastern countries	To Developing countries
Lining	90 %	10 %	-
Umbrella fabrics	100 %	-	-
Ribbons	100 %	-	-

VII. ANNUAL CONSUMPTION

(1966/67)	Quantity consumed		% import	Average import ratio (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL:					
- Electricity	000 kWh	2,173 (*)			69
- Fuel oil	t				42
- Petrol	t	839			21
- Gas	000 m3	3			6
- Water	000 m3	..			0.2
2. Production materials					
TOTAL:					
- Rayon silk yarn	t	575.3	20	24.2	929
- Synthetic yarn	"	13.5	100	-	46
- Cellulose yarn	"	1.9	-	-	3
- Cotton yarn	"	3.4	100	0.5	5
- Silk yarn	"	0.6	100	-	10
- Woolen worsted yarn	"	2.2	95	1	7
- Rubber thread	"	0.1	100	0.1	1
- Dyes and chemicals	"	15.9	95	6.5	50

(*) Self-supply of 152,000 kWh not counted in total consumption value.

3. Other materials & supplies		TOTAL:	84
- Packaging material			7
- Parts, supplies & services (**)			60
- Other materials & supplies			17
4. Business services purchased		TOTAL:	290
- Transportation, storage & insurance			21
- Communication, advertising & other business services			269
5. Work performed by subcontractors		TOTAL:	50
TOTAL VALUE OF CONSUMPTION:			1,544

(**) Including US \$ 4,000 import duties.

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service:

- | | | |
|---|---------------------------------------|-----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export transactions |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
			Potential areas for industrial co-operation:	
			The expatriate manager of this firm has indicated a willingness:	
1, 3, 7				to assist in conducting pre-investment or "trouble-shooting" assignments of a short-term nature in the developing countries;
5, 6				to train personnel at his establishment; or
1-4				to follow-up on investment and production possibilities in the textile or fibre-processing field in countries with a "sufficiently large" market.

XII. SUPPLEMENTS & NOTES

Depreciation policies:

The straight line method is applied to the original purchase price. The management makes use of the most accelerated policies available under the law:

- 12.5 for most equipment
- 20. for power equipment.

Inventory policies:

The inventory of production materials corresponds roughly with the term of payment for these materials, i.e. 45 days. The inventory of finished products is subject to wide fluctuation.

Desired working capital:

	Value	Equivalent number of months
Production materials	US \$ 16,000	1.5
Other materials and supplies	" 3,500	5
Finished products	" 32,000	1.5
Wages	" 4,000	2.5
Salaries	" 2,500	3
Administrative and sales costs, etc.	" 16,000	2-3
	US \$ 74,000	2-3

MAJOR PRODUCTS: Knitted socks. Capable of manufacturing 24,000 dozen a year on 1-shift operation.

REPORTING UNIT: A one-establishment enterprise, founded in 1965, privately owned.

I. FIXED CAPITAL ASSETS	(in 000 US \$)	Year of compl.	Orig. purchase value	Replacement value
(End of 1967)				
1. Primary process equipment				
total:			44	47
- Process equipment			36	39
- Hand tools and apparatuses			7	7
- Cost of installation			1	1
2. Primary industrial building		1966	34	34
total:				
(total floor space: 260 m ²)				
3. Auxiliary facilities				
total:			6	6
- Water, steam, electricity, cooling and storing			-	-
- Transportation facilities (total load: ..)			-	-
- Administrative facilities		1966	3	3
- Laboratory facilities		1966	1	3
- Laboratory facilities			-	-
TOTAL PHYSICAL FIXED CAPITAL ASSETS (excl. land):			84	87
4. Other fixed capital assets				
total:			0.3	0.3
- Land (total acreage: .. m ²)			0.3	0.3

DETAIL OF I.1. (supplier):	Year of inst.	Orig. purchase value	Replacement value
Knitting machines (12) (Japan)	1966/67	26	28
Linking machines (8) (Japan)	"	4	5
Steam setting (1) (Japan)	"	3	3
Winder (1) (Japan)	"	3	3

History of investment

Construction of the factory as well as trial production started in 1966, commercial production in 1967. The first profits accrued in September 1967 when the output reached 2,000 socks per month. Investment in 1968 to duplicate 1's output: US\$280,000 (6 knitting and 4 linking machines).

CAPACITY POWER:	Generating equipment:
Primary equipment:	- installed capacity: - kVA
- electric motors: (12) .. kW	

GENERAL CONDITIONS:
Location: Long distance and local transport: both fair.
Utilities: Public utilities: fair.
Services: All facilities: fair.

II. INVENTORIES AND WORKING CAPITAL		(in 000 US \$)	
(End of 1967)		Actual value	Actual value
1. Inventories		30	..
total:			
- Production materials		16	- Cash (hand/bank) 0.1
- Other input materials		1	- Market.ec. & bonds ..
- Work-in-process		2	- Short-term investment ..
- Finished products		11	- Prepaid expenses ..
			- Accounts receivable ..

3. Desired working capital	No. of monthr	Value
total:	3	42
- Production materials	3	42
- Other input materials		
- Work-in-process		
- Finished products		
- Wages and salaries		

* B - Machine operators
 * C - Other operatives

III. MANNING TABLE
 (1967 average)

	Total	1st shift	2nd shift	3rd shift
		B*	C*	B+C*
TOTAL EMPLOYED:	25	25	-	-
1. Primary operative shops	22	22	-	-
Knitting shop	8	8	-	-
Linking shop	12	12	-	-
Steam setting shop	2	2	-	-
2. Auxiliary operative units	1	1	-	-
- Repair and maintenance	-	-	-	-
- Tooling shop	-	-	-	-
- Mechanical shop	-	-	-	-
- Utilities control	-	-	-	-
- Product and material storage	-	-	-	-
- Off-site transport	-	-	-	-
- Guards, cleaners, etc.	1	1	-	-
3. Auxiliary non-operative units	2	2	-	-
- Production management	1	1	-	-
- Research and development	-	-	-	-
- Sales unit	-	-	-	-
- Accounting	-	-	-	-
- General administration	1	1	-	-

CAPACITY OF OPERATIVE SHOPS:	WORKING TIME PER OPERATIVE WORKER:
	- Normal hours/day: 7 hours
	- Normal days/year: 300 days
	- Actual hours/year: 2,100 hours

1. Knitting shop: capacity utilisation rate 56%
2. Linking shop: " " " 10%

Both shops are fully automated.

IV. ANNUAL PRODUCTION (in 000 US \$)

(1967) Products (or groups of products)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price ex factory (US \$)	Total production value
		Unit	Output			
Socks	1967	Dosen	16,124	24,000	4.34	70
Total value of production						70

Competing imports

C.i.f. price (without tariff) of competing import varies from US\$1.2 to 14.00 per dozen. The tariff rate amounts to US\$1.68 per dozen or 40% ad valorem, whichever is higher.

Capacity utilization

Under-utilisation of capacity is due to initial operation.

VI. VALUE ADDED (in 000 US \$)

(1967)	Value
1. Wages & salaries	
- Employees in direct production (24 persons)	17
- Other employees (2 persons)	5
2. Other payments for employees	incl. in 1.
3. Annual depreciation	7
4. Rentals paid	0.1
5. Interests and royalties	2
6. Sales tax	-
7. Other ind. bus. tax (trading licenses) (-) subsidies	0.1
8. Corporate income before tax	6
TOTAL VALUE ADDED:	37

VII. MONTHLY EARNING RATES (in US \$)

(End of 1967)	No. of emp.	Average earnings rates
1. Local non-operatives		
total:	1	140
- Managers	1	140
- Engineers	-	-
- Technicians	-	-
- Accountants	-	-
- Sales officers	-	-
- Clerks and typists	-	-
2. Local operatives		
total:	24	30
- Supervisors	-	-
- Foremen	1	70
- Machine operators	23	28
- Craftsmen	-	-
- Truck drivers	-	-
- Semi-skilled operat.	-	-
- Unskilled operat.	-	-
- Part-time operat.	-	-
3. Foreign employees		
total:	1	280
- Engineers, trainees, and other technical control staff	1	280

V. ANNUAL CONSUMPTION (in 000 US \$)

(1967)	Quantity consumed		%	Tariff rate	Total consumption value
	Unit	Purchase			
1. Energy and water					
total:					1
- Electricity					
- water	..	..	..	-	1
2. Production materials					
total:					26
Nylon yarn	lbs	11,500	100	30%	26
Rubber yarn	kg	250	100	30%	

	Total consumption value
3. Other materials and supplies	
total:	3
- Printing (labels, cellophane bags, boxes, cartons, pins, clips)	3
- Parts etc. for equip. maintenance	0.3
4. Business services purchased	
total:	3
- Com. advert. and other business activities	3
5. Work performed by sub-contractors	
total:	-
TOTAL VALUE OF CONSUMPTION:	33

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY (in US \$)

(1965)	No. of establishments	No. of empl.	Avr. M. & S. per emp.	Avr. gross prod. val./ gross prod.	Avr. emp./ gross prod. ratio*	ISIC-code
10 - 19	3	77	..	..	..
20 - 49	23	888	..	..	..
50 - 99	53	3,951	..	..	..
100 - 499	76	15,321	..	..	..
over 500	3	1,674	..	..	..
total	158	21,911	319	3,412		
2. Size groups by scale of production of establishment:	No data available					
up to 2	2					
2 - 8	8					
8 - 40						
40 - 120						
120 - 240						
240 - 400						
400 - 1,600						
1,600 - 4,000						
over 4,000						
total						

* Capital is defined as physical capital assets.

IX. SUPPLIERS

Governmental Policies

They are very liberal with regard to import of necessary raw materials.

Future plans

Investments totalling US\$26,000/year are envisaged for the period 1969-1974. Yarn production will be affected.

* This income figure was estimated by the interviewer.

IV. ANNUAL PRODUCTION (in 000 US \$)

Products (or group of products)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price ex factory (US \$)	Total production value
		Unit	Output			
Baby suits	..	dos.	460	1,900	9.9	5
Ladies underwear	..	dos.	170	690	9.8	2
Boy's shirts	..	dos.	2,800	11,000	9.8	27
Youth's shirts	..	dos.	4,200	17,000	9.8	41
Men's shirts	..	dos.	9,300	39,000	16.8	156
Trousers	..	dos.	620	25,000	16.7	10
Total value of production						241

(* assuming 3 shifts)

Competitive imports

The protective tariff rate being imposed on imported shirts and underwear is 42 cents per piece or 40 % ad valorem, whichever is higher.

Capacity utilization

Actual production as of 1966 was approx. 40 % of the 3-shift nominal capacity output. However, relative to the normal 1-shift standard, the existing facilities appear to be fully utilized.

VI. VALUE ADDED (in 000 US \$)

(1966)	Value
1. Wages & salaries	
- Employees in direct production (79 persons)	28
- Other employees (9 persons)	10
2. Other payments for employees	1
3. Annual depreciation	7
4. Rentals paid	2
5. Interest and royalties	7
6. Sales tax	-
7. Other ind. bus. tax (-) subsidies	-
8. Corporate income before tax	8
TOTAL VALUE ADDED:	63

VII. MONTHLY EARNING RATES (in US \$) (End of 1966)

	No. of empl.	Average earnings rates
1. Local non-operatives total:	9	
- Managers	1	..
- Engineers	-	-
- Technicians	1	..
- Accountants	1	..
- Sales officers	1	77
- Clerks and typists	5	70
2. Local operatives total:	79	31
- Supervisors	-	-
- Foremen	-	-
- Machine operators	42	35
- Craftsmen	-	-
- Truck drivers	1	28
- Other fulltime operatives	30	28
- Unskilled operat.)	6	21
- Part-time operat.)	-	-
3. Foreign employees total:	-	-

V. ANNUAL CONSUMPTION (in 000 US \$)

1. Energy and water (1966)	Quantity consumed		%	Tariff rate	Total consumption value
	Unit	Purchase			
- Electricity	000 Kwh	25.30			1
- Water	000 gallons	129			0.1
2. Production materials total:					158
- Cotton fabrics	yds.	234,000	100	0.14/yd	96
- Rayon fabrics	yds.	126,000	100	0.19/yd	62

3. Other materials and supplies total:	Total consumption value
- Packaging (paper boxes, cartons, plastic boxes *)	5
- Parts for equipm. maintenance	4
- Parts for equipm. maintenance	1
4. Business services purchased total:	14
- Transport, storage and insurance	-
- Communic., advertising, etc.	14
5. Work performed by sub-contractors total:	-
TOTAL VALUE OF CONSUMPTION:	178

* 100% imported

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY (in US \$)

1. Size groups by establishments	No. of establs.	No. of empl.	Avr. M. & S. per estab.	INEC-code	
				Avr. gross prod. val./ per estab.	Avr. emp./ gross prod. ratio *
10 - 19	2	32	..	..	..
20 - 49	4	190	..	..	..
50 - 99	1	70	..	..	..
100 - 499	2	229	..	..	..
over 500	1	602	..	..	..
total	10	1,082	302	2,922	
2. Size groups by scale of production of establishments:					
up to 2	2	No data available			
2 - 8	8				
8 - 40	40				
40 - 120	120				
120 - 240	240				
240 - 400	400				
400 - 1,600	1,600				
1,600 - 4,000	4,000				
over 4,000	4,000				
total					

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

Governmental policies

Import of production materials: The Government is the exclusive importer of textile raw material (charges 6 % on c.i.f. value as commission).

Product market: A number of (and reportedly too many) competitive firms exist in the same line of industry.

Future plans: In 1969 US\$ 14,000 will be invested for general expansion purposes. Another 20 persons will then be employed.

Major Products: Underwear for men and women, clothing for children. Capable of producing annually about 45,000 dozens of men's underwear, 7,500 dozens of women's underwear and 5,500 dozens of children's clothing based on 1-shift operation.

Reporting Unit: A one-establishment enterprise, founded in 1924, privately owned, no participation of foreign capital.

I. FIXED CAPITAL ASSETS		Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
(End of 1967)				
1. Primary process equipment				
TOTAL				
- Process equipment			1	34
- Hand tools & apparatuses	various		1	1
- Cost of installation			2	2
2. Primary industrial building				
TOTAL				
(total floor space: 2,900 m ²)			84	112
3. Auxiliary facilities				
TOTAL				
- Water, steam, electricity, cooling & storing		1966	8	10
- Transportation facilities		1962-66	6	7
- Administrative facilities			-	-
- Laboratory facilities			-	-
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):				
			168	206
4. Other fixed capital assets				
TOTAL				
- Land (total acreage: 3,000 m ²)			18	40

DETAIL OF PROCESS EQUIPMENT (no.):	Supplier country	Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
- Boiler	USA	1966	3.6	4.0
- Bleachers	"	1963/66	4.0	4.5
- Centrifugal machine	"	1950	3.5	3.7
- Cloth press machine	"	1950	0.7	3.7
- Cutters	"	1966	0.7	0.7
- Compressor	"	1963	2.8	0.7
- Sewing machines	"	1950-66	3.7	3.9
- Finishing machine	"	1966	1.7	1.4
- Circular machines	USA, Japan	1950-56, 1966	40.3	52.8

RECORDS OF INVESTMENT:

Construction of the factory as well as trial and commercial production started in 1924. The following investments for expansion purposes have been made ever since: (in 000 US \$)

1966	15	Weaving and sewing
1967	15	Bleaching
1967	8	Other equipment

CAPACITY POWER:	Generating equipment installed capacity
Process equipment:	- 1VA
Electric motor:	- 1W

EXTERNAL CONDITIONS:

Transport: Long distance and local area, fair.

Utilities: Electricity and water, excellent.

Community: Residential, health and recreational, educational, fair.

II. INVENTORIES AND WORKING CAPITAL		(in 000 US \$)	
(End of 1967)			
1. Inventories	Actual value	2. Liquid assets	Actual value
TOTAL	13.6	TOTAL:	93.1
- Production materials	2.4	- Cash (hand/bank)	1.1
- Other input materials	0.3	- Market. sec. & bonds	-
- Work-in-process	1.4	- Short-term investment	-
- Finished products	9.5	- Prepaid expenses	-
		- Accounts receivable	92.0
3. Desired working capital			
TOTAL	39.3		
- Production materials	3	7.1	
- Other input materials	0.5	1.7	
- Finished products	1	3.3	
- Wages & salaries	1	1.3	
- Other special items	3	25.9	

III. MANNING TABLE

	Total	1st shift		2nd shift	
		A	B	A+B	A+B
(1967 average)					
ALL SHOPS & UNITS:	44	44		-	-
1. Primary operative shops	36	30	6	-	-
- Dyeing	2	2	-	-	-
- Weaving	2	2	-	-	-
- Sewing	28	25	3	-	-
- Packing	2	-	2	-	-
- Cutting	2	1	1	-	-
2. Auxiliary operative units	3	3		-	-
- Repair and maintenance *)	1	1		-	-
- Mechanical shop	-	-		-	-
- Utilities control	-	-		-	-
- Product & material storage	-	-		-	-
- Off-site transport	1	1		-	-
- Guards, cleaners, etc.	1	1		-	-
*) part-time					
3. Auxiliary non-operative units	5	5		-	-
- Production management	-	-		-	-
- Research & development	-	-		-	-
- Sales unit	1	1		-	-
- General administration	3	3		-	-
- Others (cutter - part-time)	1	1		-	-

WORKING TIME PER OPERATIVE WORKER:

Normal hours/day:	8 hours	Normal days/year:	260 days
Actual hours/year:	2,080 hours		

CAPACITY OF OPERATIVE SHOPS:

IV. ANNUAL PRODUCTION

(1967)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price on factory (US \$)	Total production value (1967 US \$)
		Unit	Output			
Produce for group of products						
- Men's underwear	1929	dosen	28,716	44,574	2.73	78.4
- Women's underwear	1964	"	5,100	7,650	1.40	7.1
- Children's clothing	1964	"	3,600	5,400	2.70	9.7
TOTAL VALUE OF PRODUCTION						95.2

EXPORTS:

Men's underwear	at US \$ 2.73 a dosen
Women's underwear	" " " 1.40 " "
Children's clothing	" " " 2.70 " "

COMPETING IMPORTS:

A protective tariff rate of US \$ 6.00 per gross kilo and of 10% ad valorem is imposed on imported men's and women's underwear and children's clothing.

CAPACITY UTILIZATION:

Capacity is underutilized due to lack of demand. In order to achieve full utilization 144 additional man-hour would be required per day.

VI. VALUE ADDED

(1967)	Value (1967 US \$)
1. Wages & salaries	
- Employees in direct production (33 persons)	13.4
- Other employees (3 persons)	6.4
2. Other payments for employees	1.8
3. Annual depreciation	3.6
4. Rentals paid	3.1
5. Interests & royalties	2.9
6. Sales tax	-
7. Other ind. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	12.1
TOTAL	48.8

VII. MONTHLY EARNING RATES

(End of 1967)	No. of emp.	Average earning rate (US \$)
1. Local non-operatives		
TOTAL	1	162
- Managers	1	400
- Engineers	-	-
- Technicians	-	-
- Accountants (part-time)	1	80
- Sales officers	1	240
- Other professional staff	-	-
- Clerks & typists	2	45
2. Local operatives		
TOTAL	40	102
- Supervisors	-	-
- Foremen	1	120
- Machine operators	10	110
- Craftsmen	1	12
- Truck drivers	1	120
- Other full-time operatives	6	83
- Unskilled & part-time operatives	1	40
3. Foreign employees		
TOTAL	-	-

V. ANNUAL CONSUMPTION

(1967)	Quantity consumed				Total consumption value (1967 US \$)	
	Unit	Purchase	% imported	Tariff rate		
1. Energy and water						
TOTAL					4.2	
- Electricity	000 KwH	16			0.9	
- Liquid fuels and lubricants						
Diesel	m)	40			2.6	
- Water	000 m)	2,000			0.7	
2. Production materials						
TOTAL					33.0	
- Threads	kg	10,572	10	0.15	10	8.0
- Dyes	"	14	100	0.05	10	0.2
- Chemical products	"	..	100	free	5	1.1
- Elastics	m	37,125	-	2.50	20	22.8
- Acids	kg	90	100	0.05	10	0.3

3. Other materials & supplies	Total consumption value (1967 US \$)	
TOTAL	5.6	
- Packagings (Polystyrene bags)	100	2.2
- Repair & maintenance	100	2.1
- Non-factor services inputs	-	1.3
4. Business services purchased		
TOTAL	3.6	
- Transport, storage & insurance		2.4
- Communication, advertisements, etc.		1.2
5. Work performed by sub-contractors		
TOTAL	-	
TOTAL	46.4	

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1967)	Industry group:	(HSIC:)
1. Size groups by number of gross employees	Number of establ.	Number of empl.
up to		
	Avg. gr. S. & S. per emp. (US \$)	Avg. gross prod. val. per emp. (US \$)
		Avg. emp. gross prod. rate* (%)
No data available.		
TOTAL		
2. Size groups by value of annual production (1967 US \$)		
up to		
TOTAL		

IX. SUPPLEMENTS

Governmental policies:

The availability of input materials is affected by the Industrial Development Law.

* Capital is defined as physical capital assets.

Major Products:

Shirts. Capable of producing annually 151,000 shirts on 1-shift operation.

Reporting Unit:

A one-establishment enterprise, private corporation, no participation of foreign capital.

I. FIXED CAPITAL ASSETS

(End of 1968)	Year of installation	Orig. purchase value (1968 US \$)	Replacement value (1968 US \$)
1. Primary process equipment		15.7	18.7
TOTAL		15.7	18.7
- Process equipment		15.4	18
- Hand tools & apparatuses		0.1	0.1
- Cost of installation		0.1	0.1
2. Primary industrial building		rented	-
TOTAL		rented	-
(total floor space: .. m ²)			
3. Auxiliary facilities		-	-
TOTAL		-	-
- Water, steam, electricity, cooling & storing			
- Transportation facilities			
- Administrative facilities			
- Laboratory facilities			
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		15.7	18.7
4. Other fixed capital assets		rented	-
TOTAL		rented	-
- Land (total acreage: .. m ²)			

DETAIL OF PROCESS EQUIPMENT (see:)	Supplier country	Year of installation	Orig. purchase value (1968 US \$)	Replacement value (1968 US \$)
Sewing machines (*) (12)	USA	1950/1964	4.4	6.1
Electrical sewing machines (11)	"	1961/1964/1965-1968	6.1	7.1
Special electrical machine (1)	"	1960	0.9	1
Auxiliary equipment	"	1960/1964/1968/1966/1968	4.3	5.7

(*) consisting of different models

HISTORY OF INVESTMENT

The first trial as well as commercial production started in 1940. Following amounts were invested for expansion of production: (in 100 US \$)

Year	approx.	production of shirts
1941	2.8	"
1956	2.4	"
1964	1.2	"
1966	1.6	"

CAPACITY POWER:

Process equipment:	- kW	Generating equipment:	Installed capacity	- kVA
- Electric motors:				

EXTERNAL CONDITIONS:

Transport: -
 Utilities: Electricity and water, excellent.
 Community: Residential, fair.

II. INVENTORIES AND WORKING CAPITAL

(in 100 US \$)

(End of 1968)	Actual value	Actual value
1. Inventories	3.6	0.1
TOTAL	3.6	0.1
- Production materials	1.2	-
- Other input materials	1	-
- Work-in-process	0.8	-
- Finished products	0.6	-
2. Liquid assets		
TOTAL		0.1
- Cash (hand/bank)		0.1
- Market, sec. & bonds		-
- Short-term investment		-
- Prepaid expenses		-
- Accounts receivable		-
3. Desired working capital		
TOTAL	2.4	
- Production materials (**)	-	
- Other input materials (**)	-	
- Finished products	-	
- Wages & salaries	3	2.4
- Other special items	-	

III. MANNING TABLE

(number of persons)

A - Machine operators
B - Other operators

(1968 average)	Total	1st shift A	1st shift B	2nd shift A+B	3rd shift A+B
ALL SHOPS & UNITS:	37	37			
1. Primary operative shops	34	28	6		
" " "	34	28	6		
2. Auxiliary operative units	1	1			
- Repair and maintenance	-	-			
- Mechanical shop (part time)	1	1			
- Utilities control	-	-			
- Product & material storage	-	-			
- Off-site transport	-	-			
- Guards, cleaners, etc.	-	-			
3. Auxiliary non-operative units	2	2			
- Production management	1	1			
- Research & development	-	-			
- Sales unit	-	-			
- General administration (counsellor)	1	1			

WORKING TIME PER OPERATIVE WORKER:

- Normal hours/day:	8 hours	- Normal days/year:	235 days
- Actual hours/year:	1,880 hours		

CAPACITY OF OPERATIVE SHOPS:

(**) The company operates with raw materials supplied by its customers which at the same time are its retailers.

IV. ANNUAL PRODUCTION

(1968)	Yr. of first prod.	Quantity produced		Unit price on factory (US \$)	Total production value (000 US \$)	
		Unit	Output			
Products for group of products						
Shirts	1940	pcs.	124,956	153,192	1.47	184
TOTAL VALUE OF PRODUCTION						184

COMPETING IMPORTS:

Protective tariff rate for imported shirts is US \$ 6.00 per gross kg and 30% ad valorem.

CAPACITY UTILIZATION:

80% of the installed capacity is utilized.

VI. VALUE ADDED

(1968)	Value (000 US \$)
1. Wages & salaries	
- Employees in direct production (16 persons)	19.5
- Other employees (1 person part time)	0.1
2. Other payments for employees	1.1
3. Annual depreciation	1.7
4. Rentals paid	1.4
5. Interest & royalties	0.1
6. Sales tax	-
7. Other ind. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	-
	30

VII. MONTHLY EARNING RATES

(End of 1968)	No. of emp.	Average earning rate (US \$)
1. Local non-operatives		
TOTAL:	115	
- Managers	1	300
- Engineers	-	-
- Technicians	-	-
- Accountants	1	60
- Sales officers	-	-
- Other professional staff	-	-
- Clerks & typists	-	-
2. Local operatives		
TOTAL:	37	50
- Supervisors	1	80
- Persons	-	-
- Machine operators	28	52
- Craftsmen	1	60
- Truck drivers	-	-
- Other full-time operatives	6	38
- Unskilled & part-time operatives	1	10
3. Foreign employees		
TOTAL:	-	-

V. ANNUAL CONSUMPTION

(1968)	Quantity consumed				Total consumption value (000 US \$)	
	Unit	Purchase	% imported	Tariff rate		
1. Energy and water						
TOTAL:					0.1	
- Electricity	000 KwH	12			0.5	
- Liquid fuels and lubricants	m ³	37			0.1	
2. Production materials						
TOTAL:					149.9	
Semihard lining	m	457	100	6.00	30	0.6
Standard lining	m	5,738	"	6.00	30	9.1
Threads	cones	400	"	0.20	20	0.5
Buttons	pcs.	750,000	"	2.50	free	0.1
Poplin and oambray	m	9,601	"	3.50	10	4.4
Dacron	m	151,948	"	3.50	10	116.4
Tricot	m	38,405	"	3.50	10	18.8

	Total consumption value (000 US \$)
3. Other materials & supplies	
TOTAL:	2.5
- Packagings (cardboard, pins, plastic bars)	0.8
- Repair & maintenance (100% imp.)	0.6
- Non-factor service inputs	1.1
4. Business services purchased	
TOTAL:	1
- Transport, storage & insurance	0.5
- Communication, advertisements, etc.	0.5
5. Work performed by sub-contractors	
TOTAL:	-
	154

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(196)

Industry group: _____ (SIC:)

1. Size groups by number of persons employed	Number of estab.	Number of empl.	Avg. gross prod. val. per emp. (US \$)	Avg. gross prod. val. per emp. (US \$)	Avg. emp. gross prod. rate* (%)
up to					
No data available.					
TOTAL					
2. Size groups by value of annual production (000 US \$)					
up to					
TOTAL					

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

GOVERNMENTAL POLICIES:

The company would like to have technical assistance in order to improve the production process. Import duties, Social Security costs as well as minimum wage legislation affect the company's profitability.

Major Products:

Shirts, trunk-hoses, etc. (including weaving and knitting work). Capable of producing annually about 2.7 million pieces of these goods with one shift in the sewing department. (weaving and knitting with three shifts)

Reporting Unit:

A one-establishment enterprise, founded in 1971; private corporation with no foreign capital participation.

I. FIXED CAPITAL ASSETS

(End of 1967)

	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
1 Primary process equipment			
TOTAL		36	37
- Process equipment		36	37
- Hand tools & apparatuses			
- Cost of installation			
2 Primary industrial building			
TOTAL		4	4
(total floor space: 1,000 m ²)			
3 Auxiliary facilities			
TOTAL			
- Water, steam, electricity, cooling & storing			
- Transportation facilities			
- Administrative facilities			
- Laboratory facilities			
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		40	41
4 Other fixed capital assets			
TOTAL		4	4
- Land (total acreage: 1,000 m ²)			

*Includes an administrative office

DETAIL OF PROCESS EQUIPMENT (no.)

	Supplier country	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
- Looms (20)			10	10
- Chin strap (1)				
- Circular machines (2)	USA	1971	1	1
- Elastic looms (1)	USA and Mexico	1971	2	2
- Sewing machines (210)			15	15
- Various equipment			1	1

HISTORY OF INVESTMENT:

The first trial as well as commercial production started in 1971. The factory made its first profits when the investment was utilized.

The investment expenditures have been as follows:

1970	US \$	51,000
1971	"	37,000
1972	"	1,000

Mostly for expansion of the sewing department and for the purchase of machinery.

II. INVENTORIES AND WORKING CAPITAL

(in 000 US \$)

(End of 1967)

	Actual value	2 Liquid assets	Actual value
1 Inventories		TOTAL	103
TOTAL	107		
- Production materials	1	- Cash (hand/bank)	1
- Other input materials	1	- Market, sec. & bonds	
- Work-in-process	1	- Short-term investment	
- Finished products	104	- Prepaid expenses	1
		- Accounts receivable	101
3 Desired working capital			
TOTAL		400	
- Production materials	1		
- Other input materials	1		
- Finished products	1		
- Wages & salaries	1		
- Other special items	1		

III. MANNING TABLE

(number of persons)

A - Female operative
B - Other operative

(1967 average)

ALL SHOPS & UNITS:

1 Primary operative shops

	Total	1st shift	2nd shift	3rd shift
	A	B	A+B	A+B
TOTAL	337	337	20	20
- Weaving department	1	1	1	1
- Knitting dept.	1	1	1	1
- Elastic fabric dept.	1	1	1	1
- Sewing of labels dept.	1	1	1	1
- Cutting department	1	1	1	1
- Sewing department	1	1	1	1

2 Auxiliary operative units

	Total	1st shift	2nd shift	3rd shift
	A	B	A+B	A+B
TOTAL	4	4	4	4
- Repair and maintenance	1	1	1	1
- Mechanical shop	1	1	1	1
- Utilities control	1	1	1	1
- Product & material storage	1	1	1	1
- Off-site transport	1	1	1	1
- Guards, cleaners, etc.	1	1	1	1

3 Auxiliary non operative units

	Total	1st shift	2nd shift	3rd shift
	A	B	A+B	A+B
TOTAL	1	1	1	1
- Production management	1	1	1	1
- Research & development	1	1	1	1
- Sales unit	1	1	1	1
- General administration	1	1	1	1

WORKING TIME PER OPERATIVE WORKER:

Normal hours/day	8 hours	Normal days/year	164 days
Actual hours/year	1,312 hours		

CAPACITY OF OPERATIVE SHOPS:

The over-all capacity of the establishment is geared to the productivity of the sewing department, which operates with one shift.

CAPACITY POWER:

Process equipment	1000 KW	Generating equipment	1000 KVA
Electric motors		Installed capacity	

EXTERNAL CONDITIONS

Transport:	Long distance, fair; short distance, excellent
Utilities:	Electricity, fair; water, good; sewerage, fair
Community:	Community, residential, health and recreation, educational, fair.

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (U.I.):	Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Avg. Age (yrs)	(*) Remarks	Supplier country	Year of installation	Daily running time	Output
Looms (fabric weaving)	266	700	784	10	A	Switzerl., USA	1950-59	24 hrs	250,000 shots/machine/day
Looms (ribbon weaving)	86	75	84	15	B	Switzerl.	1945-60	16 hrs	80,000 shots/machine/day
Automatic fabric and ribbon weaving spooling machines	30	85	95	10	D	Switzerl., FR.Germ.	1950-66	16 hrs	13.5 t/month
Reeling machines	10	16	17	15	D	Switzerl., FR. Germ.	1950-66	16 hrs	5 t/month
Dyeing and finishing machines	18	112	126	6	A	Switzerl., FR.Germ., Italy, Denmark, Austria	1950-59	16 hrs	450,000 e/month
Drier, single layer stenter	2	40	46	10	C	FR.Germ.	1950, 1959	16 hrs	450,000 a/month
Others	..	318	359	15	A				

(*) A : Rather new
B : In good condition, partly obsolete
C : In good condition, well maintained
D : In good condition, more or less obsolete

CAPACITY POWER:
Process equipment:
- electric motors kW 470
- others " 380
Generating equipment:
- installed capacity kVA 340

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization:		Automation:		Further details:
		A. most advanced	B. considerably high standard	C. moderate standard	D. appreciably short of today's standard		E. almost outdated	I. fully automated	II. semi-automated
Plant A: Weaving department				C	II	
Plant B: Fabric weaving dept.				B	I	
Ribbon weaving dept.				C	III	
Dyeing department				C	II	

CAPACITY UTILIZATION:

Full capacity output: US \$ 2,900,000.

Current utilization:

Major products (or processes)	Approximate %				
	up to 30	40	50	60	70
Plant A: Weaving department					X
Plant B: Fabric weaving department					X
Ribbon weaving department			X		
Dyeing department					X

The present rate of utilization is based on 2-shift operation except for the fabric weaving department which operates on 3 shifts. Under-utilization of ribbon weaving department is due to insufficient demand.

The company reports that another 10 operatives would be required on the 1st as well as on the 2nd shift in order to reach full utilization of total capacity.

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output (1000 US \$)	No. of persons employed	Total exports (1000 US \$)
1962/63	2,060	410	190
1963/64	2,220	415	300
1964/65	2,450	420	440
1965/66	2,760	425	670
1966/67	2,630	430	500
1967/68	2,280	370	380

2. Investments in the past:

From 19 57 to 19 67:	Approximate amount (1000 US \$)	Type of investment
	250	Buildings
	1,040	Machinery and equipment
	150	Furniture and fixtures, transport equipment and others
1966/67:	58	

3. Future Plan:

80 will be annually invested for expansion and rationalisation of machinery, rationalisation of fabrication process and specialisation of product mix. Personnel will be reduced gradually, however, no exact statements are possible.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1964)

Industry: Spinning, weaving and finishing textiles (ISIC Code: 231)

1. Size groups by number of persons employed:	No. of estab.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)	2. Size groups by annual scale of production (1000 US \$):		No. of empl.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)
						up to	over					
up to 19	223	855	1,108	7,001	47	up to 20	147	172	847	4,776	58	
20 - 99	73	3,542	1,403	9,811	41	20 - 40	23	127	1,174	4,796	55	
100 - 499	66	15,304	1,481	7,444	41	40 - 200	72	1,323	1,114	5,154	49	
500 - 999	11	7,748	1,451	5,449	40	200 - 400	29	1,254	1,293	6,600	51	
over 1,000	5	9,915	1,596	6,014	45	400 - 2,000	73	10,857	1,398	7,059	42	
						over 2,000	34	23,631	1,569	6,912	41	
TOTAL:	378	37,364	1,489	6,865	42	TOTAL:	378	37,364	1,489	6,865	42	

IV. ANNUAL PRODUCTION

(1966)	Yr. of first prod.	Quantity produced		Unit price on factory (US \$)	Total production value (1966 US \$)
		Unit	Output		
Shirts	1954	100 pieces	250	2.50	625
Trunk-hoses	1954	"	1,000	1.00	1,000
Knicker-bockers	1954	"	1,000	1.00	1,000

*Not including sales tax

Exports: None

Capacity utilization:

The sewing department's capacity (one shift) is utilized approximately 70 percent. Under-utilization is largely due to the demand factor. The nominal capacity output in the above is based on the capacity of the sewing department. The weaving and knitting departments are of secondary significance for the development of Mexico.

VI. VALUE ADDED

(1966)	Value (1966 US \$)
1. Wages & salaries	
- Employees in direct production (" persons)	100
- Other employees (" persons)	50
2. Other payments for employees	10
3. Annual depreciation	20
4. Rental paid	10
5. Interests & royalties	5
6. Sales tax (incl. state)	10
7. Other ind. bus. taxes	5
8. () Subsidies	0
9. Corporate income before tax	10

VII. MONTHLY EARNING RATES

(End of 1966)	No. of emp.	Average earning rates (US \$)
1. Local non-operatives		
TOTAL	100	100
- Managers	5	150
- Engineers	5	120
- Technicians	10	100
- Accountants	5	100
- Sales officers	5	100
- Other professional staff	5	100
- Clerks & typists	50	80
2. Local operatives		
TOTAL	95	100
- Supervisors	5	100
- Foremen	5	100
- Machine operators	10	100
- Craftsmen	5	100
- Truck drivers	5	100
- Other full-time operatives	50	100
- Unskilled & part-time operatives	10	100
3. Foreign employees		
TOTAL	0	0

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed	Value (1966 US \$)
	Unit	Consumption value (1966 US \$)
1. Energy and water		
TOTAL		100
- Electricity	000 Kwh	100
- Diesel oil	liters	100
- Gas	liters	100
- Water	liters	100
2. Production materials		
TOTAL		100
- "Artisela"	Kg	100
- Cotton yarn	Kg	100
- Cotton fabrics	m ²	100
3. Other materials & supplies		
TOTAL		100
- Packaging (packets, boxes, cartons, etc.)		100
- Repair & maintenance		100
- Non-factor service inputs		100
4. Business services purchased		
TOTAL		100
- Transport, storage & insurance		100
- Communication, advertisements, etc.		100
5. Work performed by sub-contractors		
TOTAL		100

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)	Industry group	Number of plants	Number of emp.	Av. O. & B. per emp. (US \$)	Av. gross prod. per emp. (US \$)	Av. emp. gross prod. rate* (%)
1. The group by number of plants	Manufacture of wearing apparel except footwear (184)					
up to 15		772	2,971	157	1,110	46
16 - 25		30	767	81	4,400	64
over 25		11	1,417	128	1,000	59
TOTAL		813	5,155	85	1,500	50
2. The group by value of annual production (1965 US \$)						
up to 100,000		1,004	3,158	152	1,000	51
over 100,000		114	1,997	95	1,541	59
TOTAL		1,118	5,155	100	1,244	57

* Capital is defined as physical capital assets.

IX. EMPLOYMENT

NOVEMBER 1966: No comment

FUTURE PLANS: No specific plan of expansion

Major Products: Knitting wool and knitwear; Capable of producing annually 300 t of knitting wool and 440,000 pieces of knitwear based on 2-shift operation. Full-capacity output amounts to US \$ 2.5 million.

Reporting Unit: A one-establishment enterprise; privately owned; founded in 1888; 260 employees. Located in a developing area of the country; of local economic importance only; 10% exports. Own modest research activity in the field of synthetic fibres. Although the company is already very old, its machinery and equipment meet modern standards.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (1000 US \$)	Replacement value (1000 US \$)	Average (Yrs.)
1 Primary process equipment (including installation cost)			
TOTAL	..	968	2.5
- Process equipment *	..	968	2.5
- Hand tools & apparatus	-	-	-
2 Buildings			
TOTAL	..	730	
- Primary industrial buildings (total floor space: .. m ²)	..	581	50
- Auxiliary buildings	..	-	-
- Warehouses	..	155	3
- Office administration buildings	..	-	-
- Housing	..	144	5
3 Auxiliary facilities (excl. buildings)			
TOTAL	99	157	
- Internal power equipment	70	116	4
- Laboratory facilities	4	8	-
- Means of transportation	10	10	2
- Office equipment	15	23	2
TOTAL PHYSICAL FIXED ASSETS (including land)	..	2,055	
4 Other fixed capital assets			
TOTAL	..	232	
- Land (total acreage: .. m ²)	..	232	-
- Land improvements	-	-	-
- Others	-	-	-

*The details of process equipment and quantity of main operating shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1967 monthly average)	up to					over
	US\$	US\$	US\$	US\$	US\$	US\$
1. Local non-operatives						
- Managers						
- Engineers						
- Technicians						
- Accountants						
- Sales officers						
- Clerks and typists						
2. Local operatives						
- Supervisors						
- Foremen						
- Skilled operatives						
- Machine operators						
- Craftsmen						
- Truck drivers						
- Unskilled operatives						
- Other full-time operatives						
- Part-time operatives						
3. Foreign employees						
- Managerial staff						
- Technical staff						
- Other skilled operatives						
- Unskilled operatives						

No data available.

EXTERNAL CONDITIONS

(*) Transport	external long distance	poor
	internal long distance	poor
	local and city	poor
Utilities	electricity	fair
	water	excellent
	gas	-
(*) Community	residence	poor
	health and recreation	poor
	education	poor

(*) Transport and community facilities are rated "poor", since the establishment is situated in a small village without supply of gas, an efficient housing facilities and any (TSE) communication lines.

III. INVENTORIES

(End of 1967)	Actual value (1000 US \$)	Number of months
Inventories		
PPPA	1,310	
- Production materials	516	4
- Other input materials	26	3
- Work-in-process	336	3
- Finished products	432	2

WORKING TIME PER OPERATIVE WORKER

	1st shift	2nd shift	3rd shift	hours
Shift hours/day	8	8	-	hours
Actual hours/year	2,240	2,240	-	hours
Actual days/year	280	280	-	days

IV. MANNING TABLE

(Number of persons)

Shift categories: A. Supervisory staff and foremen (for all shifts)
B. Skilled operatives
C. Semi-skilled operatives (machine operators)
D. Unskilled operatives

(1967 average)	Total	Shift categories				
		A	B	C	D	D
ALL SHOPS & UNITS:	266	29	129	108	-	-
1. Primary operative shops	224	7	119	100	-	-
- Spinning department	70	3	37	30	-	-
- Winding department	8	-	5	3	-	-
- Knitting department	17	2	9	6	-	-
- Stocking department	19	-	10	9	-	-
- Sewing department	63	-	33	30	-	-
- Dyeing department	10	-	5	5	-	-
- Hemwork	10	-	5	5	-	-
- Packing department	27	-	15	12	-	-
2. Auxiliary operative units	18	-	10	8	-	-
- Repair & maintenance	6	-	3	3	-	-
- Mechanical shop	-	-	-	-	-	-
- Tooling shop	-	-	-	-	-	-
- Utilities control	2	-	1	1	-	-
- Product & material storage	4	-	2	2	-	-
- Off-site transport	5	-	3	2	-	-
- Guards, cleaners, etc.	1	-	1	-	-	-
3. Auxiliary non-operative units	24	24	-	-	-	-
- Production management	1	1	-	-	-	-
- Research & development	-	-	-	-	-	-
- Sales unit	15	15	-	-	-	-
- Accounting	4	4	-	-	-	-
- General administration	4	4	-	-	-	-

V. ANNUAL PRODUCTION

Products (or group of products)	Yr. of prod.	Quantity produced		Av. unit price on factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Hand knitting wool	1888	kg	300,000	4.5	1,355
Knitwear (flat)	1948	pieces	200,000	4.8	968
Knitwear (circular)	1920	pieces	240,000	0.8	193

TOTAL VALUE OF PRODUCTION: 2,516

VI. VALUE ADDED

(1967)	Total value (000 US \$)
1. Annual wages & salaries	348
- Operative workers (219 persons)	294
- Non-operative workers (29 persons)	54
2. Other payments for employees	97
3. Annual depreciation	120
- Machinery & equipment	65
- Buildings & other facilities	55
- Non-physical capital assets	-
4. Rentals paid	-
5. Interests & royalties	43
6. Sales tax	132
7. Other indirect business taxes	50
8. (-) Subsidies	-
9. Corporate income before tax	248

TOTAL VALUE ADDED: 1,038

DESCRIPTION OF MAJOR PRODUCTS:

All products are made out of fleece and acrylic fibres and are produced in series.

Hand knitting wool: packed in hanks and clews in quantities of 1 kg, 1.5 kg and 2.5 kg.

Knitted wear: for ladies and gentlemen.

All products are of superior quality. Terms of delivery: knitting wool within 3 days, knitted wear within 2 to 3 months.

MARKET ASPECTS:

Consumers of products:

90% of total production is sold to retail stores and 10% to wholesalers.

Sales commission:

On: representatives.

Share in the domestic market:

Hand knitting wool: 35%. Knitted wear: 3%.

Competition in the market:

Keen competition with domestic and imported products; heavy import pressure and price cuttings.

EXPORT:

Total annual export: No data available.

Major products	To Western countries	To Eastern countries	To Developing countries
Knitting wool	100%	-	-

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import price (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL:					135
- Electricity and water	000 kWh	650 (*)	-	-	134
- Oil	t	509	-	-	1
2. Production materials					
TOTAL:					968
- Synthetic fibre (Dralon)	kg	125,000	100	39	307
- Woole	kg	125,000 (**)	100	58	581

(*) Not including 235,000 kWh of electricity and 28,000 m³ of water which were internally supplied.

(**) Not including 84,000 kg of wool which were internally supplied.

	Total consumption value (000 US \$)
3. Other materials & supplies	
TOTAL:	125
- Packaging material	12
- Parts, supplies & services	5
- Other materials & supplies	108
4. Business services purchased	
TOTAL:	250
- Transportation, storage & insurance	66
- Communication, advertising & other business services	66
- Commission for dealers	118
5. Work performed by subcontractors	
TOTAL:	-

TOTAL VALUE OF CONSUMPTION: 1,478

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT N.I.I.

	Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Avg. Age (yrs)	Supplier country	Year of installation	Daily running time	Capacity output
Spinning machines	6	..	116	2	Germany, F.R.	1966	16 hrs	50,000 kg/yr
Twisting frames	4	..	77	3	"	1965	16 "	70,000 kg/yr
Rovers	6	..	70	1	"	1967	16 "	..
Self-acting mules	1	..	27	5	"	1963	16 "	50,000 kg/yr
Garding machine	1	..	27	4	"	1964	16 "	50,000 kg/yr
Dyeing apparatuses	4	..	62	2	"	1966	16 "	70,000 kg/yr
Straight knitting machines	20	..	155	3	"	1965	16 "	..
Circular knitting machines	30	..	232	6	"	1962	16 "	..
Sewing machines	10	..	4	5	"	1963	16 "	100 pcs/day
Banderoling machine	1	..	1	2	"	1966	16 "	..
Steaming machines	2	..	16	4	"	1964	16 "	200 kg/day
Other special machines	10	..	39	3				
Lifts	3	..	23	10				
Boilers	1	..	39	1				
Lifting gears	5	..	3	8				
Turbines	2	..	8	3				
Other machines	..	..	31	4				

CAPACITY POWER:

Process equipment:
- electric motors kW 250

Generating equipment:

- installed capacity kVA 70
- prime movers for generating equipment kW 100

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Machin.		Further details
		Machin.	Autom.	
Spinning department		A	III	
Packaging department		A	II	
Winding department		A	III	
Knitting department		A	III	
Stockings department		A	II	
Sewing department		A	II	
Dyeing department		A	II	

CAPACITY UTILIZATION:

Full-capacity output No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

Current utilization:

based on 2-shift operation.

Major products (or processes)	Approximate %									
	to 20	20-40	40-60	60-70	70-80	80-90	90-95	95-99	100	

All departments operate at full-capacity output.

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output (1000 US \$)	No. of persons employed	Total exports (1000 US \$)
1963	1,740		
1964	1,930		
1965	2,130		
1966	2,210		No date available
1967	2,520		
1968	2,520		

2. Investments in the past:

From 19 58 to ..	Approximate amount (1000 US \$)	Type of investment
..	970	Machinery and buildings

3. Future Plan:

From 19 67 to 19 .. :	Approximate amount (1000 US \$)	Details
19 .. :	155	Specialisation of product-mix; rationalisation of machinery and processing methods; expansion of premises. Based on rationalisation efforts employment will be lowered on the first and second shifts.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C = confidential; figures of this size group are included in that underlined.

(1964)

Industry Knitting mills (ISIC Code:)

1. Size groups by number of persons employed	No. of establ.	No. of empl.	Avg. W. & S. (US \$)	Avg. gross prod. val./per pers. (US \$)	Avg. value added/gross prod. ratio (%)	2. Size groups by annual value of production (1000 US \$):	No. of establ.	No. of empl.	Avg. W. & S. (US \$)	Avg. gross prod. val./per pers. (US \$)	Avg. value added/gross prod. ratio (%)
up to 19	642	2,089	933	4,660	50	up to 20	501	745	680	3,569	52
20 - 99	158	7,052	1,117	4,845	54	20 - 40	73	556	931	3,687	55
100 - 499	41	7,860	1,295	5,333	49	40 - 200	158	3,981	954	3,737	54
500 - 999	4	7,541	1,543	6,105	54	200 - 400	51	2,717	1,207	5,085	55
over 1,000	3	C	C	C	C	400 - 2,000	55	7,965	1,314	5,530	51
						over 2,000	10	8,578	1,524	6,343	52
TOTAL:	848	24,542	1,289	5,373	52	TOTAL:	848	24,542	1,289	5,373	52

XII. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services:

- | | | |
|---|---------------------------------------|-----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export transactions |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of services	Country or region	No. of projects	Field of industry	Description of projects
------------------	-------------------	-----------------	-------------------	-------------------------

No data available.

XIII. SUPPLEMENTS & NOTES

Bottlenecks and current problems:

In the past a lack of skilled personnel hampered the growth of the output. Problem has been solved.

Presently, the company has to face out prices and increasing costs.

Inventory policy:

On the average, the stock of finished products amounts to 35% of the total value of production.

Major Products: Brassieres and suspender belts. Capable of producing annually close to US \$ 1 million based on 1-shift operation. Business year: 1.7.1967 - 30.6.1968.

Reporting Unit: A one-establishment enterprise originally founded in 1893; privately owned. Only since 1958 production of corsetry. Efficient medium sized enterprise utilizing modern equipment not older than 3 years on the average. No production of special brands. So far only regional significance, although efforts are being made to export to Western and Eastern countries as well. 170 employees.

I. FIXED CAPITAL ASSETS

(30/6/1968)	Original purchase value (000 US \$)	Replacement value (000 US \$)	Avg. age (Yrs.)
1. Primary process equipment (including installation cost)			
TOTAL	65	77	
- Process equipment *	65	77	3
- Hand tools & apparatuses	-	-	-
2. Buildings			
TOTAL	108	108	
- Primary industrial buildings (total floor space: 900 m ²)	93	93	2
- Auxiliary buildings	15	15	2
- Warehouses	-	-	-
- Office administration buildings	-	-	-
- Housing	-	-	-
3. Auxiliary facilities (excl. buildings)			
TOTAL	25	30	
- Internal power equipment	14	17	3
- Laboratory facilities	-	-	-
- Means of transportation	3	3	4
- Office equipment	8	10	5
TOTAL PHYSICAL FIXED ASSETS (excluding land):	198	215	
4. Other fixed capital assets			
TOTAL	15	15	
- Land (total acreage: - m ²)	-	-	-
- Land improvements (i.acr. 5,000 ")	15	15	-
- Others	-	-	-

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(as per end of 1968)	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1. Local non-operatives: - Foremen	-	1	3	1	-	-
- Managers	-	-	-	-	-	1
- Engineers	-	-	-	-	-	-
- Technicians	-	-	-	-	-	-
- Accountants	-	1	-	2	-	-
- Sales officers	-	-	3	2	-	-
- Clerks and typists	-	3	1	1	-	-
- Designers	-	-	1	1	-	-
- Sales managers	-	-	-	-	1	-
- Supervisors	-	-	-	-	1	-
2. Local operatives						
- Supervisors } (*)						
- Foremen	-	-	-	-	-	-
- Skilled operatives	-	-	-	-	-	-
- Machine operators	91	34	5	1	-	-
- Craftsmen	-	-	1	-	-	-
- Truck drivers	-	-	-	-	-	-
- Unskilled operatives (**)	1	4	-	-	-	-
- Other full-time operatives	3	1	-	-	-	-
- Part-time operative	2	-	-	-	-	-
- Storemen	-	2	-	-	-	-
- Control operatives	-	1	4	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

(*) The company considers supervisors and foremen as local non-operatives

(**) Including operatives of forwarding section

EXTERNAL CONDITIONS:

Transport:	external long distance	fair
	internal long distance	excellent
	local and city	"
Utilities:	electricity	excellent
	water	"
	gas	"
Community:	residence	insignificant
	health and recreation	"
	education	poor

Own Welfare Facilities: - The majority of machine operators was brought up in rural districts. Due to insufficient education very low output during first months of employment.

III. INVENTORIES

(30/6/1968)	Actual value (000 US \$)	Number of months
Inventories	122	
TOTAL:		
- Production materials	46	2
- Other input materials	2	-3
- Work-in-process	31	..
- Finished products	43	1-2

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	
- Shift hours/day:	9	-	-	hours
- Actual hours/year:	2,070	-	-	hours
- Actual days/year:	230	-	-	days

IV. MANNING TABLE

(Number of persons)

Shift categories: A. Supervisory staff and foremen (for all shifts)
B. Skilled operators
C. Semi-skilled operators (machine operators)
D. Unskilled operators

(as per 30 Dec. 1968)	Total	1st Shift				2nd Shift	3rd Shift	
		A	B	C	D	B-D	B-D	
ALL SHOPS & UNITS:	172	23	149				-	-
1. Primary operative shops	142	5	9	128	-	-	-	
- Cutting and setting	6	2	2	2	-	-	-	
- Sewing	136	3	7	126	-	-	-	
2. Auxiliary operative units	12	1	11				-	-
- Repair & maintenance	1	-	1				-	-
- Mechanical shop	-	-	-				-	-
- Tooling shop	-	-	-				-	-
- Utilities control	-	-	-				-	-
- Product & material storage	2	-	2				-	-
- Off-site transport	1	-	1				-	-
- Guards, cleaners, etc.	2	-	2				-	-
- Dispatch	6	1	5				-	-
3. Auxiliary non-operative units	18	17	1				-	-
- Production management	2	2	-				-	-
- Research & development	3	2	1				-	-
- Sales unit	7	7	-				-	-
- Accounting	3	3	-				-	-
- General administration	3	3	-				-	-

V. ANNUAL PRODUCTION

Products (or group of products)	Yr. of first prod.	Quantity produced		Av. unit price ex factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Brassieres	1959	pieces	379,000	2.05	780
Suspender belts	1960	"	57,000	0.77	44
TOTAL VALUE OF PRODUCTION:					824

VI. VALUE ADDED

(1967/68)	Total value (000 US \$)
1. Annual wage & salaries	170
- Operative workers	116
+ 125 manual	
+ 22 manual	
- Non-operative workers	54
+ 22 manual	
2. Other payments for employees	69
3. Annual depreciation	35
- Machinery & equipment	23
- Buildings & other facilities	10
- Non-physical capital assets	2
4. Rentals paid	4
5. Interest & royalties	11
6. Sales tax	40
7. Other indirect business taxes	2
8. (-) Subsidies	-
9. Corporate income before tax	49
TOTAL VALUE ADDED:	380

DESCRIPTION OF MAJOR PRODUCTS:

Fashionable corsetry with lace-trimming; serial production.

Each unit is packed in plastic bags as well as in single cardboard boxes. Cheaper products for department stores are not packed at all.

Terms of delivery: 3 weeks delivery time for standard goods, for special models equal to amount of time needed to supply raw materials.

MARKET ASPECTS:

Sales organization:

- Own sales organization for the whole country.
- Products can also be ordered by chain stores, department stores and mail-order houses.

Market and competition:

Products can be disposed all over the country; no transport difficulties. Share in domestic market approximates 5%. Keen competition with well-known brands, however, existence of price advantages; differences in quality of minor importance, since competitors are using same raw materials and machinery. Almost no competition with imported articles.

EXPORT:

Total annual export: 74,000 US \$.

Major products	To Western countries	To Eastern countries	To Developing countries
Brassieres and suspender belts	100	-	-

Export price policy:

Adjustment to competing prices of major international producers.

Governmental policies:

The government subsidizes exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under VI.6. has been adjusted accordingly.

VII. ANNUAL CONSUMPTION

(1967/68)	Quantity consumed		% import	Average import duties	Total consumption value (000 US \$)
	Unit	Quantity		(000 US \$)	
1. Energy and water					
TOTAL:					5
- Electricity	000 kWh	83	-	-	2
- Liquid fuels	t	..			2
- Gas	000 m3	22			0.7
- Water	000 m3	..			0.3
2. Production materials					
TOTAL:					350
Various fabrics, laces, plastic parts, hooks and eyes, clasps	..	..	60	49 (*)	350

(*) Including import compensation tax.

(1967/68)	Total consumption value (000 US \$)
3. Other materials & supplies	8
TOTAL:	5
- Packaging material (plastic bags, boxes, cardboard boxes, labels)	
- Parts, supplies & services	1
- Other materials & supplies	2
4. Business services purchased	73
TOTAL:	5
- Transportation, storage & insurance	
- Communication, advertising & other business services	68
5. Work performed by subcontractors	-
TOTAL:	-
TOTAL VALUE OF CONSUMPTION:	444

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (I.I.):

	Number	Original Purchase Value (000 US \$)	Replacement value (000 US \$)	Avg. Age (yrs)	Remarks	Supplier country	Year of installation	Daily running time
Belt knife machines	2	4	5	5	-	FR.Germ.	1965	5 hrs
Stamping machine (*)	1	3	3	2	-	Austria	1966	7-8 hrs
High speed stretch sewing machines	8	5	6	3	-			
Folding machine	1	5	6	3	-	USA	1966	4-5 hrs
Various sewing machines	122	36	45	4	-	FR.Germ, USA,Switzerl.	..	9 hrs
Conveyor belts	3	12	12	2	SC			

(*) It is planned to use stamping machines instead of belt knife machines because of their higher precision and cutting capacity.

CAPACITY POWER:
 Process equipment:
 - electric motors 80 kW
 Generating equipment:
 - installed capacity - 1VA

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization	Automation	Further details	Capacity output	Capacity utilization
Cutting room	Fabrics are arranged in layers by folding machine; cutting by belt knife or by stamping machines.	B	II		2,000 pieces/day	100%
Sewing shop	3 conveyor belts, piece work	C	II		450,000 pieces/yr.	almost 100%

CAPACITY UTILIZATION:

Full capacity output: US \$ 968,400.
 Full capacity output could be reached without any additional operatives.

Current utilization:

Major products for processes	up to	Approximate %
	30	40
	50	50
	70	60
	80	70
	90	80
	100	90

Brassieres and suspender belts

Current over-all utilization rate of close to 100% is due to excellent demand for the products manufactured and good supply of raw materials. Full capacity output could be attained if machine operators could be better trained.

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output (000 US \$)	No. of persons employed	Total exports (000 US \$)
1963/4	400	80	-
1964/5	480	86	20
1965/6	590	110	30
1966/7	740	130	50
1967/8	820	150	70
1968/9	970	170	80

2. Investments in the past:

From	To	Approximate amount (000 US \$)	Type of investment
1959	1966	77	Machinery and equipment
1966	1968	116	New factory building, machinery

In the business year reported investments amounted to US \$ 97,000.

3. Future Plan:

From 1968 to 1969: 12 - 19 Purchase of approx. 20 sewing machines and renewal of one additional conveyor belt. 50 more workers will have to be employed. No extra shift required. (See also page 4/XII.)

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C = Confidential; these size groups are included in the underlined figures.

(1964)

Industry Manufacture of wearing apparel except footwear (ISIC Code: 243)

1. Size groups by number of persons employed:	No. of estab.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)	2. Size groups by annual value of production (000 US \$):		Av. W. & S. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)	
						No. of estab.	No. of empl.				
up to 19	12,978	22,902	771	3,816	53	up to 20	12,016	14,715	607	2,865	60
20 - 99	439	18,646	1,171	5,220	47	20 - 40	585	4,599	935	3,480	56
100 - 499	105	21,412	1,263	5,958	44	40 - 200	622	11,769	1,081	4,483	50
500 - 999	2	C	C	C	C	200 - 400	130	6,369	1,192	5,473	48
over 1,000	1	C	C	C	C	400 - 2,000	157	18,326	1,269	6,464	43
						over 2,000	15	7,182	1,356	6,692	41
TOTAL:	13,525	62,960	1,057	4,960	47	TOTAL:	13,525	62,960	1,057	4,960	47

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service:

- | | | |
|---|---------------------------------------|----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export transaction |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
8				The establishment is interested in exporting its products. On the other hand, there seem to be almost no possibilities for imports of raw materials, since they have to be of superior quality.
6 and 9				The employment as well as the training of foreign workers both from developing and developed countries is of little interest to the company.

XII. SUPPLEMENTS & NOTES

Working capital: (000 US \$)

Liquid assets (average):

- Cash on hand and in bank (*)	33
- Marketable securities and bonds	2
- Accounts receivable from delivery of goods and services	93
- Other accounts receivable	12
- Prepaid expenses	-

Total average liquid assets 140

(*) Cash on hand and in bank is usually very high at the end of the business year.

History of production and investment:

In 1959, when the production of corsetry was started, the break-even point was surpassed at a total value of production of approximately US \$ 194,000.

Depreciation policy:

Application of the straight-line method. Fixed assets are written off within 10 years, except for buildings which are depreciated within 25 years.

Training:

The suppliers of new machinery provide training facilities for operatives of the enterprise.

Future plan: (ad IX. History and Plan, page 3)

The company intends to expand mass production of cheap brassieres. Only 2% of normal production time is required.

Major Products: Men's coats, suits, jackets, trousers and vests.
Full capacity output approximates US \$ 1,7 million on 1-shift operation.
Business year: 1 October 1967 - 30 September 1968.

Reporting Unit: A one-establishment enterprise, privately owned. The company started industrial production in 1954; expansion of a regular tailor shop and cloth-trading business into an industrial firm. Belongs now to the 5 largest manufacturers of men's clothing. Close to consumer markets, excellent external conditions. Exports are promoted and increase fast; presently 14% of sales. 220 employees.

I. FIXED CAPITAL ASSETS

(30/9/1968)	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average age (Yrs.)
1. Primary process equipment (including installation cost)			
TOTAL	275	284	4
- Process equipment *	275	284	4
- Hand tools & apparatuses	-	-	-
2. Buildings			
TOTAL	257	428	7
- Primary industrial buildings (total floor space: 2,154 m ²)	150	228	8
- Auxiliary buildings	28	43	8
- Warehouses	49	74	8
- Office administration buildings	14	21	8
- Housing	44	62	5
3. Auxiliary facilities (excl. buildings)			
TOTAL	51	56	
- Internal power equipment (Steam)	8	10	10
- Laboratory facilities	-	-	-
- Means of transportation	31	31	3
- Office equipment	12	15	6
TOTAL PHYSICAL FIXED ASSETS (excluding land)	613	1068	
4. Other fixed capital assets			
TOTAL	29	36	
- Land (total acreage: 1,500 m ²)	21	21	-
- Land improvements (t.acr.4,291 ")	8	15	-
- Others	-	-	-

*NR: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1967/68 monthly average)	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1. Local non-operatives						
- Managers	-	-	-	-	-	3
- Engineers	-	-	-	-	-	-
- Technicians	-	-	-	-	2	-
- Accountants	-	-	-	2	1	-
- Sales officers	-	-	2	3	1	-
- Clerks and typists	3	5	4	3	-	-
2. Local operatives						
- Supervisors	-	-	-	-	-	1
- Foremen	-	-	-	5	-	-
- Skilled operatives	-	-	-	-	-	-
- Machine operators (*)	28	7	-	-	-	-
- Craftsmen	-	-	4	2	-	-
- Truck drivers	-	-	-	2	-	-
- Unskilled operatives	2	-	-	-	-	-
- Other full-time operatives	-	-	-	-	-	-
- Part-time operatives	5	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	1
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	28	8	4	-	-
- Unskilled operatives	-	-	-	-	-	-
- Machine operators (*)	18	4	-	-	-	-

(*) Female workers who either are semi-skilled or still being trained for this particular job. Their monthly average wage approximates US \$ 108.- as per 1968.

EXTERNAL CONDITIONS:

Transport	external long distance	Excellent
	internal long distance	"
	local and city	"
Utilities	electricity	Excellent
	water	"
	gas	"
Community	residence	Excellent
	health and recreation education	Fair
Own Welfare Facilities		-

III. INVENTORIES

(30/9/1968)	Actual value (000 US \$)	Number of months
Inventories		
TOTAL	341	
- Production materials	155	2
- Other input materials	12	3
- Work-in-process	116	1,5
- Finished products	58	0,5

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift hours/day	9	-	-	hours
Actual hours/year	2,070	-	-	hours
Actual days/year	230	-	-	days

IV. MANNING TABLE

(number of persons)

ISM categories: A. Supervisory staff and foremen (for all shifts)
B. Skilled operatives
C. Semi-skilled operatives (machine operators)
D. Unskilled operatives

(1967/68 average)	Total	1st Shift				2nd Shift	3rd Shift	
		A	B	C	D	B-D	B-D	
ALL SHOPS & UNITS:	220	43	177				-	-
1. Primary operative shops	178	10	103	57	8	-	-	
- Tailor shop	31	3	19	7	2	-	-	
- Sewing shop	131	5	77	45	4	-	-	
- Pressing shop	11	1	5	3	2	-	-	
- Finishing shop	5	1	2	2	-	-	-	
2. Auxiliary operative units	16	10	6				-	-
- Repair & maintenance	3	1	2				-	-
- Mechanical shop	-	-	-				-	-
- Tooling shop	-	-	-				-	-
- Utilities control	2	2	-				-	-
- Product & material storage	4	2	2				-	-
- Off-site transport	2	2	-				-	-
- Guards, cleaners, etc.	2	-	2				-	-
- Others	3	3	-				-	-
3. Auxiliary non-operative units	26	23	3				-	-
- Production management	1	1	-				-	-
- Research & development	5	2	3				-	-
- Sales unit	10	10	-				-	-
- Accounting	5	5	-				-	-
- General administration	5	5	-				-	-

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service

- | | | |
|---|---------------------------------------|-----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export transactions |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
8				The company does not foresee any possibilities to import raw materials from developing countries.
9				On principle foreign workers could be employed. So far the demand for unskilled labour could be satisfied regionally.

XII. SUPPLEMENTS & NOTES

Commission work:

The company performed commission work for 8 different contractors. Total commission received amounted to US \$ 21,000.

The jigger and foulard dyeing methods were applied to dye linings. Finishing, measuring and folding of lining was also done.

On the other hand, umbrella fabrics and brocades were dyed and printed by 7 subcontractors. Total commission paid amounted to US \$ 50,000.

Technological features:

Fabric weaving: Automatic looms are almost exclusively utilized, 1/3 of them are provided with multi-colour weft changing; 20 Jacquard looms.

Ribbon weaving: Mainly conventional looms, 1/3 of them are Jacquard looms.

Additional preparatory machinery, dyeing and finishing equipment for linings and umbrella material.

Bottlenecks in the past:

Lack of personnel and of capacity.

Current problems:

Rather narrow domestic market. The enterprise reports difficulties in getting the right raw materials (rayon). Due to insufficient supply with working capital customers frequently request prolonged terms of payment. Increase of insolvencies in clothing industry.

Inventories policy:

Value of finished products on stock amounts to 14.5% of total value of production.

V. ANNUAL PRODUCTION

(1968)	Yr. of prod.	Quantity produced		Av. unit price in factory (US \$)	Total output value (1000 US \$)
		Unit	Quantity		
Men's clothing:					
Coats	1955	pieces	18,522	29.0	538
Suits	"	"	16,826	31.3	527
Lounge jackets	"	"	10,522	16.3	171
Jackets	"	"	6,161	15.6	96
Trousers	1962/63	"	7,723	4.5	35
Sweaters	1966/67	"	3,573	7.8	28
Revenue from contract and commission work					46
TOTAL VALUE OF PRODUCTION:					1,441 *****

VI. VALUE ADDED

(1968)	Total value (1000 US \$)
1. Annual wages & salaries	322
- Operative workers	
1 177 peronal	203
- Non-operative workers	
1 43 peronal	119
2. Other payments for employees	81
3. Annual depreciation	54
- Machinery & equipment	34
- Buildings & other facilities	19
- Non-physical capital assets	1
4. Rentals paid	11
5. Interest & royalties	2
6. Sales tax	63
7. Other indirect business taxes	9
8. (-) Subsidies	-
9. Corporate income before tax	136
TOTAL VALUE ADDED:	680 *****

DESCRIPTION OF MAJOR PRODUCTS:

All clothes are made to order in series of 300 - 6,000 pieces. About 25 different models are at disposal per season.

Within the country 80% of the production is shipped in company-owned vans designed for the transport of clothes; the remaining 20% is shipped in nartoms.

Main emphasis on production of a comfortable suit for car-drivers (Special design and quality of material).

MARKET ASPECTS:

Customers of products:

Men from the age of 16 and above.

Sales organization:

The establishment's sales organization employe 6 salesmen.

The company is represented in 12 Western European cities.

Share in the domestic market of men's clothing about 10%.

EXPORT: US \$ 225,000 .

Total annual export:

Major products	To Western countries	To Eastern countries	To Developing countries
Waterproof woollen overcoats	100%	-	-
National dresses	100%	-	-
Men's suits	100%	-	-

Exports:

Practically to all Western European countries.

Governmental policies:

The government subsidizes exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under VI.6. has been adjusted accordingly.

VII. ANNUAL CONSUMPTION

(1968)	Quantity consumed		% import	Average import prices (1000 US \$)	Total consumption value (1000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL: 15					
- Electricity	000 kWh	422			7
- Fuel oil	t	162			4
- Gasoline	t	7.5			1
- Diesel oil	t	20			2
- Water	000 m3	15			1
2. Production materials					
TOTAL: 618					
- Fabrics	m	139,770	18	37	563
- Accessories	various	..	18	37	50
- Ready-made clothes (*)	pieces	828	18	37	5

(*) Bought from other enterprises for completion of own production programs. Only of minor importance.

3. Other materials & supplies		16
TOTAL:		6
- Packaging material (cartons, cardboards)		
- Parts, supplies & services		
- Other materials & supplies		10
4. Business services purchased		103
TOTAL:		27
- Transportation, storage & insurance		
- Communication, advertising & other business services (*)		76
5. Work performed by subcontractors		9
TOTAL:		9

TOTAL VALUE OF CONSUMPTION: 761

(*) Including commissions for non-company representatives.

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (1.1.)	Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Av. Age (yrs)	Example			Further details
					Self	Purchased second hand	Other	
					U1	U2	U3	
Cutting-out machines	25			3				
Sewing machines	180	245	250	3				
Pressing machines	37			4				
Shrinking machine	1	14	16	3				
Labelling machines	2			4				
Special machines	8		12	1				

CAPACITY POWER
 Process equipment:
 electric motors kW 200
 - others " 50
 Generating equipment
 installed capacity - 1VA

CAPACITY OF PRIMARY OPERATIVE SHOPS.

Major primary operative shops	Kind of process involved	Mechanization		Automation		Further details
		Mechan.	Autom.	I	II	
Cutting out shop	Special screen-spraying method, optimal utilization of fabrics, reduction of waste.	A	I			Full-capacity output: 300 units per day.
Sewing shop	Assembly line production not applicable. Yet, high output possible through division and standardization of total work process.	A	II			Company constantly increases performance of individual workers through various incentives as well as through application of time and motion analyses.
Pressing shop	Steam ironing machines	A	II			
Finishing shop	Labelling, control, storage	B	III			

CAPACITY UTILIZATION:
 Full capacity output US \$ 1,990,000.
 If more women-workers were available, output could be increased by 10-15% without any additional investment.
 Current utilization: Based on 1-shift operation.

Major products for processes	Approximate %					
	up to 30	40	50	60	70	80 90 100
Cutting out						x
Sewing						x
Pressing						x
Finishing						x

The high actual capacity utilization rate is due to satisfactory supply of raw materials and high productivity of labour.

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output (1000 US \$)	Nb. of persons employed	Total output (1000 US \$)
1963	1,280	230	190
1964	1,400	225	300
1965	1,430	212	350
1966	1,700	265	250
1967	1,630	263	250
1968	1,440	220	220

2. Investments in the past:

From 1954 to 1966 :	Approximate amount (1000 US \$)	Type of investment
270	Land and primary industrial buildings	
50	Housing	
300	Machines and equipment, transport	
40	Machinery and equipment	

3. Future Plan:
 From 1968 to 1973 : 3,200
 Modernization of machinery and equipment, additional auxiliary production facilities. Impacts on employment: + 10 skilled workers, + 2 unskilled workers, + 6 non-operatives. All on first shift.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1964) Manufacture of wearing apparel except footwear (ISIC Code: 243)

1. Size groups by number of persons employed:						2. Size groups by annual rate of production (1000 US \$):					
No. of estab.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. gross prod. val. per pers. (US \$)	Av. value added/gross prod. ratio (%)		No. of estab.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. gross prod. val. per pers. (US \$)	Av. value added/gross prod. ratio (%)	
up to 19	12,978	22,902	171	1,816	1	up to 20	12,016	14,715	607	2,865	60
20 - 99	439	18,646	1,171	5,220		20 - 40	585	4,599	935	3,480	56
100 - 499	105	21,412	1,263	5,258	44	40 - 200	622	11,769	1,081	4,483	50
500 - 999	2	C	C	C	C	200 - 400	130	6,369	1,192	5,473	48
over 1,000	1	C	C	C	C	400 - 2,000	157	18,326	1,269	6,464	43
						over 2,000	15	7,182	1,356	6,692	41
TOTAL:	13,525	62,960	1,057	4,960	47	TOTAL:	13,525	62,960	1,057	4,960	47

C = Confidential; these size groups are included in the underlined figures.

XII. COORDINATE AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service:

- | | | |
|-------------------------|---------------------------------------|-----------------------------------|
| 1. Engineering study | 3. Technical and managerial personnel | 5. Inquiry and expert opinion |
| 2. Financial assistance | 4. Industrial training | 6. Introduction of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply | 8. Maintenance & repair | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service	Country or region	No. of projects	Field of industry	Description of projects
1				The company is willing to prepare engineering studies for the production of men's and ladies' clothing. Experts to solve engineering, technical and commercial questions are available.
2				Under certain circumstances the company would be interested in a joint venture.
3				Due to the high level of productivity achieved through continuous application of time and motion analyses the enterprise could provide know-how, e.g. on plant layout, production techniques and work methods.
4				Some 200 used machines (for sewing, cutting-out, and pressing) could be disposed of capable of producing 1,500 trousers per day. A plant of this size would require some 150 operatives. If requested, company could supply plan for layout of machinery.
5				Company could provide limited number of experts.
6				The establishment is prepared to train industrial operatives such as needle-women, substitutes, production managers and time and motion analysts. Various training facilities are available. Company also offers apprenticeships lasting between 3 and 5 years for well qualified applicants who should be educated to join the managerial staff in their mother-countries.
8				Exports could be offered at highly competitive prices.
9				30 - 40 foreign workers (mainly women) could be easily employed.

XIII. SUPPLEMENTS & NOTES

History of production:

The break-even point was surpassed for the first time in 1955.

Depreciation policy:

Both the straight-line and the accelerated methods are applied. Buildings are depreciated by 2%, equipment by 8 - 12% and machinery by 10 - 12%.

Commission work:

The company manufactured uniform jackets on commission basis amounting to US \$ 46,000, although generally no commission work is done.

On the other hand, subcontractors were supplied with cut-out material to sew jackets, vests and coats. Amount annually spent on commissions: US \$ 16,000.

Training:

In-plant training only. Exchange of experience with companies in 14 European countries.

Major Products: Men's shirts and children's shirts. Capable of producing about 320,000 men's shirts and 150,000 children's shirts annually based on 1-shift operation. Full-capacity output amounts to US \$ 1.4 million.

Reporting Unit: Founded in 1960 as a branch of a renowned textile trading company which intends to become more independent of other shirt manufacturers. Privately owned; 176 employees; located in a developing area of the country; no exports.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average age (Yrs.)
1 Primary process equipment (including installation cost)			
TOTAL	96	132	
- Process equipment *	95	131	7
- Hand tools & apparatuses		1	-
2 Buildings			
TOTAL	155	252	
- Primary industrial buildings (total floor space: 1,350 m ²)	155	252	16
- Auxiliary buildings			
- Warehouses			
- Office administration buildings			
- Housing			
3 Auxiliary facilities (excl. buildings)			
TOTAL	16	19	
- Internal power equipment	-	-	-
- Laboratory facilities	-	-	-
- Means of transportation	7	8	4
- Office equipment	9	11	19
TOTAL PHYSICAL FIXED ASSETS (excluding land):	267	403	
4 Other fixed capital assets			
TOTAL	..	54	
- Land (total acreage: 20,000 m ²)	..	54	-
- Land improvements	-	-	-
- Others	-	-	-

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1967 monthly average)	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1. Local non-operatives						
- Managers	-	-	-	-	-	-
- Engineers	-	-	-	-	-	-
- Technicians	-	-	-	-	-	-
- Accountants	-	-	-	1	-	-
- Sales officers	-	-	-	-	-	-
- Clerks and typists	-	3	1	-	-	-
- Foremen	-	4	1	1	-	-
- Warehouse superintendents and clerks	-	1	-	1	-	-
2. Local operatives						
- Supervisors	-	-	-	-	-	-
- Foremen (*)	-	-	-	-	-	-
- Skilled operatives (**)	-	-	-	-	-	-
- Machine operators	-	148	11	-	-	-
- Craftsmen	-	1	1	-	-	-
- Truck drivers	-	-	1	-	-	-
- Unskilled operatives	-	1	-	-	-	-
- Other full-time operatives	-	-	-	-	-	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	not applicable
- Other skilled operative	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

(*) Company considers foremen as local non-operatives.

(**) Included in "Machine operators".

EXTERNAL CONDITIONS:

Transport:	external long distance	fair
	internal long distance	"
	local and city	insignificant
Utilities:	electricity	fair
	water	"
	gas	"
Community:	residence	fair
	health and recreation	insignificant
	education	"
Own Welfare Facilities:		-

III. INVENTORIES

(End of 1967)

	Actual value (000 US \$)	Number of months
Inventories		
TOTAL:	155	..
- Production materials	77	..
- Other input materials	12	..
- Work-in-process	66	..
- Finished products		

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	
Shift hours/day:	9	-	-	hours
Actual hours/year:	2,230	-	-	hours
Actual days/year:	248	-	-	days

IV. MANNING TABLE

(Number of persons)

Shift categories: A. Supervisory staff and foremen (for all shifts)
B. Skilled operatives
C. Semi-skilled operatives (machine operators)
D. Unskilled operatives

(1967 average)	Total	A	1st Shift				2nd Shift	
			B	C	D	B-D	B-D	
ALL SHOPS & UNITS:	176	13	163				-	-
1. Primary operative shops	165	6	4	155	-	-	-	
- Cutting shop	11	3	-	8	-	-	-	
- Sewing shop	128	2	4	122	-	-	-	
- Finishing shop	26	1	-	25	-	-	-	
2. Auxiliary operative units	6	2	4				-	-
- Repair & maintenance	2	-	2				-	-
- Mechanical shop	-	-	-				-	-
- Tooling shop	-	-	-				-	-
- Utilities control	-	-	-				-	-
- Product & material storage	2	2	-				-	-
- Off-site transport	1	-	1				-	-
- Guards, cleaners, etc.	1	-	1				-	-
3. Auxiliary non-operative units	5	5	-				-	-
- Production management	-	-	-				-	-
- Research & development	-	-	-				-	-
- Sales unit	2	2	-				-	-
- Accounting	3	3	-				-	-
- General administration			-				-	-

V. ANNUAL PRODUCTION

(1967)	Yr. of prod.	Quantity produced		Av. unit price on factory RUB (R)	Total output value (000 US\$)
		Unit	Quantity		
Products for group of products					
Men's shirts	1960	000 pcs	294	}	1,173
Children's shirts	1960	000 pcs	136		
TOTAL VALUE OF PRODUCTION:					1,173 *****

VI. VALUE ADDED

(1967)	Total value (000 US \$)
1. Annual wages & salaries	199
- Operative workers (163 persons)	171
- Non-operative workers (13 persons)	28
2. Other payments for employees	61
3. Annual depreciation	29
- Machinery & equipment	15
- Buildings & other facilities	14
- Non-physical capital assets	0.1
4. Rentals paid	-
5. Interest & royalties	27
6. Sales tax (*)	1
7. Other indirect business taxes	1
8. (-) Subsidies	-
9. Corporate income before tax	41
(*) See page 4/XII	
Supplements	359
TOTAL VALUE ADDED:	359 *****

DESCRIPTION OF MAJOR PRODUCTS:

Company emphasizes high quality of its products. Very fashionable shirts. Serial production.
Prompt delivery.

MARKET ASPECTS:

Sales commission:

The company does not employ own district representatives due to the fact that it produces exclusively for one large textile trading company (parent company).

Extent of market:

Domestic market only. Main sales areas: 2 largest cities of the country.

Share in the domestic market:

7 - 8%.

Competition in the market:

Keen competition due to imports partly offered at dumping prices by low wage countries.

EXPORT:

Total annual export: No exports.

Major products	To Western countries	To Eastern countries	To Developing countries

No exports because the present assortment of shirts is still too limited for the European market.

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import prices (000 US \$)	Total consumption value (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity				
1. Energy and water						
TOTAL:					10	
- Electricity	000 kWh	176	-	-	6	
- Coke	t	30	-	-	1	
- Petrol and diesel oil	t	..	-	-	1	
- Fuel oil	t	21	-	-	1	
- Water	000 m3	4.3	-	-	1	
2. Production materials						
TOTAL:					755	
- Fabrics (standard width 90 cm)	000 m	900	30	46	696	
- Threads and yarns	..	..	-	-	12	
- Labels and buttons	..	..	-	-	16	
- Miscellaneous	..	..	-	-	31	
3. Other materials & supplies						
TOTAL:					30	
- Packaging material (cardboard boxes)					29	
- Parts, supplies & services					-	
- Other materials & supplies					1	
4. Business services purchased						
TOTAL:					19	
- Transportation, storage & insurance					5	
- Communication, advertising & other business services					14	
5. Work performed by subcontractors						
TOTAL:					-	
TOTAL VALUE OF CONSUMPTION:						814 *****

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (N.I.):	Number	Original Purchase Value (000 US \$)	Replacement value (000 US \$)	Av. Age (yrs)	Remarks:		Supplier country	Daily running time	Capacity (units)
					EE: Purchased second-hand	OE: Obsolete			
Table for cutting to size with Band iron Vertical cutting device (maximum cutting depth 17 cm)	2	11.2	13.9	15			Germany, F.R.	9 hrs 9 "	
Fabric laying machine	1	9.3	10.8	4			Switzerl.	4 "	2,000,000 m/year
Sewing machines	120	37.5	59.6	12			mainly USA and Germany, F.R.	9 "	
Button breakers	2	9.2	10.4	3			Germany, F.R.	8 "	
Button stitchers	2	3.6	4.3	3			Italy, USA	7 - 8 hrs	
Multiple-purpose automatic machines	1	5.9	7.0	3			Germany, F.R.	6 hrs	
Processes for linens and collars	6	12.0	14.0	10			Austria, Germany, F.R., Switzerl.	9 "	100-150 proceedings per hour
Conveyor belt	1	..	1.5	4			Switzerl.	8 "	
Linens marking machine	1	..	..	7			Germany, F.R.		
Others	..	7.1	9.6	-					

CAPACITY POWER:
 Process equipment:
 - electric motors 85 kW

Generating equipment:
 installed capacity - kVA

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization:	Automation:	Further details:
		A most advanced B considerably high standard	C modern standard D appreciably short of today's standard E almost outdated	I fully automated II semi-automated III un-automated
Cutting	Fabrics are spread out on cutting table by fabric-laying machine, smoothening is done by hand	B	II	Approx. cutting thickness: 10 - 12 cm Approx. 1,000,000 m (linear measure, standard width 90 cm) can be processed every year
Sewing	No conveyor-line production	C	III	
Finishing	Finishing, pressing, folding, packaging	A	II	

CAPACITY UTILIZATION:

Full-capacity output: US \$ 1,400,000.
 No additional labour requirements.

Current utilization: Based on 1-shift operation.

Major products by process	Approximate %					
	to 30	40	50	60	70	80
Shirt manufacturing						X

Factors responsible for the present capacity utilization:

- Fluctuations in supply of production materials are an obstacle to the manufacturing process.
- Lack of skilled operatives.

For the time being output is not high enough to meet demand.

IX. HISTORY & PLAN

1. Performance in the past:	Total output (000 US \$)	No. of persons employed	Total exports (000 US \$)
Year: 1963	650	140	-
1964	880	181	-
1965	1,020	191	-
1966	1,080	176	-
1967	1,200	176	-
1968	1,280	158	-

2. Investments in the past:	Approximate amount (000 US \$)	Type of investment
From 1960 to 1965:	155	Construction of plant
	270	Equipment and machinery
in 1967:	10	

3. Future Plan:

From 19 - to 19 - : Only replacement investments are planned within the next years.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C - confidential; figures of these size groups are included in those underlined.

(1964)

Industry: Manufacture of wearing apparel except footwear (SIC-Code: 243)

1. Size groups by number of persons employed	No. of estab.	No. of empl.	Av. W. & E. per pers. (US \$)	Av. gross prod. vol./per pers. (US \$)	Av. value added/gross prod. ratio (%)	2. Size groups by annual sales of production (000 US \$)	No. of estab.	No. of empl.	Av. W. & E. per pers. (US \$)	Av. gross prod. vol./per pers. (US \$)	Av. value added/gross prod. ratio (%)
up to 19	17,978	22,902	771	3,816	53	20 - 40	585	4,599	935	3,480	56
20 - 99	439	18,646	1,171	5,220	47	40 - 200	622	11,769	1,081	4,483	50
100 - 499	105	21,412	1,263	5,958	44	200 - 400	130	6,369	1,192	5,473	48
500 - 999	2	C	C	C	C	400 - 2,000	157	18,326	1,269	6,464	43
over 1,000	1	C	C	C	C	over 2,000	15	7,182	1,356	6,692	41
TOTAL:	13,985	62,960	1,057	4,960	47	TOTAL:	13,525	62,960	1,057	4,960	47

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|---|---------------------------------------|----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export transaction |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of services	Country or region	No. of projects	Field of industry	Description of projects
------------------	-------------------	-----------------	-------------------	-------------------------

8

The enterprise is interested in importing low-priced fabrics (for the manufacture of fashionable and low quality shirts).

Although the enterprise cannot cope with the present domestic demand it is inclined to venture to export its products if the government is willing to provide the company with export credits.

XII. SUPPLEMENTS & NOTES

Settlements in the past:

Lack of personnel, delayed supply of production materials.

Financing policy:

The straight-line method is applied.

Training programs:

In 1967 no training courses were held.

of VI. Value added:

Only the sales tax for products bought by employees is included in this computation. Taxes for all other sales are borne by the parent company.

Major Products: Ladies' dresses and suits.

Capable of producing about 90,000 dresses annually. Full capacity output amounts to US \$ 1.16 million based on 1-shift operation.

Reporting Unit:

A one-establishment enterprise; founded in 1956. One of the 3 largest enterprises of this branch in the country; 143 employees; 13% exports; latest fashion trends are continuously studied and adopted.
Business year: 1 Feb. 1967 - 31 Jan. 1968.

I. FIXED CAPITAL ASSETS

(End of January 1968)

	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average age (Yrs.)
1. Primary process equipment (including installation cost)			
TOTAL:	85	107	
- Process equipment *	85	107	..
- Hand tools & apparatuses	-	-	-
2. Buildings			
TOTAL:	100	201	
- Primary industrial buildings (total floor space: 960 m ²)	100	201	13
- Auxiliary buildings			13
- Warehouses			4
- Office administration buildings			-
- Housing	-	-	-
3. Auxiliary facilities (excl. buildings)			
TOTAL:	44	46	
- Internal power equipment	-	-	-
- Laboratory facilities	-	-	-
- Means of transportation	17	17	2
- Office equipment	27	29	4
TOTAL PHYSICAL FIXED ASSETS (excluding land):	229	354	
4. Other fixed capital assets			
TOTAL:	23	52	
- Land (total acreage: .. m ²)	4	31	-
- Land improvements ..	-	-	-
- Others	19	21	-

*NB. Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII.)

II. MONTHLY GROSS WAGES AND SALARIES

(1967 monthly average)

	Number of persons					over 560 US\$
	up to 100 US\$	100 -140 US\$	140 -160 US\$	160 -240 US\$	240 -560 US\$	
1. Local non-operatives						
- Managers	-	-	-	-	-	1
- Engineers	-	-	-	-	-	-
- Technicians	-	1	3	-	2	-
- Accountants	1	-	1	-	-	-
- Sales officers	1	-	-	-	1	-
- Clerks and typists	2	1	5	1	-	-
2. Local operatives						
- Supervisors	-	-	-	-	-	-
- Foremen	-	5	-	1	-	-
- Skilled operatives	-	35	-	-	-	-
- Machine operators	4	45	-	-	-	-
- Craftsmen	-	-	-	1	-	-
- Truck drivers	-	1	-	-	-	-
- Unskilled operatives	8	4	-	-	-	-
- Other full-time operatives	-	3	-	-	-	-
- Part-time operatives	-	-	-	-	-	-
- Apprentices	15	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	1
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

EXTERNAL CONDITIONS:

Transport:	- external long distance	fair
	- internal long distance	"
	- local and city	poor
Utilities:	- electricity	excellent
	- water	"
	- gas	insignificant
Community:	- roads	fair
	- health and recreation	"
	- education	"
Own Welfare Facilities:		Pension fund

III. INVENTORIES

(End of January 1968)

	Actual value (000 US \$)	Number of months
Inventories	155	
TOTAL:		
- Production materials	46	2
- Other input materials	1	2
- Work-in-process	31	1
- Finished products	(*) 77	6 days - 2 months

(*) Seasonal fluctuations

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift inventory	9	-	-	hours
Actual inventory	2,088	-	-	hours
Actual days/year	232	-	-	days

IV. MANNING TABLE

(1967 average)

	Total	Shift categories				2nd Shift B-C	3rd Shift B-B
		A	B	C	D		
ALL SHOPS & UNITS:	143	21	122			-	-
1. Primary operative shops	117	3	39	64	11	-	-
- Pattern making department	4	1	3	-	-	-	-
- Cutting department	13	1	1	-	11	-	-
- Sewing department	94	1	35	58	-	-	-
- Ironing department	6	-	-	6	-	-	-
2. Auxiliary operative units	12	4	8		-	-	
- Repair & maintenance	2	1	1		-	-	
- Mechanical shop	-	-	-		-	-	
- Tooling shop	-	-	-		-	-	
- Utilities control	3	1	2		-	-	
- Product & material storage	5	2	3		-	-	
- Off-site transport	1	-	1		-	-	
- Guards, cleaners, etc.	1	-	1		-	-	
3. Auxiliary non-operative units	14	14	-		-	-	
- Production management	2	2	-		-	-	
- Research & development	2	2	-		-	-	
- Sales unit	4	4	-		-	-	
- Accounting	3	3	-		-	-	
- General administration	3	3	-		-	-	

V. ANNUAL PRODUCTION

(1967) Products for group of products	Yr. of first prod.	Quantity produced		Av. unit price on factory (US \$)	Total output value (1966 US\$)
		Unit	Quantity		
Ladies' dresses and suits	1956	pcs	80,400	10	807
TOTAL VALUE OF PRODUCTION:					807 *****

VI. VALUE ADDED

(1967)	Total value (1966 US \$)
1. Annual wages & salaries	175
- Operative workers (122 persons) (*)	128
- Non-operative workers (21 persons)	47
2. Other payments for employees	50
3. Annual depreciation	19
- Machinery & equipment	15
- Buildings & other facilities	4
- Non-physical capital assets	0.2
4. Rentals paid	0.3
5. Interest & royalties	17
6. Sales tax	34
7. Other indirect business taxes	2
8. (-) Subsidies	-
9. Corporate income before tax	52
(*) incl. 15 apprentices	
TOTAL VALUE ADDED:	349 *****

DESCRIPTION OF MAJOR PRODUCTS:

Serial production (series of 80 - 2,000 pieces per model); packed in cartons (1 - 40 pieces per carton). All dresses are easily washable.

Terms of delivery: depending on season, at the worst up to 6 months; standard models approx. 14 days. Delivery of summer collection: February to April, delivery of winter collection: August to October.

MARKET ASPECTS:

Consumers of products:

Ladies, especially between 25 - 35 years of age.

Sales organization:

1 independent representative and 1 salaried travelling salesman. Fashion shows in cities, customers are visited by mannequins. Sales office in the capital. Products are presented at approx. 6 domestic and foreign fairs per year.

Share in the domestic market:

10% of the market for ladies' dresses.

Export areas:

Western and Northern European countries, USA and Canada.

Export price policy:

The enterprise is capable of exporting its products at internationally competitive prices.

EXPORT:

Total annual export: US \$ 108,000.

Major products	To Western countries	To Eastern countries	To Developing countries
Ladies' dresses	100%	-	-

Governmental policies:

The government subsidizes exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under VI.6. has been adjusted accordingly.

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import duties	Total consumption value (1966 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL:					8
- Electricity	000 kWh	116	-	-	3
- Fuel oil	t	86	-	-	3
- Petrol	t	13	-	-	2
2. Production materials					
TOTAL:					360
- Wollen fabric	m	34,092			} 291
- Artificial silk fabric	"	30,944			
- Cotton fabric	"	19,725			
- Synthetic fabric	"	30,109			
- Knitted fabric	"	4,962			
- Spun rayon fabric	"	24,773			
- Accessories	-	-			69

	Total consumption value (1966 US \$)
3. Other materials & supplies	
TOTAL:	31
- Packaging material (cartons, plastic bags)	4
- Parts, supplies & services	21
- Other materials & supplies	6
4. Business services purchased	
TOTAL:	57
- Transportation, storage & insurance	9
- Communication, advertising & other business services	48
5. Work performed by subcontractors	
TOTAL:	2
TOTAL VALUE OF CONSUMPTION:	458 *****

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (1.1):

	Number	Original Purchase Value (1960 US \$)	Replacement value (1960 US \$)	Avg. Age (yrs)	Remarks	Supplier country	Year of installation	Daily running time	Capacity output
Pattern cutting machine	1	0.1	0.1	-	-				
Perforating machine	1	0.3	0.4	8	-				
Trimming machines	2	0.3	0.4	2	-	USA	1967	6 hrs	
Round knife machines	6	1	1	4	-	Germany, F.R.	1967	6 "	
Band knife machine	1	1	1	6	-				
Folding carriage	1	2	2	4	-				
Unrolling device	1	0.4	0.4	4	-				
Cloth folding and cutting equipment	2	1	1	4	-				
Fixing press	1	2	3	2	-				
Numbering machine	1	0.3	0.4	2	-				
High speed sewing machines	60	23	30	6	partly SH	UK, Germany, F.R., USA, Germany, F.R.	1967, 1968, 1956, 1961, 1964, 1965	9 "	150-200 dresses per hour
Button breaker	4	5	6	5	partly SH				
Button stitcher	1	1	1	13	-				
Blind stitch machines	4	4	4	5	-				
Zig zag sewing machines	3	2	2	4	partly SH				
Oversew machines	7	3	4	6	-	Italy, Germany, F.R.	1966	up to 9 hrs	
Saddler stitch machine	1	1	1	4	-				
Folding machine	1	1	1	4	-				
Zip fastener sewing machines	2	1	2	10	partly SH				
Long arm sewing machine	1	1	1	4	-				
Other special machines	6	5	7	..	-				
Universal finishing press	1	1	1	6	-				
Cloth moulding machine	1	1	1	5	-				
Universal ironing tables	8	4	5	3	-				
Steam irons	8	1	1	4	-				
Other machines	..	23	30	..	-				

CAPACITY POWER:

Process equipment:

- electric motors kW 54
- other prime movers " 25

Generating equipment:

- installed capacity kVA -

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Machin.	Autom.	Further details:
Pattern making department	Drawing - cutting - enlarging - interpolating (to make all sizes equal)	B	III	
Cutting department	Lay-out drawing - numbering of pieces - adjusting and bundling	B	III	
Sewing department	Combination of single and group production	B	III	Output: 400 pcs/day
Ironing department	Ironing - labelling	B	III	Output: 400 pcs/day

CAPACITY UTILIZATION:

Full-capacity output: US \$ 1,160,000.

Current utilization: 1-shift operation

Major products (or processes)	up to	Approximate %
	30	40 50 60 70 80 90 100
Pattern making department		X
Cutting department		X
Sewing department		X
Ironing department		X

Due to lack of skilled operatives company could not utilize its entire capacity.

IX. HISTORY & PLAN

1. Performance in the past:	Total output (1960 US \$)	No. of persons employed	Total exports (1960 US \$)
Year: 1963	480	118	5
1964	580	120	10
1965	640	133	50
1966	670	140	90
1967	820	140	110
1968	970	124	120

2. Investments in the past:	Approximate amount (1960 US \$)	Type of investment
From 19 56 to 19 66:	100	Buildings
	50	Equipment
" 1959 " 1966:	90	Machinery and transportation facilities
in 1967:	25	

3. Future Plan:

From 19 69 to 19 74: .. (*) Rationalization and specialization of machinery, equipment and product-mix.

(*) Amount depends on growth of exports.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C = confidential; these size groups are included in the underlined figures.

(1964)

Industry Manufacture of wearing apparel except footwear (SIC Code: 243)

1. Size groups by number of persons employed:	No. of estab.	No. of empl.	Avg. W. & S. per pers. (1960 US \$)	Avg. gross prod. val./per pers. (1960 US \$)	Avg. value added/gross prod. ratio (%)	2. Size groups by annual sale of production (1960 US \$):	No. of estab.	No. of empl.	Avg. W. & S. per pers. (1960 US \$)	Avg. gross prod. val./per pers. (1960 US \$)	Avg. value added/gross prod. ratio (%)
up to 19	12,978	22,902	771	3,816	53	up to 20	12,016	14,715	607	2,855	80
20 - 99	439	18,646	1,171	5,220	47	20 - 40	585	4,599	935	3,480	56
100 - 499	105	21,412	1,263	5,958	44	40 - 200	622	11,769	1,081	4,483	50
500 - 999	2	C	C	C	C	200 - 400	130	6,369	1,192	5,473	48
over 1,000	1	C	C	C	C	400 - 2,000	157	18,326	1,269	6,464	43
						over 2,000	15	7,182	1,356	6,692	41
TOTAL:	13,525	62,961	1,057	4,960	47	TOTAL:	13,525	62,960	1,057	4,960	47

Major Products: Woolen and synthetic yarns. Full capacity output amounts to US \$ 2,7 million or 650 - 700 t of yarns based on 2-shift operation. In 1967 the company produced about 520 t of yarns.

Reporting Unit: A one-establishment enterprise, privately owned, founded about 1900.
Due to continuous investments the spinning mill could be kept on a normal technical level of operation.
250 employees.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (000 US \$)	Replacement value (000 US \$)	Avg. age (Yrs.)
1 Primary process equipment (including installation cost)			
TOTAL	1,293	1,730	10
- Process equipment *	1,281	1,730	10
- Hand tools & apparatuses	12	..	10
2 Buildings			
TOTAL	625	1,064	32
- Primary industrial buildings (total floor space: 20,304 m ²)	434	677	25
- Auxiliary buildings	65	155	25
- Warehouses	38	77	10
- Office administration buildings	12	39	50
- Housing	76	116	50
3 Auxiliary facilities (excl. buildings)			
TOTAL	148	193	
- Internal power equipment	117	..	25
- Laboratory facilities	5	..	6
- Means of transportation	4	..	6
- Office equipment	22	..	10
TOTAL PHYSICAL FIXED ASSETS (excluding land)	2,066	2,987	
4 Other fixed capital assets			
TOTAL	24	47	
- Land (total acreage: 50,202 m ²)	14	..	-
- Land improvements (t.acr. 26,464 ")	10	19	-
- Others	-	-	-

*NB Details of process equipment and capacity of primary operative shops are given on Page Three (Six) in VIII.

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1967 monthly average)	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1. Local non-operatives						
- Managers	-	-	-	-	2	-
- Engineers	-	-	-	-	-	-
- Technicians	-	-	-	2	1	-
- Accountants	-	1	-	-	-	-
- Sales officers	-	-	1	-	-	-
- Clerks and typists	-	2	-	5	1	-
- Others	-	-	-	1	-	-
2. Local operatives						
- Supervisors	-	-	-	-	1	-
- Foremen	-	6	1	9	1	-
- Skilled operatives	-	1	-	-	-	-
- Machine operators	6	154	11	4	-	-
- Craftsmen	-	1	11	4	-	-
- Truck drivers	-	2	1	-	-	-
- Unskilled operatives	3	15	-	1	-	-
(*) - Other full-time operatives	-	-	2	-	-	-
- Part-time operatives	-	-	-	-	-	-
(*) steam plant	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	1	-	-	-
- Unskilled operatives	-	3	-	-	-	-

EXTERNAL CONDITIONS.

Transport	external long distance	insignificant
	internal long distance	"
	local and city	"
Utilities	electricity	excellent
	water	"
	gas	"
Community	residence	Fair
	health and recreation	insignificant
	education	"

Own Welfare facilities: Company subsidized lunch, payments in kind depending on period of employment.

III. INVENTORIES

(End of 1967)	Actual value (000 US \$)	Number of months
Inventories	617	
TOTAL		
- Production materials	173	3
- Other input materials	61	4
- Work-in-process	12	1
- Finished products	171	1

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
- Shift hours/day	8	8	8	hours
- Actual hours/year	1,964	..	..	hours
- Actual days/year	228	..	..	days

IV. MANNING TABLE

(number of persons)

Shift categories: A. Supervisory staff and foremen (for all shifts)
B. Skilled operatives
C. Semi-skilled operatives (machine operators)
D. Unskilled operatives

(As per 11/12/1967)	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	B-D	B-D
ALL SHOPS & UNITS:	254	23	159			66	6
1 Primary operative shops	194	9	5	114	3	57	6
Spinning dept. (Carded yarn)	10	-	1	8	-	1	-
Spinning dept. (Worsted yarn)	97	4	1	35	3	39	5
Printing dept. (Worsted yarn)	16	-	1	8	-	7	-
Converter	3	-	-	1	-	1	1
Weaving dept.	21	2	1	9	-	9	-
Sewing dept.	35	1	-	34	-	-	-
Dyeing dept.	19	2	1	16	-	-	-
Finishing dept.	3	-	-	3	-	-	-
2. Auxiliary operative units	47	2	36			9	-
- Repair & maintenance	21	-	15			6	-
- Mechanical shop	-	-	-			-	-
- Tooling shop	-	-	-			-	-
- Utilities control	6	-	6			-	-
- Product & material storage	7	1	5			1	-
- Off-site transport	3	1	2			-	-
- Guards, cleaners, etc.	8	-	7			1	-
- Others	2	-	1			1	-
3. Auxiliary non-operative units	13	12	1			-	-
- Production management	3	3	-			-	-
- Research & development	-	-	-			-	-
- Sales unit	2	2	-			-	-
- Accounting	6	6	-			-	-
- General administration	2	1	1			-	-

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|---|---------------------------------------|-------------------------------------|
| 1. Engineering study | 3. Technical and managerial personnel | 5. Import and export promotion |
| 2. Financial assistance | 4. Industrial training | 6. Administration of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of services	Country or region	No. of projects	Field of industry	Description of projects
3				Know-how contracts could be supplied for planning, designing, cutting and manufacturing of dresses and costumes.
5				Some personnel could be provided.
6				In-plant training of sewers would be possible.
7				Technical consultancy could be provided if demanded.

XII. SUPPLEMENTS & NOTES

Contract and commission work:

Manufacture of ladies' dresses on commission basis amounted to US \$ 19,000.

On the other hand, subcontractors plotted material for the reporting enterprise to the amount of US \$ 2,000.

Depreciation policy:

The enterprise applies both the straight-line and the accelerated methods of depreciation.

Inventory policy:

Depending on the season, the value of finished products amounts as a minimum to 10% of total value of production.

History of investment:

Construction and production of the factory was started in 1956. The break-even point was surpassed in the same year.

Major Products:

Wearing apparel. Current annual production of approximately 80,000 pieces of children's overcoats, work overalls, and other garments on one-shift operation.

Reporting Unit:

An independent one-establishment unit with approximate fixed capital assets of US \$ 300,000 and 136 employees, as of 1968. Founded in 1960. Present factory established in 1965.

I. FIXED CAPITAL ASSETS					II. INVENTORIES AND WORKING CAPITAL						
(End of 1968)					(End of 1968)						
	Year of installation	Orig. purchase value (1000 US \$)	Replacement value (*) (1000 US \$)		Actual value	2. Liquid assets	Actual value				
1. Primary process equipment					1. Inventories						
TOTAL:					TOTAL:						
	1965	121	121		147	TOTAL:	176				
- Process equipment		109	109	- Production materials	105	- Cash (hand/bank)	130				
- Hand tools & apparatus		12	12	- Other input materials	24	- Market. sec. & bonds	-				
- Cost of installation		-	-	- Work-in-process	18	- Short-term investment	-				
				- Finished products		- Prepaid expenses	-				
						- Accounts receivable	46				
2. Primary industrial building					3. Desired working capital						
TOTAL:					TOTAL:						
		160	160		Number of months	Value					
(total floor space: 2,500 m ²)		160	160			165					
				- Production materials	3	105 (*)					
3. Auxiliary facilities					- Other input materials	3					
TOTAL:					- Finished products	3					
		10	9.5	- Wages & salaries	3	60					
- Water, steam, electricity, cooling & storing		-	-	- Other special items	-	-					
- Transportation facilities		4.5	3.5	(*) Incl. work-in-process.							
- Administrative facilities		5.5	6	III. MANNING TABLE					(number of persons)		
- Laboratory facilities		-	-	(1968 average)					A - Machine operator B - Other operator		
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):					ALL SHOPS & UNITS:						
		290	290.5	1. Primary operative shops							
		-----	-----	2. Auxiliary operative units							
4. Other fixed capital assets					3. Auxiliary non-operative units						
TOTAL:					WORKING TIME PER OPERATIVE WORKER:						
		10	15	- Normal hours/day: 8 hours					- Normal days/year: 265 days		
- Land (total acreage: 6,000 m ²)		10	15	- Actual hours/year: 1,950 hours					(including 50 half-days - Saturdays)		
DETAIL OF PROCESS EQUIPMENT (incl.:					CAPACITY OF OPERATIVE SHOPS:						
	Supplier country	Year of installation	Orig. purchase value (1000 US \$)	Replacement value (*) (1000 US \$)	- Productive cycle is fairly balanced with all shops functioning at about 60% of capacity.						
Special sewing machines	Italy	1966	20	20	- Basis for capacity calculations is one-shift operation.						
Heavy duty presses	Germany, F.R.	1966	21	21	- Improved articulation of existing resources would lead to a good 25% increase in efficiency as judged by the average work time per finished coat. At present this equals 5 hours as opposed to an easily obtainable "average efficiency" production of 3 - 3 1/2 hours for similarly capitalised enterprises.						
Specialised cutting machines	Germany, F.R.	1966	3	3							
Ordinary sewing machines	UK, Germany, F.R.	1963	15	15							
General equipment including .. hand tools, cutting tables, shelves, other installations, etc.	..	1964	50	50							
(*) Replacement value:											
Indicates the approximate valuation (by the plant manager) for the replacement of a given facility, taking into account its current functional status, i.e. obsolete or old machinery will thus be cheap to "replace".											
CAPACITY POWER:											
Process equipment: No data available.					Generating equipment: Installed capacity: - kVA						
- Electric motors: kW											
EXTERNAL CONDITIONS:											
Transport: Local, regional, national; fair.											
Utilities: Electricity and water; fair.											
Community: Housing and public health; fair. Schools; excellent. Recreation facilities; poor.											

IV. ANNUAL PRODUCTION

(1968) Products (or group of products)	Vr. of Prod. prod.	Quantity produced		Nominal quantity output	Unit price in factory (US \$)	Total production value (1968 US \$)
		Unit	Output			
Overcoats	1960	piece	60,000	75,000	9.50	570
Coveralls	1968	piece	1,500	10,000	4.60	7
Miscellaneous garments (including pants and jackets)	1960	piece	8,000	30,000	8.00	64
TOTAL PRODUCTION VALUE						641

Notes: Corporate income: This is an aggregate figure which has been derived as a residual and should be interpreted as including certain other categories of expenses as well as profits.

VI. VALUE ADDED

(1968)	Value (1968 US \$)
1. Wages & salaries	
- Employees in direct production (130 persons)	101
- Other employees (6 persons)	16
2. Other payments for employees	81
3. Annual depreciation	19
4. Rentals paid	-
5. Interests & royalties	2
6. Sales tax	-
7. Other ind. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax (*)	32
(*) See note under IV.	251

VII. MONTHLY EARNING RATES

(End of 1968)	No. of pers. empl.	Average earning rate (monthly) (US \$)
1. Local non-operative		
TOTAL:	6	
- Managers	1	500
- Engineers	-	-
- Technicians	-	-
- Accountants	1	200
- Sales officers	1	200
- Other professional staff	-	-
- Clerks & typists	1	70
- Executive assistants	2	120
2. Local operative		
TOTAL:	130	
- Supervisors	-	-
- Foremen	5	120
- Machine operators	64	60
- Craftsmen	-	-
- Truck drivers	1	100
- Other full-time operatives	55	60
- Unskilled operative	3	60
- Others	2	100
3. Foreign employees		
TOTAL:	-	-

V. ANNUAL CONSUMPTION

(1968)	Quantity consumed			Unit price	Total consumption value (1968 US \$)
	Unit	Purchas	% imported		
1. Energy and water					
TOTAL:					5
- Electricity	000 Kwh	50	-	0.042	2.1
- Fuels	t	70	-	33	2.3
- Water	..	..	-	..	0.2
2. Production materials					
TOTAL					308
- "Wool blend" fabrics	000 a	100	-	2.1	210
- Lining materials	000 a	60	-	0.8	48
- Accessories	..	..	-	..	50

	Total consumption value (1968 US \$)
3. Other materials & supplies	
TOTAL:	16
- Packagings	5
- Repair & maintenance	2
- Non-factor service inputs	9
4. Business services purchased	
TOTAL:	61
- Sales service at average rate of 6% of sales	38
- Transport, communication, insurance, etc.	23
5. Work performed by sub-contractors	
TOTAL:	390

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1961)
Industry group: Manufacture of wearing apparel, except footwear (ISC: 243)

1. Size groups by number of persons employed:	No. of establ.	No. of empl.	Total labour resources	Value added	Gross prod. value	Fixed invest- ment
up to 99	118,459	74	105	134	320	2.9
100 - 499	226	208	328	382	940	25
500 - 999	14	640	1,120	1,300	5,180	138
1,000 - 4,999	4	2,160	4,320	5,900	16,300	615
National Average (total)	118,703	278	465	573	1,600	44.5

2. Size groups by number of persons employed:	Average per employee (in US \$)					
	No. of establ.	No. of empl.	Total labour resources	Value added	Gross prod. value	Fixed invest- ment
up to 99	118,459	74	936	1,123	-	24
100 - 499	226	208	967	1,146	-	75
500 - 999	14	640	1,097	1,363	-	135
1,000 - 4,999	4	2,160	1,310	1,684	-	178
National Average (total)	118,703	278	1,070	1,313	-	107

IX. SUPPLEMENTS

(a) Recent production history:

	1960	1964	1965	1966	1967
Total output (000 US \$)	9	230	320	450	640
Total number of persons	7	60	70	70	90
Output value p.worker (US \$)	1,300	3,800	4,600	6,400	7,100
Total output (000 US \$)	(*) 1968	720	880		
Total number of persons	130	140			(*) Estimates
Output value p.worker (US \$)	5,500	6,300			

(b) Desired structural relations of costs (**)

	Goal (**)	Actual (***)
Materials	40.5%	54%
Labour	20.9%	26%
Selling costs	14.0%	8%
Administrative costs	4.6%	4%
Depreciation	3.7%	3%
Other costs	4.7%	-
Profits	11.4%	5%
	100.0%	100%

(**) As suggested by Government Technical Agency for this particular plant.

(***) As called from this report.

Major Products: Wearing apparel. Current annual production of about 25,000 pieces of coats, jackets, suits, and pants based on one-shift operation.

Reporting Unit: An independent one-establishment unit with fixed capital assets valued currently at about US \$ 100,000 and 48 employees, as of 1968. Founded in 1948. Business year: 1 March 1967 - 28 February 1968.

I. FIXED CAPITAL ASSETS

(End of February 1968)

	Average age	Orig. purchase value (000 US \$)	Replacement value (*) (000 US \$)
1 Primary process equipment		21	19
TOTAL		21	19
- Process equipment	5	15	15
- Hand tools & apparatuses	10	6	4
- Cost of installation	-	-	-
2 Primary industrial building		24	56
TOTAL		24	56
(total floor space: 600 m ²)		24	56
3 Auxiliary facilities		..	..
TOTAL		..	..
- Water, steam, electricity, cooling & storing		..	..
- Transportation facilities		21	9
- Administrative facilities		included in (2)	
- Laboratory facilities		-	-
TOTAL PHYSICAL FIXED CAPITAL ASSETS (excluding land):		66	84
4 Other fixed capital assets		8	16
TOTAL		8	16
- Land (total acreage: 1,000 m ²)		8	16

DETAIL OF PROCESS EQUIPMENT (no.)	Supplier country	Year of installation	Orig. purchase value (000 US \$)	Replacement value (*) (000 US \$)
Special sewing machines	3 Germany, F.R.	1965/66	6.4	6.4
Ordinary sewing machines	15 Italy	1963/64	3.6	3.6
Heavy-duty pressing machines	2 Germany, F.R.	1967	3.0	3.0
Small cutting machines	2 Germany, F.R.	1964	1.1	1.1

(*) **Replacement value:** Indicates the approximate valuation by the plant manager for the replacement of a given facility, taking into account its current functional status, i.e. obsolete or old machinery will thus be cheap to "replace".

CAPACITY POWER:

Process equipment:
- Electric motor: 0.2 kW

Generating equipment:

Installed capacity: - kVA

EXTERNAL CONDITIONS:

Transport: quite satisfactory.

Utilities: electricity is cheap, water scarce and expensive.

Community: residential and recreational, poor; health and educational, excellent.

II. INVENTORIES AND WORKING CAPITAL

(in 000 US \$)

(End of February 1968)

	Actual value	2. Liquid assets	Actual value
1. Inventories	77	TOTAL	144
TOTAL	77	- Cash (hand/bank)	40
- Production materials	32	- Market. sec. & bonds	56
- Other input materials	13	- Short-term investment	-
- Work-in-process	32	- Prepaid expense	-
- Finished products	32	- Accounts receivable	48
3. Desired working capital	Number of months	Value	
TOTAL	Not available	Not available	
- Production materials			
- Other input materials			
- Finished products			
- Wages & salaries			
- Other special items			

III. MANNING TABLE

(number of persons)

	Total	1st shift		2nd shift A+B	3rd shift A+B
		A	B		
(1967/68 average)	48	48		-	-
ALL SHOPS & UNITS:	41	25	16	-	-
1. Primary operative shops	41	25	16	-	-
- Cutting	6	1	5	-	-
- Sewing	20	20	-	-	-
- Pressing	2	2	-	-	-
- Miscellaneous hand work	11	-	11	-	-
- Supervisory staff and foremen (for the above units)	2	2	-	-	-
2. Auxiliary operative units	2	2	-	-	-
- Repair and maintenance	-	-	-	-	-
- Mechanical shop	-	-	-	-	-
- Utilities control	-	-	-	-	-
- Product & material storage	2	2	-	-	-
- Off-site transport	-	-	-	-	-
- Guards, cleaners, etc.	-	-	-	-	-
3. Auxiliary non-operative units	5	5	-	-	-
- Production management	1	1	-	-	-
- Research & development	-	-	-	-	-
- Sales unit	1	1	-	-	-
- General administration	3	3	-	-	-
- Accounting	-	-	-	-	-

WORKING TIME PER OPERATIVE WORKER:

- Normal hours/day: 8.5 hours - Normal days/year: 240 days
- Actual hours/year: 1,860 hours (Saturdays are half-days)

CAPACITY OF OPERATIVE SHOPS:

Organization of the firm as a whole as well as the several operative shops, is so loose that it is difficult to make any meaningful quantitative observation concerning capacity. The following observations should prove helpful in this regard:

(i) all machinery is active at least 90% of actual working time;

(ii) there is no indication of any attempt on the part of the management to think in terms of either explicit capacity criteria or rational flows of materials, etc. within existing plant.

(See part IV. for detailed treatment of this concept).

IV. ANNUAL PRODUCTION

(1967) Products (or group of products)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price in factory (US \$)	Total production value (000 US \$)
		Unit	Output			
Men's overcoats	1948	000 pcs	5	..	16	80
Boys' overcoats	1948	" "	2	..	10	20
Men's suits	1949	" "	2.5	..	16	40
Women's overcoats	1961	" "	5	..	16	80
Men's jackets	1960	" "	1.5	..	10	15
Men's pants	1960	" "	1	..	4	4
Girls' overcoats	1960	" "	2	..	10	20
Women's suits	1960	" "	1.5	..	13	20
Boys' suits	1960	" "	0.5	..	10	5
Other non-specified articles	1956	" "	1.5	..	varies	63
TOTAL PRODUCTION VALUE						347 -----

VI. VALUE ADDED

(1967)	Value (000 US \$)
1. Wages & salaries	
- Employees in direct production (43 persons)	72
- Other employees (5 persons)	20
2. Other payments for employees	24
3. Annual depreciation	1
4. Rentals paid	-
5. Interests & royalties	2
6. Sales tax	-
7. Other ind. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax (*)	74
(*) See IX. Supplements.	198 -----

VII. MONTHLY EARNING RATES

(End of February 1969)	No. of pers. empl.	Average earning rate (monthly) (US \$)
1. Local non-operatives		
TOTAL:	5	Min. Max.
- Managers	1	more than 240
- Engineers	-	-
- Technicians	-	-
- Accountants	2	160 - 240
- Sales officers	1	160 - 240
- Other professional staff	-	-
- Clerks & typists	1	80 - 160
2. Local operatives		
TOTAL:	43	Min. Max.
- Supervisors	-	-
- Foremen	2	160 - 240
- Machine operators	20	80 - 160
- Craftsmen	6	80 - 160
- Truck drivers	-	-
- Other full-time operatives	15	less than 80
- Unskilled & part-time operatives	-	-
3. Foreign employees		
TOTAL:	-	-

V. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% imported	Unit price (US \$)	Total consumption value (000 US \$)
	Unit	Purchase			
1. Energy and water					
TOTAL:					2
- Electricity	000 Kwh	..	-	0.052	1
- Water		..	-	..	1
2. Production materials					
TOTAL:					135
- Wool and wool-blend fabrics	000 m	45	-	2.10	95
- Lining materials	000 m	25	-	0.77	19
- Accessories (buttons, thread, etc.)	..	..	-	..	21
3. Other materials & supplies					
TOTAL:					4
- Packaging					2
- Repair & maintenance					1
- Non-factor services inputs					1
4. Business services purchased					
TOTAL:					3
- Transport, storage & insurance					6
- Communication, advertisements, etc.					2
5. Work performed by sub-contractors					
TOTAL:					149 -----

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1961)	Manufacture of wearing apparel, industry group: <u>except footwear</u>		(ISIC: 243)			
1. Size groups by number of persons employed:	No. of establ.	No. of empl.	Total labour payments	Value added	Gross prod. value	Fixed invest- ment
up to 99	118,459	74	105	134	320	2.9
100 - 499	226	208	328	382	940	25
500 - 999	14	640	1,120	1,300	5,180	138
1,000 - 4,999	4	2,160	4,550	5,000	16,300	615
National average (total)	118,703	278	465	573	1,600	44.5
Average per employee (in US \$)						
2. Size groups by number of persons employed:	No. of establ.	No. of empl.	Total labour payments	Value added	Gross prod. value	Fixed invest- ment
up to 99	118,459	74	936	1,123		24
100 - 499	226	208	964	1,146		75
500 - 999	14	640	1,097	1,363		135
1,000 - 4,999	4	2,160	1,310	1,684		178
National average (total)	118,703	278	1,070	1,313		107

IX. SUPPLEMENTS

(a) Recent productive history:

	1948	1960	1965	1966	1967	1968
Total output (000 US \$)	160	240	270	305	320	350
Total employees	20	30	35	40	45	48
Output per employee (US \$)	8,000	8,000	7,800	7,650	7,100	7,300

(b) Suggested structural relations of costs for firm
on basis of current development programs:

Cost element	Per cent total costs
Materials	37.7
Labour	28.7
Selling costs	13.7
Administrative costs	6.7
Depreciation	3.5
Other costs	3.8
Profits	6.2
Materials	39.5
Labour	24.0
Selling costs	14.2
Administrative costs	6.0
Depreciation	3.3
Other costs	3.6
Profits	10.4
100	100

ad VI. VALUE ADDED - Item 9.: Corporate income: This is an aggregate figure which has been derived as a residual and should be interpreted as including certain other categories of expenses as well as profits.

Major Products: Wearing apparel. Current annual production of about 100,000 pieces of coats, jackets, suits, and pants based on a one-shift operation.

Reporting Unit: An independent one-establishment enterprise with fixed capital assets volume currently at about US \$ 400,000 and 121 employees, as of 1968. Founded in 1952.

I. FIXED CAPITAL ASSETS

(End of 1967)	Average age	Orig. purchase value 1000 US \$	Replacement value (*) 1000 US \$
1. Primary process equipment	8 years	30	30
TOTAL			
- Process equipment		28	(*)
- Hand tools & apparatuses		2	(*)
- Cost of installation		-	-
2. Primary industrial building		240	300
TOTAL		240	300
(total floor space: 1,842 m ²)			
3. Auxiliary facilities		100	100 (*)
TOTAL			
- Water, steam, electricity, cooling & storing		65	(*)
- Transportation facilities		17	(*)
- Administrative facilities		10	(*)
- Laboratory facilities		8	(*)
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		370	430
4. Other fixed capital assets		10	50
TOTAL		10	50
- Land (total area: 2,500 m ²)		10	50

DETAIL OF PROCESS EQUIPMENT:	Number	Average age	Orig. purchase value (US \$)	Replacement value (US \$)
Zig-Zag sewing machines average price: US \$ 560.-	2	8 years	1,120	About the same market price prevails for all of these machines
Button-hole machines	2	8 years	5,100	
Button-attaching machine	1	8 years	550	
Sample cutting machine	1	8 years	90	
Ribbon cutter	1	8 years	400	
Special sewing machines (invisible point)	2	8 years	2,900	
Cutting machines	4	8 years	2,200	
Special cutting machine	1	8 years	120	
Hemming machine	2	8 years	360	
Special sewing-finishing machine	1	8 years	720	
Hooking machine	1		40	
Standard industrial sewing machines of various makes, average price: US \$ 280.-	37		10,400	
Cutting benches, etc.	..		4,000	

(*) The management estimates that the current replacement value is roughly equal to original price of this well-maintained equipment.

CAPACITY POWER: No data available.
Process equipment:

- Electric motors: kW

Generating equipment:
installed capacity: - kVA

EXTERNAL CONDITIONS:

Transport: generally satisfactory.

Utilities: adequate.

Community: housing: fair/good;
educational system: good

II. INVENTORIES AND WORKING CAPITAL

In 000 US \$

(End of 1967)	Actual value	2. Liquid assets	Actual value
1. Inventories	800	TOTAL:	117
TOTAL:			
- Production materials	260	- Cash (hand/bank)	77
- Other input materials	90	- Market. sec. & bonds	-
- Work-in-process		- Short-term investment	-
- Finished products	450	- Prepaid expenses	-
		- Accounts receivable	40
3. Desired working capital	Number of months	Value	
TOTAL:	Not available		
- Production materials			
- Other input materials			
- Finished products			
- Wages & salaries			
- Other special items			

III. MANNING TABLE

(number of persons)

A = Machine operator
B = Other operative

(1967 average)	Total	1st shift A	2nd shift B	2nd shift A+B	2nd shift A+B
ALL SHOPS & UNITS:	131	131	-	-	-
1. Primary operative shops	116	116	-	-	-
- Cutting	14	14	-	-	-
- Sewing	60	60	-	-	-
- Pressing	5	5	-	-	-
- Other operations including hand sewing, etc.	32	32	-	-	-
- Supervisory staff for the above units	5	5	-	-	-
2. Auxiliary operative units	10	10	-	-	-
- Repair and maintenance	1	1	-	-	-
- Mechanical shop	-	-	-	-	-
- Utilities control	-	-	-	-	-
- Product & material storage	2	2	-	-	-
- Off-site transport	1	1	-	-	-
- Guards, cleaners, etc.	-	-	-	-	-
- Others	6	6	-	-	-
3. Auxiliary non-operative units	5	5	-	-	-
- Production management	1	1	-	-	-
- Research & development	-	-	-	-	-
- Sales unit	1	1	-	-	-
- General administration	1	1	-	-	-
- Accounting	2	2	-	-	-

WORKING TIME PER OPERATIVE WORKER:

- Normal hours/day: 8.3 hours - Normal days/year: 265 days
- Avr. hours/year: 2,080 hours (Saturdays are half-days).

CAPACITY OF OPERATIVE SHOPS:

Given the loose structure of production of an establishment at this stage of productive evolution, it is extremely hazardous to attempt to assign precise quantitative indicators of capacity as such. The following sort of "capacity observation" does seem reasonable, however: on the basis of a one-shift operation, existing capital stock, labour force, and organisation, overall output is fairly close to capacity, i.e. in the neighbourhood of 80-90%. The "operative shops" function with sufficient flexibility so that no "stage" bottleneck can be identified as such, at least at the current level of production.

IV. ANNUAL PRODUCTION

(1967)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price on factory (US \$)	Total production value (000 US \$)
		Unit	Output			
Products (or group of products)						
Women's suits	1957	piece	1,385	14.50	20	
Boys' suits (short pants)			5,200	12.00	62	
Boys' suits (long pants)			1,842	17.00	31	
Men's suits			9,583	24.00	230	
Boys' suits (shorts)			245	14.60	4	
Men's and boys' pants			6,061	4.50	27	
Men's and boys' jackets			3,987	11.00	44	
Men's overcoats			7,248	15.70	114	
Men's short overcoats			480	14.00	7	
Women's overcoats			5,879	21.00	123	
TOTAL PRODUCTION VALUE					662	

VI. VALUE ADDED

(1967)	Value (000 US \$)
1. Wages & salaries	99
- Employees in direct production (126 persons)	
- Other employees (5 persons)	7
2. Other payments for employees	47
3. Annual depreciation	6
4. Rentals paid	-
5. Interest & royalties	5
6. Sales tax	-
7. Other ind. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax (*)	176
(*) See IX. Suppl. ments.	329

VII. MONTHLY EARNING RATES

(End of 1967)	No. of emp.	Average earning rate (monthly) (US \$)
1. Local non-operatives		
TOTAL:	5	more than
- Managers	1	160
- Engineers	-	-
- Technicians	-	-
- Accountants	2	80 - 160
- Sales officers	1	more than 160
- Other professional staff	-	-
- Clerks & typists	1	less than 80
2. Local operatives		
TOTAL:	126	
- Supervisors	-	-
- Foremen	5	80 - 160
- Machine operators	60	less than 80
- Craftsmen	1	80 - 160
- Truck drivers	1	80 - 160
- Other full-time operatives	37	less than 80
- Unskilled & part-time operatives	-	-
- Others	20	less than 80
- Others	2	80 - 160
3. Foreign employees		
TOTAL:	-	-

V. ANNUAL CONSUMPTION

(1967)	Quantity consumed				Total consumption value (000 US \$)
	Unit	Purchase	% imported	Tariff rate	
1. Energy and water					
TOTAL:					2
- Electricity and fuels	000 Kwh	..	-	-	2
2. Production materials					
TOTAL:					308
- Wool blend textiles	..	-	-	-	226
- Linings	..	-	-	-	46
- Accessories	..	-	-	-	36

	Total consumption value (000 US \$)
3. Other materials & supplies	
TOTAL:	11
- Packagings	8
- Repair & maintenance	2
- Non-factor services inputs	1
4. Business services purchased	
TOTAL:	12
- Transport, storage & insurance	6
- Communication, advertisements, etc.	6
5. Work performed by sub-contractors	
TOTAL:	-
	333

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1961) Manufacture of wearing apparel, industry group: <u>except footwear</u> (HSIC: 24)						
1. Size groups by number of persons employed:	No. of establs.	No. of empl.	Total labour	Gross prod. Value	Fixed investments	
			persons added	added		
up to	99	118,459	74	105	134	29
100 -	499	226	208	328	282	25
500 -	999	14	640	1,120	1,390	138
1,000 -	4,999	4	2,160	4,550	5,900	615
National average (total)	118,703	278	465	573	1,600	44.5
Average per employee (in US \$)						
2. Size groups by number of persons employed:	No. of establs.	No. of empl.	Total labour	Gross prod. Value	Fixed investments	
			persons added	added		
up to	99	118,459	74	936	1,123	24
100 -	499	226	208	964	1,146	75
500 -	999	14	640	1,097	1,363	135
1,000 -	4,999	4	2,160	1,310	1,684	178
National average (total)	118,703	278	1,070	1,313	107	

IX. SUPPLEMENTS

§§ VI. VALUE ADDED - Item 2:

Corporate income: This is an aggregate figure which has been derived as a residual and should be interpreted as including certain other categories of expenses as well as profits.

	1964	1965	1966	1967	1968
- Total output value (000 US \$)	520	440	500	670	720
- Number of employees	91	97	100	126	150
- Output value/employee (US \$)	5,700	4,550	5,300	5,300	4,800

The administration has also indicated a net profit figure of US \$ 130,000 for 1967 which is not otherwise figured into the above accounts. The remaining differential of one's and receipts is US \$ 15,700 (less than 2 1/2 of the total) which can be divided among unidentified costs and statistical errors.



74.09.12

V. ANNUAL PRODUCTION

(1967)	Yr. of first prod.	Quantity produced		Av. unit price as factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Yarns (Pure wool and polyester sized)	..	t	517	..	1,963
Fabrics for men's wear	..	m	18,000	..	46
Revenue from contract and commission work	-	216
Marketable wastes	-	0.2
TOTAL VALUE OF PRODUCTION:					2,225 *****

VI. VALUE ADDED

(1967)	Total value (000 US \$)
1. Annual wages & salaries	367
- Operative workers (212 persons)	298
- Non-operative workers (23 persons)	69
2. Other payments for employees	85
3. Annual depreciation	90
- Machinery & equipment	65
- Buildings & other facilities	24
- Non-physical capital assets	0.5
4. Rentals paid	0.3
5. Interests & royalties	97
6. Sales tax	82
7. Other indirect business taxes	15
8. (-) Subsidies	-
9. Corporate income before tax	6
TOTAL VALUE ADDED:	
	742 -----

DESCRIPTION OF MAJOR PRODUCTS:

Carded yarns and fabrics.

Woolen yarns, polyester/wool yarns, acrylic knitting yarns. Carded yarns and fabrics are of minor significance.

All products are exportable.

MARKET ASPECTS:

Consumers of products:

Yarns: Weaving and knitting mills

Fabrics: Manufacturers of clothes and textile wholesalers.

Sales organization:

A sales organization does not exist since almost 75% of the production is sold to one single weaving mill. The remaining 25% is more or less exported to COMECON-countries. These exports are based on medium-term contracts.

A very small portion of the output is sold to domestic weaving and knitting mills. The company only produces to order. Fulfilment usually takes some months.

Market and competition:

Due to the special type of product the number of customers is limited to the 10 largest weaving and knitting mills in the country. Almost equal price structure of domestic products. Imports sometimes a little cheaper. Slight differences in quality.

EXPORT:

Total annual export: US \$ 260,000.

Major products	To Western countries	To Eastern countries	To Developing countries
Woolen yarns	-	100%	-

Export price policy:

Neither keen international competition. Prices of exported goods have to be reduced by sales tax refunds.

Since the company deals mainly with one very solvent customer, certain cost items such as extra charges for risk taking do not have to be considered.

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import duties	Total consumption value (000 US \$)	Average import duties (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity					
1. Energy and water							
TOTAL:					52		
- Electricity	000 kWh	1,422	-	-	32		
- Gasoline	t	11	-	-	2		
- Fuel oil	t	754	-	-	17		
- Water	000 m ³	130	-	-	1		
2. Production materials							
TOTAL:					1,246		
- Combed wool	t	548	95.5	-	1,246		
- Polyester fibres							
3. Other materials & supplies							
TOTAL:							127
- Packaging material (boxes)							5
- Chemicals for dyeing and impregnation							73
- Parts, supplies & services						0.4	47
- Other materials & supplies							2
4. Business services purchased							
TOTAL:							52
- Transportation, storage & insurance							22
- Communication, advertising & other business services							30
5. Work performed by subcontractors							
TOTAL:							6
TOTAL VALUE OF CONSUMPTION:							1,483 *****

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (I.I.F.)	Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Av. Age (yrs)	Remarks	Process equipment	Supplier country	Year of installation	Output	Shift/operation	Remarks:
											OB: Purchased second-hand OC: Obsolete A: Renard B: Self-constructed
Spinning department:											
Woollice spinning:						Ring spinning frames	FR.Germ.	1967	..	..
Crusher rollers, willows, blending	3	14	..	15	Ob						
Carding units	3	90	..	17	"						
Mule-spinning frames	3	23	..	17	"	Super-intersecting gills	Italy	1964-66	..	..
Worsted yarn spinning:											
Ring spinning frames	2	58	..	2	-						
Ring spinning frames	1	26	..	5	-						
Ring spinning frames	13	280	..	12	Ob	Converter	Italy	1963	25 t/month	3 shifts	
Super-intersecting gills	7	70	..	5	-						
Drawing frames	2	35	..	5	-						
Combers	12	46	..	8	-						
Pin drafters	7	43	..	14	Ob	Dyeing equipment	FR.Germ.	1964	1.5 t/day	1 shift	
Worsted card	1	17	..	10	"						
Converter	1	32	..	5	-						
Combing frames	10	16	..	10	SH						
Misc. machines for spinning dept.	..	43	..	10	Ob						
Twisting department:											
Twisting and pirn winding machines	15	89	..	10	Ob						
Weaving department:											
Looms	20	54	..	19	Ob						
Dyeing department:											
Dyeing and scouring equipment	..	205	..	10	Ob						
Finishing department:											
Various finishing machines	..	133	..	10	Ob						
Others: Air-conditioning	..	33	..	10	Ob						
Lifting apparatuses, scales, elevators	..	63	..	..	Ob						

CAPACITY POWER:
Process equipment:
- electric motors - 700 kW

Generating equipment:
- installed capacity - kVA

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Machin.	Autom.	Further details: Current capacity utilisation	
				Current capacity utilisation	Notes
Dyeing shop	Dyeing of flocks and of worsted flocks of wool before spinning	C	II	fully utilized	
Spinning dept.(worsted yarn)	Spinning of yarn	C	II	fully utilized	Production could be increased through night shift operation
Spinning dept.(carded yarn)	Flock of wool passes 3 carding units, before being processed in mule-spinning frame	D	III	fully utilized	
Preparation for weaving	Winding, twisting, warping	D	III	low utilisation due to obsolescence of machinery	Products of minor significance, commission work only
Weaving dept.	Crossing of warps and wefts	D	III	Utilisation depends on availability of labour	
Finishing shop	Fulling or washing, drying, trimming, pressing, decatizing, etc.	C	III		

CAPACITY UTILIZATION

Full capacity output US \$ 2,700,000. In order to reach this figure 20 additional operatives would have to be employed in the 1st and 2nd shift each.

Current utilization:

Major products (or processes)	Approximate %					
	up to 30	40	60	70	80	100
Yarns (dyeing and spinning)						X
Fabric (weaving)			X			

Current capacity utilisation is based on 2-shift operation except for the converter section which operates on 3 shifts. High utilisation of spinning capacity is mainly due to good supply of raw materials and satisfactory demand for the products manufactured. The weaving department could only operate due to commission work received. Otherwise no more weaving would have been done.

IX. HISTORY & PLAN

1. Performance in the past:	Total output (1000 US \$)	No. of persons employed	Total exports (1000 US \$)
Year: 1963	2,530	407	400
1964	2,420	383	300
1965	2,380	327	60
1966	2,070	241	220
1967	2,250	235	280
1968	-	-	-

2. Investments in the past:	Approximate amount (1000 US \$)	Type of investment
From 1961 to 1962 :	160	Replacement of machinery: Spinning frames, finishing machines
" 1962 " 1963 :	220	Dyeing and finishing machines
" 1963 " 1964 :	120	Dyeing machines
1967 :	130	

3. Future Plan:	Approximate amount (1000 US \$)	Type of investment
From 1968 to 1972 :	80	Expansion and replacement of machinery and equipment. Purchase of new spinning frames. Employment of one additional operative and 5 additional auxiliary operatives on 1st and 2nd shift each.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1964)

Industry Spinning, weaving and finishing textiles (SIC-Code: 231)

1. Size groups by number of persons employed:						2. Size groups by annual value of production (1000 US \$):					
No. of empl.	No. of estab.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)	No. of empl.	No. of estab.	Av. W. & S. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)	
up to 19	223	855	1,108	7,001	46	up to 20	147	172	847	4,716	58
20 - 99	73	3,542	1,403	9,811	40	20 - 40	23	127	1,174	4,796	55
100 - 499	66	15,304	1,482	7,444	41	40 - 200	72	1,323	1,114	5,153	49
500 - 999	11	7,148	1,451	5,449	39	200 - 400	29	1,254	1,293	6,600	50
over 1,000	5	6,315	1,526	6,014	44	400 - 2,000	73	10,857	1,398	7,059	42
						over 2,000	34	23,631	1,569	6,912	40
TOTAL:	378	37,664	1,490	6,865	41	TOTAL:	378	37,364	1,490	6,865	41

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|---|---------------------------------------|--------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export promotion |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultation | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of services	Country or region	No. of projects	Field of industry	Description of projects
8				Almost no chance to import industrial products manufactured in developing countries, since the raw materials required are either wool or well-known brands of synthetic fibres. So far wool has come from Australia and Uruguay and synthetic fibres from European producers. However, great interest is shown for export promotion.
9				Company reports interest to employ foreign operatives.

XII. SUPPLEMENTS & NOTES

History of production and investment:

Originally the company was founded as a weaving mill. In 1954 a spinning mill was added which today practically accounts for the total output. The break-even point could not be reached until 1966 with annual sales of US \$ 2.3 billions.

Depreciation policy:

The company could only apply the straight-line method and not the accelerated method since taxable profits were too low.

Contract and commission work:

The establishment performed commission work on yarns and fabrics for 20 different contractors. Total commission received amounted to US \$ 216,000.-.

On the other hand 5 subcontractors received a few orders to spin yarns and silver combed. Total commissio. paid approached US \$ 6,000. Work is based on short-term agreements.

Current problems:

Lack of personnel. This bottleneck could not yet be solved, despite growing employment of foreign labour since various other neighbouring industries offer higher wages.

Major Products: Linen yarns and linen threads; Weaving yarns, thread yarns, hose pipe yarns, shoe yarns and threads, wax machine threads. Capable of producing annually about 1,700 tons of linen yarns and threads. Full-capacity output amounts to US \$ 2.9 million based on 2-shift operation.

Reporting Unit: One-establishment enterprise, founded in 1852; although the company is rather old, the process equipment utilized is on the average not older than 12 years; 360 employees; privately owned; about 55% of the output is exported.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (1000 US \$)	Replacement value (1000 US \$)	Average age (Yrs.)
1 Primary process equipment (including installation cost)		2,460	
TOTAL		2,353	12
- Process equipment *		107	
- Hand tools & apparatuses			
2 Buildings		2,123	
TOTAL		826	50
- Primary industrial buildings (total floor space: 7,600 m ²)		140	50
- Auxiliary buildings		257	50
- Warehouse		125	
- Office administration buildings		1,175	50
- Housing			
3 Auxiliary facilities (excl. buildings)		870	
TOTAL		280	25
- Internal power equipment			
- Laboratory facilities		9	10
- Means of transportation		31	5
- Office equipment		47	15
- Others		93	
TOTAL PHYSICAL FIXED ASSETS (excluding land)		5,963	
4 Other fixed capital assets		521	
TOTAL		411	
- Land (total acreage: 200,000 m ²)			
- Land improvements (total: 40,000 m ²)		30	
- Others			

*No details of process equipment and capacity of primary operative shops are given on Page three (Section VIII).

II. MONTHLY GROSS WAGES AND SALARIES

(1967 monthly average)	Number of persons				
	up to 100 US\$	100-140 US\$	140-160 US\$	160-240 US\$	over 240 US\$
1. Local non-operatives					
- Managers	-	-	-	-	1
- Engineers	-	-	-	2	-
- Technicians	-	-	8	7	-
- Accountants	-	1	2	2	-
- Sales officers	1	-	1	4	-
- Clerks and typists	2	2	5	1	-
- Others	-	1	-	2	-
2 Local operative					
- Supervisor	-	-	-	-	-
- Foremen	-	13	-	-	-
- Skilled operatives	147	39	-	-	-
- Machine operators	-	-	-	-	-
- Craftsmen	3	18	5	-	-
- Truck drivers	-	2	-	-	-
- Unskilled operatives	28	3	-	-	-
- Other full-time operatives	34	8	-	-	-
- Part-time operatives	4	2	-	-	-
3 Foreign employees					
- Managerial staff	-	-	-	-	1
- Technical staff	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-
- Unskilled operatives	3	-	-	-	-

EXTERNAL CONDITIONS:

Transport:	external long distance	excellent
	internal long distance	"
	local and city	fair
Utilities:	electricity	fair
	water	"
	gas	insignificant
Community:	residence	fair
	health and recreation	excellent
	education	insignificant
Own Welfare Facilities:		-

III INVENTORIES

(End of 1967)	Actual value (1000 US \$)	Number of months
Inventories	658	
TOTAL		
- Production materials	174	3
- Other input materials	43	3
- Work-in-process	42	-
- Finished products	299	1.7

WORKING TIME PER OPERATIVE WORKER:

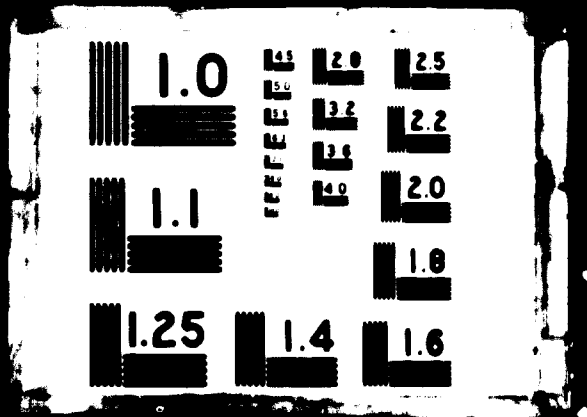
	1st shift	2nd shift	3rd shift	hours
Shift hours/day	8	8	-	hours
Actual hours/year	1,840	1,840	-	hours
Actual days/year	231	231	-	days

IV. MANNING TABLE

(1967 average)	Total	Shift categories:					
		A	1st Shift		2nd Shift	3rd Shift	
			B	C	D	B-D	B-D
ALL SHOPS & UNITS:	359	43	216		95	-	-
1. Primary operative shops	271	12	7	100	57	95	-
- Hackling	15	1	1	9	4	-	-
- Preparation of hards	25	3	1	4	8	9	-
- Carding	45	1	1	21	5	17	-
- Fine spinning	90	3	2	30	23	32	-
- Winding	52	1	1	21	4	25	-
- Twisting	34	2	1	13	9	9	-
- Dyeing and bleaching	10	1	-	2	4	3	-
2. Auxiliary operative units	59	7	52		-	-	-
- Repair & maintenance	37	2	35		-	-	-
- Mechanical shop	-	-	-		-	-	-
- Tooling shop	-	-	-		-	-	-
- Utilitise control	4	1	3		-	-	-
- Product & material storage	5	2	3		-	-	-
- Off-site transport	3	-	3		-	-	-
- Guards, cleaners, etc.	10	2	8		-	-	-
3. Auxiliary non-operative units	29	29	-		-	-	-
- Production management	3	3	-		-	-	-
- Research & development	2	2	-		-	-	-
- Sales unit	10	10	-		-	-	-
- Accounting	6	6	-		-	-	-
- General administration	8	8	-		-	-	-

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Major Products: Shoes. Capable of producing annually 36,000 pairs of shoes for men, ladies and children on 1-shift operation.

Reporting Unit: A one-establishment enterprise founded in 1964, privately owned, no participation of foreign capital.

I. FIXED CAPITAL ASSETS

(End of 1965/67)

	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
1 Primary process equipment			
TOTAL		16.9	33.4
- Process equipment		16.2	32.7
- Hand tools & apparatuses	1964	0.1	0.1
- Cost of installation		0.6	0.6
2 Primary industrial building			
TOTAL		-	-
(total floor space: - m2)			
3 Auxiliary facilities			
TOTAL		3.8	4.1
- Water, steam, electricity, cooling & storing		-	-
- Transportation facilities	1965	3.4	3.7
- Administrative facilities	1965	0.4	0.4
- Laboratory facilities		-	-
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		20.7	37.5
4 Other fixed capital assets			
TOTAL		-	-
- Land (total acreage: - m2)			

DETAIL OF PROCESS EQUIPMENT (No.):

	Supplier country	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
- Stranding machine	Italy	1964	1.0	1.1
- Leather trimming machine	"	"	0.4	0.4
- Leather bending machine	Denmark	"	0.4	1.0
- Drilling machine	Italy	"	0.3	0.4
- Sewing machines	3 FR.Germ.	"	1.4	1.2
- "Zig-Zag" sewing machine	1 USA	"	0.2	0.6
- Stitching machine	1 USA	"	0.2	0.8
- Sewing machine (2 needles)	1 USA	"	0.3	0.5
- Cutting machine	Denmark	1964/68	2.7	10.0
- Other auxiliary equipment	various	1964/68	10.3	16.6

MEMORY OF INVESTMENT:

Trial production started in 1964, commercial production in 1965.

The following amounts were spent on host and shoe stretchers:

(in 000 US \$)

1966 approx. 2

1967 " 4

CAPACITY POWER:

Process equipment:	Generating equipment:
- Electric motors: - kW	- Installed capacity: - IVA

EXTERNAL CONDITIONS:

Transport: Local area, excellent.

Utilities: Electricity and water, excellent.

Community: Residential, excellent.

II. INVENTORIES AND WORKING CAPITAL (in 000 US \$)

(End of 1966/67)

	Actual value		Actual value
1 Inventories	10.4	2 Liquid assets	5.8
TOTAL		TOTAL	
- Production materials	3.7	- Cash (hand/hank)	1.9
- Other input materials	-	- Market, sec. & bonds	-
- Work-in-process	1.2	- Short-term investment	-
- Finished products	5.6	- Prepaid expenses	2.4
		- Accounts receivable	1.5
3 Desired working capital			
	Number of months	Value	
TOTAL		29.0	
- Production materials	5	20.0	
- Other input materials	-	-	
- Finished products	1	4.0	
- Wages & salaries	1	1.0	
- Other special items	-	-	

III. MANNING TABLE

(number of persons) (1965/67 average)

	Total	1st shift		2nd shift	
		A	B	A+B	A+B
ALL SHOPS & UNITS:	38	36		2	-
1. Primary operative shops	24	24	-	-	-
- Labourers	24	24	-	-	-
2. Auxiliary operative units	4	2	2	-	-
- Repair and maintenance	-	-	-	-	-
- Mechanical shop	-	-	-	-	-
- Utilities control	-	-	-	-	-
- Product & material storage	-	-	-	-	-
- Off-site transport	-	-	-	-	-
- Guards, cleaners, etc.	2	1	1	1	1
- Others	2	1	1	1	1
3. Auxiliary non-operative units	10	10	-	-	-
- Production management	1	1	-	-	-
- Research & development	-	-	-	-	-
- Sales unit	8	8	-	-	-
- General administration	1	1	-	-	-

WORKING TIME PER OPERATIVE WORKER:

Normal hours/day:	8 hours	Normal days/year:	260 days
Actual hours/year:	2,080 hours		

CAPACITY OF OPERATIVE SHOPS:

II. DESIGN AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

- Type of service**
- | | | |
|------------------------|---------------------------------------|----------------------------------|
| 1. Advisory study | 2. Technical and managerial personnel | 4. Repair and repair maintenance |
| 2. Planning assistance | 3. Industrial training | 5. Admission of foreign labor |
| 3. Technical services | 6. Industrial training | |
| 4. Equipment supply | 7. Technical consultancy | |
8. Finance & insurance

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Name of industry	Description of project
8				The establishment is interested in importing leather and semi-finished products made out of leather.
9				Admission of foreign labour possible.

III. SUPPLEMENTARY NOTES

Depreciation policy:

The straight-line as well as accelerated methods of depreciation were applied.

Contract and commission work:

Shoe vamps manufactured by 2 subcontractors; work was based on short-term agreements. Commission paid: US \$ 1,500.

Personnel:

Lack of skilled personnel.

Inventory policy:

The company produces only to order. Inventories of finished products are kept to a minimum. In the reporting year they amounted to 1% of the total value of production.

Major Products:

Men's, ladies', children's shoes, ski boots, slippers.

Presently company operates at full capacity and produces about 3.3 million pairs of shoes worth US \$ 17 million. One-shift operation. Business year: 1 March 1967 - 29 February 1968.

Reporting Unit:

A five-establishment enterprise; privately owned; founded in 1802. 2,575 employees; 4 establishments are manufacturing shoes, one in producing lasts. Largest enterprise in this line in the country; favourably located; company-conducted research activity; licensed production of French and Italian products; 10% export. This study summarizes the whole enterprise.

I. FINED CAPITAL ASSETS

(End of 1967)	Original purchase value (1000 US \$)	Replacement value (1000 US \$)	Average age (Yrs)
1. Primary process equipment (including installation cost)			
TOTAL	2,656	3,123	
- Process equipment *	2,485	3,123	8
- Hand tools & apparatuses	171		
2. Buildings			
TOTAL	1,228	1,743	
- Primary industrial buildings (total floor space: 36,748 m ²)	616	875	25
- Auxiliary buildings	90	128	25
- Warehouses	115	163	25
- Office administration buildings	279	397	25
- Housing	128	180	9
3. Auxiliary facilities (a/c buildings)			
TOTAL	635	646	
- Internal power equipment	-	-	-
- Laboratory facilities	19	27	7
- Means of transportation	152	155	3
- Office equipment	464	464	1
TOTAL PHYSICAL FINED ASSETS (excluding land)	4,519	5,512	
4. Other fixed capital assets			
TOTAL	1,989	2,677	
- Land (total acreage: 43,767 m ²)	30	155	-
- Land improvements (t. aer. 36,616 m ²)	29	155	-
- Others	1,930	2,367	8

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(1967 monthly average)	Number of persons					
	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1. Local non-operative						
- Managers	-	-	-	-	-	6
- Engineers	-	-	-	-	5	-
- Technicians	8	19	21	61	12	-
- Accountants	7	21	3	12	2	1
- Sales officers	11	31	5	24	20	8
- Clerks and typists	32	51	14	44	16	1
2. Local operatives						
- Supervisors	-	-	14	7	-	-
- Foremen	-	-	-	-	-	-
- Skilled operatives	125	846	207	276	4	-
- Machine operators	-	-	-	42	-	-
- Craftsmen	-	-	-	4	-	-
- Truck drivers	-	-	-	-	-	-
- Unskilled operatives	208	157	84	62	-	-
- Other full-time operatives	6	12	-	-	-	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	9	70	5	2	-	-

EXTERNAL CONDITIONS:

Transport:	external long distance	excellent
	internal long distance	"
	local and city	"
Utilities:	electricity	excellent
	water	"
	gas	"
Community:	residence	fair
	health and recreation	"
	education	"
(Non Welfare Facilities):	Apartment buildings, cafeteria, cultural and sports facilities, welfare association	

III. INVENTORIES

(End of 1967)	Actual value (1000 US \$)	Number of months
Inventories	2,371	
TOTAL		
- Production materials	1,163	2
- Other inputs materials	31	1
- Work-in-process	323	1
- Finished products	854	1

WORKING TIME PER OPERATIVE WORKER:

	in shift	2nd (*) shift	3rd (*) shift	hours
- Shift length:	8.5	8	8	hours
- Actual hours/year:	1,680	1,664	1,664	
- Actual days/year:	221	221	221	days

(*) 2 operations of the ski-boot factory.

IV. MANNING TABLE

(As per 8 November 1968)

ALL SHOPS & UNITS:	Total	A	Shift categories:			2nd Shift	3rd Shift
			1st Shift	2nd Shift	3rd Shift		
			A	B	C	D	
1. Primary operative shops	1,985	112	1,869	2	2		
- Men's shoe factory	369	21	348	-	-		
- Ladies' shoe factory	531	34	497	-	-		
- Ski boot factory	232	10	218	2	2		
- Children's shoe factory	405	20	385	-	-		
- Slipper factory	381	22	359	-	-		
- Stamping department	67	5	62	-	-		
2. Auxiliary operative units	288	65	217	-	-		
- Repair & maintenance	58	14	44	-	-		
- Mechanical shop	-	-	-	-	-		
- Tooling shop	-	-	-	-	-		
- Utilities control	15	6	9	-	-		
- Product & material storage	111	29	82	-	-		
- Off-site transport	5	3	2	-	-		
- Guards, cleaners, etc.	28	5	23	-	-		
- Others	65	8	57	-	-		
3. Auxiliary non-operative units	308	295	13	-	-		
- Production management	13	13	-	-	-		
- Research & development	4	2	2	-	-		
- Sales unit	115	110	5	-	-		
- Accounting	48	48	-	-	-		
- General administration	128	122	6	-	-		

V. ANNUAL PRODUCTION

(1967) Products for group of products	W. of foot prod.	Quantity produced		Av. unit price on factory US \$	Total output value 1000 US\$
		Units	Quantity		
Men's shoes	..	pairs	465,500	7.2	3,333
Ladies' shoes	..	"	935,100	6.6	6,153
Ski boots	..	"	104,500	18.0	1,880
Children's shoes	..	"	457,400	5.4	2,478
Slippers	..	"	1,290,700	2.5	3,247
TOTAL VALUE OF PRODUCTION:					17,091

VI. VALUE ADDED

(1967)	Total value 1000 US \$
1. Annual wages & salaries	
- Operative workers (1,873 persons)	2,436
- Non-operative workers (466 persons)	966
2. Other payments for employees	915
3. Annual depreciation	731
- Machinery & equipment, cars	401
- Buildings & other facilities	60
- Non-physical capital assets	270
4. Rentals paid	97
5. Interest & royalties	148
6. Sales tax (*)	705
7. Other indirect business taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	786
(*) Reimbursements of sales tax for exports have been deducted.	6,794
TOTAL VALUE ADDED:	

DESCRIPTION OF MAJOR PRODUCTS:

All products are manufactured in series, some of them under license agreements.
 Medium-priced shoes of good quality.
 Terms of delivery: Long-term supply agreements between company and retailers. Delivery usually
 6 weeks ahead of each season.

MARKET ASPECTS:

Sales organization:

Central sales department for all 5 establishments. 37% of total production is sold in
 48 company-owned stores; the remaining 63% is sold by company-representatives to
 about 1,500 independent retail-stores.

Share in the domestic market:

Company holds about 14% of the domestic market for ladies', men's and children's shoes.
 Leading manufacturer of slippers.

Sales areas:

Western Europe, USA, Canada, Japan, and Australia.

Importation in the market:

Imports from Southern and Western European countries have a very strong impact on
 domestic pricing.

EXPORT:

Total annual export US \$ 1,821,000.

Major products	To Western countries	To Eastern countries	To Developing countries
Ski boots	100%	-	-
Braided shoes	100%	-	-
Other export articles	100%	-	-

Export price policy:

International competitiveness is increased due to
 export subsidies (exemption from sales tax). The
 government subsidizes exports by way of repaying the
 sales tax accumulated on all exported goods during the
 present and previous transactions. The sales tax
 indicated under 21% has been adjusted accordingly.

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import prices (000 US \$)	Total consumption value 1000 US \$
	Units	Quantity			
1. Energy and water					
PPM:					
- Electricity	000 kWh	2,790	-	-	21
- Coal, coke	"	..	-	-	70
- Fuel oil	"	988	-	-	1
- Gas	000 m3	19	-	-	15
- Water	000 m3	60	-	-	8
2. Production materials					
PPM:					
- Upper leather	m2	370,000	25	104	3,198
- Lining leather	"	470,000	47	73	1,051
- Slipper material	..	..	60	5	798
- Socks material	kg	1,000,000	20	52	2,094
- Yarns material	..	..	20	47	1,180

	Total consumption value 1000 US \$
3. Other materials & supplies	
PPM:	
- Packaging material (boxes, cases, card-boards, etc.)	479
- Parts, supplies & services	195
- Other materials & supplies	36
4. Business services purchased	
PPM:	
- Transportation, storage & insurance	1,490
- Communication, advertising & other business services	777
5. Work performed by administration	
PPM:	
-	-
TOTAL VALUE OF CONSUMPTION:	

TOTAL VALUE OF CONSUMPTION: 10,297

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT N.I.I.	Number	Original Purchase Value (1958 US \$)	Replacement value (1958 US \$)	Av. Age (yrs)	Remarks:		Further details:
					SH: Purchased second-hand	OH: Obsolete	
Cutting machines and devices	200	232	..	10	-		The majority of the machinery was supplied by the Federal Republic of Germany, and only to a minor extent by the U.K. Daily running time: 9 hrs.
Stitching machines and devices	800	348	..	8	-		
Bottom preparation and stamping machines	200	232	..	15	Ob		
Leasting machines	900	619	..	8	partly SH		
Transport devices (for stitching and bottom department)	..	116	..	2	-		
Computer	1	472	..	3	-		
Hydraulic cutting, molding and stamping machines	120	232	..	4	-		
Machines for production of cardboard boxes	20	58	..	8	partly SH		
Printing presses	10	33	..	2	-		
Machines for production of stitching knives	30	58	..	15	-		
Various other machines	70	77	..	10	partly SH		<p>CAPACITY POWER: Process equipment: - electric motors kW 700</p> <p>Generating equipment: - installed capacity kVA -</p>

CAPACITY OF PRIMARY OPERATIVE SHOPS.

Major primary operative shops	Kind of process involved	Mechan.		Autom.		Further details:	Output capacity	Capacity utilization
		A	B	I	II			
Men's shoe factory		A			II		2,000 pairs/day	110%
Ladies' shoe factory		A - B			II		3,500 " "	110%
Children's shoe factory		A			II		300 " "	110%
Ski boot factory		A		I - II			..	..
Slipper factory		A		I - II			..	..
Stamping department		A - B			III		..	..

CAPACITY UTILIZATION:

Full capacity output US \$ 17, 355, 000.

Current utilization: Based on 1-shift operation.

Major products (or processes)	Approximate %					
	up to 30	40	50	60	70	80 90 100
Men's shoes						x
Ladies' shoes						x
Ski boots						x
Children's shoes						x
Slippers						x
Stamping department						x

All five establishments are operating at full capacity. Total output increases on the average by about 10% annually depending on the success of the rationalisation efforts and on the supply of skilled labour.

IX. HISTORY & PLAN

1. Performance in the past:	Total output (1958 US \$)		No. of persons employed	Total exports (1958 US \$)
	Year	1963		
1963	7,080	2,341	460	
1964	6,420	2,309	700	
1965	7,470	2,334	910	
1966	12,710	2,507	1,020	
1967	14,170	2,518	1,820	
1968	-	-	-	-

(*) other than exports.

2. Investments in the past	Approximate amount (1958 US \$)	Type of investment
From 1955 to 1967 :	6,700	Buildings, machinery, data processing equipment, etc.
1967 :	690	

3. Future Plan:
From 1969 to 1974: 3,900 Expansion of machinery and equipment, auxiliary production, administrative and welfare facilities; rationalisation and specialisation of machinery. 100 additional skilled operatives and 15 additional non-operatives will be required on the 1st shift.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1964)

Industry: Manufacture of footwear (ISIC-Code: 241)

C - confidential; the figures of those size groups are included in those underlined.

1. Size groups by number of persons employed	No. of estab.	No. of empl.	Av. W & B. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)	2. Size groups by annual scale of production (1958 US \$):	No. of estab.	No. of empl.	Av. W & B. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)
20 - 99	73	3,484	1,269	5,664	45	20 - 40	163	456	1,134	9,561	35
100 - 499	36	12,082	1,414	6,453	45	40 - 200	92	1,411	1,221	5,326	47
500 - 999	2	C	C	C	C	200 - 400	35	1,767	1,312	6,069	49
over 1,000	2	C	C	C	C	400 - 2,000	41	6,189	1,365	6,022	45
TOTAL	4,851	17,355	1,338	6,745	45	over 2,000	11	6,814	1,437	6,892	45
TOTAL	4,851	17,955	1,330	6,745	45	TOTAL	4,851	17,955	1,330	6,745	45

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|-------------------------|---|-----------------------------------|
| 1. Engineering study | 3. Technical and managerial personnel | 6. Import and export transactions |
| 2. Financial assistance | 4. Industrial training | 7. Technical consultancy |
| 3. Industrial services | 5. Equipment supply, installation & maintenance | 8. Admission of foreign labour |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
1				The company is prepared to provide shoe manufacturing enterprises with engineering studies.
3				Know-how contracts concerning industrial process engineering, product planning and plant lay-out could be signed any time. Company has gained large experience in these fields.
4				Used machinery could be made available. Suppliers of new machinery could be procured.
5				Provision of staff-members only possible for a limited period of time.
6				Shoe factory workers, electricians, fitters and designers could be trained.
7				Technical consultancy could be considered.
8				Company is interested in importing tanned leather. Exports of shoes to developing countries may not be possible due to high prices.

XII. SUPPLEMENTS & NOTES

The company consists of 5 establishments, 4 of which engage in shoe production, 1 establishment produces lasts. This study summarizes all 5 establishments. Additional data about the individual establishments are available to a limited extent only. The reporting units are:

No. 1: men's and ladies' shoes, ski boots
 No. 2: slippers and sandals
 No. 3: children's flexible shoes
 No. 4: upper parts for men's shoes
 No. 5: lasts.

1. Fixed capital assets (in 000 US \$)

	Establishment					Total
	No. 1	No. 2	No. 3	No. 4	No. 5	
Land	22	-	3	5	-	59
Buildings	1,099	22	65	100	-	1,228
Primary process equipment	1,709	425	16	33	-	2,656
Auxiliary facilities	2,258	143	131	34	-	2,565
	5,088	590	215	172	443	6,508

2. Working capital (in 000 US \$)

A. Inventories

	Establishment					Total
	No. 1	No. 2	No. 3	No. 4	No. 5	
Production materials	1,007	21	63	15	11	1,115
Other input materials	-	-	-	-	-	-
Work-in-process	210	32	71	9	-	322
Finished products	854	-	-	-	-	854
	2,071	131	134	24	11	2,371

B. Liquid assets

	Establishment					Total
	No. 1	No. 2	No. 3	No. 4	No. 5	
Cash on hand and in bank	359	2	15	1	-	377
Marketable securities	70	2	-	-	-	72
Accounts receivable from delivery of goods & services	1,882	340	112	56	13	2,603
Other accounts receivable	176	142	62	1	-	381
Prepaid expenses	161	4	-	-	-	165
	2,648	490	390	58	13	3,598

3. Value added (in 000 US \$)

	Establishment					Total
	No. 1	No. 2	No. 3	No. 4	No. 5	
Annual wages and salaries	2,466	320	508	66	42	3,402
Other payments for employees	715	81	114	16	9	935
Annual depreciation	585	52	65	29	-	731
Rentals paid	-	11	42	-	31	87
Interests and royalties	109	17	13	9	-	148
Sales tax	649	9	14	25	8	705
Corporate income before tax	413	251	75	18	29	786
(-) Subsidies (export)	(10)	(56)	(25)	(23)	(2)	(116)
	4,927	685	809	140	117	6,678

Depreciation policy:

The company applies both the straight-line and the accelerated methods of depreciation. In the first year of installation accelerated depreciation of buildings (20%), plant equipment (50%) and cars (50%). In all subsequent years application of the straight-line method: buildings 2%, machinery 10%, plant equipment 15%, cars 20%.

Settlements:

Both the cutting and stitching shops could still increase their output if additional skilled operatives could be provided.

MAJOR PRODUCTS: Plywood. Capable of manufacturing annually 3,540,000 m² based on 3-shift operation.

REPORTING UNIT: A branch-establishment of a fairly decentralised, multi-establishment enterprise, founded in 1963, privately owned. Foreign capital participation : 76 %.

I. FIXED CAPITAL ASSETS (in 000 US \$)	Year of compl.	Orig. purchase value	Value after depreciat.
(End of 1967)			
1. Primary process equipment total:		261	211
- Process equipment	1963	261	211
- Hand tools and apparatuses			
- Cost of installation			
2. Primary industrial building total:		-	-
(total floor space: .. m ²)			
3. Auxiliary facilities total:		4	..
- Water, steam, electricity, cooling and storing		4	..
- Transportation facilities (total load: .. t)		-	-
- Administrative facilities		-	-
- Laboratory facilities		-	-
TOTAL PHYSICAL FIXED CAPITAL ASSETS (excl. land):		265	..
4. Other fixed capital assets total:		-	-
- Land (total acreage: .. m ²)		-	-

DETAIL OF I.1. (supplier): (all FRG)	Year of inqt.	Orig. purchase value	Value after depreciat.
Peeling equipment (1)			
Slicing equipment (1)			
Knives (2)			
Sharpener (2)			
Saws (8)			
Clipper (4)			
Trolleys (29)			
Tanks (2)			
Chain belt dryer (1)			
Edge cutter (1)			
Splicer (1)			
Glue spreading and mixing equipment (1)			
Lathe (1)			
Grinder (1)			
Thread gauge (1)	1963	261	211
Presses (2)			
Air compressor (1)			
Scraper (1)			
Trippler drum (1)			
Blowers (3)			
Bundling stripping machines (1)			
Gauge planers (2)			
Boilers (4)			
Cranes (3)			
Jointing machine (1)			
Drillier (1)			
Drying kilns (2)			
Panel slicer (1) there			

II. INVENTORY AND WORKING CAPITAL (in 000 US \$)		(in 000 US \$)	
(End of 1967)	Actual value	2. Liquid assets	Actual value
1. Inventories total:	123	total:	132
- Production materials	65	- Cash (hand/bank)	1
- Other input materials	-	- Market. sec. & bonds	-
- Work-in-process	1	- Short-term investment	-
- Finished products	57	- Prepaid expenses	2
		- Accounts receivable	129

1. Desired working capital	No. of months	Value
total:		280
- Production materials	}	28
- Other input materials		
- Other special items		
- Finished products		
- Wages and salaries		

* B - Machine operators
* C - Other operatives

III. MANNING TABLE (1967 average)				
	Total	1st shift	2nd shift	3rd shift
		B*	C*	B+C*
TOTAL EMPLOYED:	236	145	67	24
1. Primary operative shops	170	83	64	23
Log shop	6	6	-	-
Crane and peeler shop	14	7	-	-
Clipper shop	17	9	8	-
Slicer shop	4	4	-	-
Dryer shop	18	6	6	6
Edgeoutter shop	10	4	4	2
Jointing machine shop	12	4	4	4
Block board, kiln and presa shop	51	27	20	4
Cross cutter shop	12	6	6	-
Scraper shop	4	2	2	-
Drum sander shop	12	4	4	4
Waste remover shop	6	4	1	1
Others (reserve)	4	-	2	2
2. Auxiliary operative units	50	48	2	-
- Repair and maintenance	7	5	2	-
- Tooling shop	-	-	-	-
- Mechanical shop	13	13	-	-
- Utilities control	-	-	-	-
- Product and material storage	20	20	-	-
- Off-site transport	4	4	-	-
- Guards, cleaners, etc.	5	5	-	-
- Clerk	1	1	-	-
3. Auxiliary non-operative units	16	14	1	1
- Production management	2	2	-	-
- Research and development	1	1	-	-
- Sales unit	1	1	-	-
- Accounting	-	-	-	-
- General administration	12	10	1	1

CAPACITY OF OPERATIVE SHOPS:		WORKING TIME FOR OPERATIVE WORKER:	
- Normal hours/shift:	8	hours	
- Normal days/year:	300	days	
- Actual hours/year:	2,192	hours	

CAPACITY POWER:
Process equipment:
 - electric motors: (71) 450 kW
Generating equipment:
 - installed capacity: - NVA

GENERAL COMMENTS:
Transport: Long distance : fair; local area : excellent

UTILITIES: Electricity and water : excellent

Comments: -

IV. ANNUAL PRODUCTION (in 000 US \$)

(1967) Products (or group of products)	Yr. of firm prod.	Quantity produced		Nominal capacity output	Unit price ex factory (US \$)	Total production value
		Unit	Output			
Plywood (marine plywood, block boards, flush doors, and moulded plywood)	1963	m3	2,087.7	3,540	237.3	495
Total value of production						495

Benin

In 1967 exports amounted to US\$ 150,000 at a f.o.b. price of US\$ 261/m3.

Capacity utilization

Major causes of the under-utilization of the productive capacity are lack of demand and seasonal factors. 560 additional man hours would be needed annually to reach full capacity.

VI. VALUE ADDED (in 000 US \$)

(1967)	Value
1. Wages & salaries	
- Employees in direct production (220 persons)	83
- Other employees (16 persons)	27
2. Other payments for employee	5
3. Annual depreciation	40
4. Rentals paid	-
5. Interests and royalties	21
6. Sales tax	-
7. Other ind. bus. tax (-) subsidies	-
8. Corporate income before tax	50
TOTAL VALUE ADDED:	218

VII. MONTHLY EARNING RATES (in US \$)

(End of 1967)	No. of empl.	Average monthly rates
1. Local non-operatives total:	8	533
- Managers	-	-
- Engineers	-	-
- Technicians	-	-
- Accountants	5	700
- Sales officers	-	-
- Clerks and typists	3	294
2. Local operatives total:	226	127
- Supervisors	3	252
- Foremen	-	-
- Machine operators	10	1,050
- Craftsmen	-	-
- Truck drivers	2	70
- Other fulltime operators	134	28
- Unskilled operat.	-	-
- Part-time operat.	2	49
3. Foreign employees total:	-	-

V. ANNUAL CONSUMPTION (in 000 US \$)

(1967)	Quantity consumed	Unit	Purchase	Tariff rate	Total consumption value
1. Energy and water total:					
- Electricity	000 Kwh		425	-	13
- Water	000 m3		2,009,000	-	1
2. Production materials total:					207
- Logs	m3		8,367	30 %	127
- Timber	m3		533	30 %	19
- Glue and hardener	l		240	100	45
- Others	..		..	-	16

(*) Not imported	Total consumption value
3. Other materials and supplies total:	30
- Packaging (*)	1
- Parts etc. for equipm. maintenance*	27
- Materials for non-manufact.	2
4. Business services purchased total:	17
- Transport, storage + insurance	6
- Comm. advertising + other bus. s.	11
5. Work performed by sub-contractors total:	10
TOTAL VALUE OF CONSUMPTION:	211

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY (in US \$)

(1965)	No. of establishments	No. of employees	Avr. U. & S. per emp.	ISIC-code	Avr. gross prod. val. per emp.	Avr. emp. / gross prod. ratio
1. Size groups by establishments:						
10 - 19	23	362	..	..	..	..
20 - 49	26	783	..	..	..	..
50 - 99	19	1,425	..	..	..	..
100 - 499	5	922	..	..	..	..
over 500	-	-	-	-	-	-
total	73	3,492	399	1,514		
2. Size groups by scale of production of establishments:						
up to	2					
2 - 8	8					
8 - 40	40					
40 - 120	120					
120 - 240	240					
240 - 400	400					
400 - 1,600	1,600					
1,600 - 4,000	4,000					
over 4,000	4,000					
total						

* Capital is defined as physical capital assets.

IX. SUPPLIERS

History of investment

Construction of the factory was first started in 1962. Trial as well as commercial production began in 1965. In 1967 about US\$ 360,000 were invested for expansion of production.

Major investment was undertaken in 1967 of US\$ 460,000. Affected were the production of plywoods of different grades, block boards, and flush doors.

Contracting work

Tapping of veneer is handled by sub-contractors, on piece work contracts.

Future plans

A major expansion programme is planned for 1969, 1970, with an investment of US\$ 210,000. Products affected: Metal edgings, nails, hooks for sea boxes, glue plant. Additional labour requirement for first shift : 14, and for second shift : 8 persons.

Major Products: Plywood and saw timber. Annual capacity output is 1,500,000 m² / 3.2 mm of plywood and 4,000,000 board-feet of sawn timber on two-shift operation.

Reporting Unit: A centralized multi-factory enterprise, founded in 1936; public corporation; no participation of foreign capital.

I. FIXED CAPITAL ASSETS

(End of 1966)

	Year of installation	Orig. purchase value (\$00 US \$)	Replacement value (\$00 US \$)
1 Primary process equipment			
TOTAL		241.8	241.8
- Process equipment		240.3	240.3
- Hand tools & apparatuses	1937/38	1.5	1.5
- Cost of installation			
2 Primary industrial building			
TOTAL		113.6	113.6
(total floor space: 2,130 m ²)	1940/58 1963	113.6	113.6
3 Auxiliary facilities			
TOTAL		233.2	233.2
- Water, steam, electricity, cooling & air conditioning	1940/58	151.2	151.2
- Transportation facilities	"	82.0	82.0
- Administrative facilities	"	20.0	20.0
- Laboratory facilities	"		
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land)		588.6	588.6
4 Other fixed capital assets			
TOTAL		1.2	1.2
Land (total acreage: 1,700 m ²)		1.2	1.2

DETAIL OF PROCESS EQUIPMENT (no.)

	Supplier country	Year of installation	Orig. purchase value (\$00 US \$)	Replacement value (\$00 US \$)
- boiler	U.S.A.	1947/51	20.0	20.0
- Rotary veneer peelers	"	"	12.0	12.0
- Dryers	"	1947/51	12.0	12.0
- Veneer chipping and assembling dept.	"	"	20.0	20.0
- Gluing machines	"	"	10.0	10.0
- Press department	"	"	10.0	10.0
- Trimming and finishing dept.	"	"	10.0	10.0

HISTORY OF INVESTMENT

The primary industrial plant was established in 1936, and in 1958. The first commercial production started in 1959. The factory made its first profits in 1962. In 1963, approximately 100,000 m² were invested for the expansion of dryers and in 1964 approximately 15,000 m² for renovation of the process.

II. INVENTORIES AND WORKING CAPITAL In 000 US \$

(End of 1966)

1 Inventories	Actual value	2 Liquid assets	Actual value
TOTAL	270.7	TOTAL	95.4
- Production materials	190.3	- Cash (hand/bank)	18.0
- Other input materials	61.4	- Market. sec. & bonds	2.4
- Work-in-process	19.0	- Short-term investment	16.5
- Finished products	10.0	- Prepaid expenses	58.5
		- Accounts receivable	

3. Deered working capital	Number of months	Value
TOTAL		501.5
- Production materials	2	190.3
- Other input materials	1	61.4
- Finished products	1.5	19.0
- Wages & salaries	1	190.3
- Other special items	5	18.6

III. MANNING TABLE (number of persons)

(1966 average)

	Total	1st shift		2nd shift
		A	B	A+B
ALL SHOPS & UNITS	211	123		65
	101	40	23	32
1. Primary operative shops				
- boiler	6			2
- Rotary veneer peelers	37	12	9	10
- Dryers	16	6		6
- Veneer chipping and assembling department	20	5	5	5
- Gluing machines	4	3		3
- Press department	17			4
- Trimming and finishing dept.		4	4	7
2. Auxiliary operative units	47	30		12
- Repair and maintenance	4	4		
- Mechanical shop	6	6		
- Utilities control	3	2		1
- Product & material storage	3	2		1
- Off-site transport	8	8		
- Guards, cleaners, etc.	23	8		8
3. Auxiliary non-operative units	31	30		1
- Production management	3	2		1
- Research & development				
- Sales unit				
- General administration	28	28		

WORKING TIME PER OPERATIVE WORKER:

Normal hours/day	1	2	3	Normal days/year
	7	7	7	237
Actual hours/year	211	1896	1659	1st, 2nd, 3rd shifts

CAPACITY OF OPERATIVE SHOPS:

10,000 m² (3.2 mm basis) of plywood per day, is manufactured on a 2 - shift operation.

No special mechanization and automation techniques employed.

CAPACITY POWER:

Process equipment	Generating equipment
3650 kW	Installed capacity

EXTERNAL CONDITIONS:

Transport: Long distance, by rail, truck, bus.

Utilities: Electricity, experimental, by rail.

Community: Residential, health, educational, industrial, etc.

IV. ANNUAL PRODUCTION

(1966)	Yr. of Prod. prod.	Quantity produced		Nominal capacity output	Unit price or factory (US \$) *	Total production value (1000 US \$)
		Unit	Output			
- Plywood	1938	000m ² (3.2mm thickness)	1,123	1,500	1,210	1,486
- Sawn timber	1962	000 board ft. **	3,746	4,000	90	329
TOTAL VALUE OF PRODUCTION:						1,815

* Average prices, not including sales tax
 ** 1 board ft. = 2,360 cm³

Exports: None

Capacity utilization:

The "nominal capacity output" is based on two shifts, 237 days per year.

VI. VALUE ADDED

(1966)	Value (1000 US \$)
1. Wages & salaries	
- Employees in direct production (163 persons)	177.0
- Other employees (38 persons)	117.4
2. Other payments for employees	21.4
3. Annual depreciation	45.9
4. Rentals paid	-
5. Interests & royalties	18.7
6. Sales tax (not incl. in TOTAL)	14.1
7. Other ind. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	598.7
TOTAL	598.6

VII. MONTHLY EARNING RATES

(End of 1966)	No. of emp.	Average earning rate (US \$)
1. Local non-operative		
TOTAL	23	275
- Managers	2	1,257
- Engineers	-	-
- Technicians	-	-
- Accountants	3	437
- Sales officers	-	-
- Other professional staff	1	227
- Clerks & typists	16	121
2. Local operative		
TOTAL	193	17
- Supervisors	1	546
- Foremen	1	221
- Machine operators	78	29
- Craftsmen	12	32
- Truck drivers	8	114
- Other full-time operatives	45	68
- Unskilled & part-time operatives	47	59
3. Foreign employees		
TOTAL	-	-

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed				Total consumption value (1000 US \$)
	Unit	Purchase	% imported	Tariff rate	
1. Energy and water					
TOTAL					23.9
- Electricity	000 Kwh	505.7			12.6
- Petroleum	000 l	1,962.0			11.3
2. Production materials					
TOTAL					858.1
- Logs for plywood	ft ³ (Doyle)	3,746,696			488.1
- Logs for sawn timber	" "	4,334,366			359.3
- Other materials	" "	..			10.7

	Total consumption value (1000 US \$)
3. Other materials & supplies	
TOTAL	177.8
- Packagings (400 t)	150.5
- Repair & maintenance	24.5
- Non-factor service inputs	2.8
4. Business services purchased	
TOTAL	156.6
- Transport, storage & insurance	155.8
- Communication, advertisements, etc.	0.8
5. Work performed by sub-contractors	
TOTAL	1,216.4

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(196)
 Industry group: Sawmills, planing and other wood mills (MNC:251)

1. Size groups by number of persons employed	Number of estab.	Number of emp.	Avg. W. & S. per emp. (US \$)	Avg. gross prod. per emp. (US \$)	Avg. exp. gross prod. rate* (%)
up to 50	1,385	6,040	433	1,321	56
50 - 250	68	3,037	583	3,530	78
over 250	34	16,453	645	2,748	103
TOTAL	1,487	31,530	589	2,814	86
2. Size groups by total of annual production (1000 US \$)					
up to 2	3,637	5,244	48	557	33
2 - 8	814	2,250	288	1,327	29
8 - 800	313	14,370	425	1,937	67
800 - 1,600	21	6,742	634	3,481	60
over 1,600	12	7,339	991	4,718	128
TOTAL	4,803	35,945	516	2,554	86

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

FUTURE PLAN:

Within the next three years approximately US \$ 1,600,000 will be invested for the expansion of production of plywood.

The additional labour to be employed will be

1st shift	35	persons
2nd shift	30	"

GOVERNMENT POLICIES:

No particular observation.

Major Products:Pine plywood. Capable of manufacturing annually 2,400,000 m²/6 mm of pine plywood on three-shift operation.**Reporting Unit:**A one-establishment enterprise, founded in 1956; privately owned; no participation of foreign capital.
Business year: 1 June 1966 - 31 July 1967.**I. FIXED CAPITAL ASSETS**

	Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
(End of July 1967)			
1. Primary process equipment			
TOTAL	1956-67	939	1,172
- Process equipment		611	899
- Hand tools & apparatuses		-	-
- Cost of installation		328	273
2. Primary industrial building			
TOTAL	1956-65	352	440
(total floor space: 13,709 m ²)		352	440
3. Auxiliary facilities *			
TOTAL		134	134
- Water, steam, electricity, cooling & storing (incl. in 2.)		incl. in 2.	
- Transportation facilities		134	
- Administrative facilities		incl. in 2.	
- Laboratory facilities			
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		1,425	1,746
4. Other fixed capital assets			
TOTAL		20	11
- Land (total acreage: 76,653 m ²)		20	11

* Facilities other than transport are included in I.P.

DETAIL OF PROCESS EQUIPMENT (incl.):	Supplier country	Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
Wood peeling lathes	U.S.A.	1956	40.0	64.0
Clippers (Chapa verde)	"	"	24.4	56.0
Driers (2)	"	1956-57	138.2	184.0
Patching machine (1)	"	1956	9.3	9.6
Glue mixing and spreading equip.	"	1956	9.0	14.0
Jointer (1)	"	1956	16.1	20.0
Assembling machine (1)	"	1956	12.1	15.8
Press (1)	"	1956	49.8	96.0
Surface finishing machine (1)	"	1956	53.2	53.2
Trimming machines	"	1956	18.0	20.0
General equipment		(1956 - 67)	12.2	59.0

HISTORY OF INVESTMENT:

The factory was constructed in 1956. The trial production started in 1956, the commercial production in 1957. The first profits were made in 1957, when utilization rate of capacity reached 50%. In 1965/66 approximately US \$ 320,000 were invested for expansion of production (both machinery and buildings).

CAPACITY POWER:Process equipment: 1,070 kW
Electric motors: 1,070 kW**Generating equipment:**

Installed capacity: - kVA

EXTERNAL CONDITIONS:

Transport: Long distance and local area, fair.

Utilities: Electricity, fair; water, excellent.

Community: Residential, health and recreational, excellent. educational, fair.

II. INVENTORIES AND WORKING CAPITAL

In 1000 US \$

(End of July 1967)		Actual value	Actual value
1. Inventories		107.6	
TOTAL			365.3
- Production materials		56.1	
- Other input materials		41.7	
- Work-in-process		32.1	
- Finished products		17.7	
2. Liquid assets			
TOTAL			365.3
- Cash (hand/bank)			19.8
- Market. sec. & bonds			-
- Short-term investment			-
- Prepaid expenses			33.8
- Accounts receivable			311.7
3. Desired working capital			
TOTAL		491.8	
- Production materials	30	90.0	
- Other input materials	-	-	
- Finished products	20	144.0	
- Wages & salaries	-	24.0	
- Other special items	33	243.8	

III. MANNING TABLE

	(number of persons)			A - Shiftwork operation		B - Other operation	
	Total	1st shift A	2nd shift B	A+B	A+B	A+B	A+B
(1967/68 average)							
ALL SHOPS & UNITS:	215	112	68	35	35	35	35
1. Primary operative shops	164	31	42	23	34	16	18
- Veneer department	121	25	34	17	23	11	11
- Plywood department	43	6	8	6	11	5	7
2. Auxiliary operative units	29	17	11	1	1	1	1
- Repair and maintenance	16	9	7	7	7	-	-
- Mechanical shop	4	3	1	1	1	-	-
- Utilities control	2	-	-	-	-	-	-
- Product & material storage	2	3	1	1	1	-	-
- Off-site transport	-	-	-	-	-	-	-
- Guards, cleaners, etc.	5	2	2	2	2	1	1
3. Auxiliary non-operative units	22	22	-	-	-	-	-
- Production management	1	1	-	-	-	-	-
- Research & development	3	3	-	-	-	-	-
- Sales unit	2	2	-	-	-	-	-
- General administration	4	4	-	-	-	-	-
- Others (office and lab.)	12	12	-	-	-	-	-

WORKING TIME PER OPERATIVE WORKER:

Normal hours/day: 7.4 hours - Normal days/year: 340 days (incl. 52 Sundays)
Actual hours/year: 2516 hours

CAPACITY OF OPERATIVE SHOPS:

In the veneer department, the nominal capacity output is 2,400,000 m²/6 mm per annum. Capacity is utilized up to 90%. Moderate automation and mechanization.

IV. ANNUAL PRODUCTION

Products for group of products	Yr. of prod.	Quantity produced		Unit price in factory MS \$	Total production value 1966 US \$	
		Unit	Output			
- Men's shoes	1965	pair	1,166	17,000	3.60	4.2
- Ladies' shoes	1965	"	38,698	57,000	1.20	16.1
- Children's shoes	1965	"	14,447	22,000	2.40	34.
- Wasts						1.0
TOTAL VALUE OF PRODUCTION						55.2

VI. VALUE ADDED

(1966/67)	Value 1966 US \$
1. Wages & salaries	10.0
- Employees in direct production (20 persons)	1.4
- Other employees (2 persons)	0.2
2. Other payments for employees	0.2
3. Annual depreciation	2.3
4. Rental paid	1.4
5. Interest & royalties	2.0
6. Sales tax	-
7. Other ind. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	5.0
TOTAL	25.6

COMPETING IMPORTS:

The following protective tariff rates are imposed on imported shoes:

men's shoes	US \$ 6.00/gross kg
ladies' shoes	" " 4.00 " "
children's shoes	" " 1.40 " "

In addition a 10% ad valorem rate is charged.

CAPACITY UTILIZATION:

In order to achieve full utilization of capacity 25,300 additional man-hours would be required annually.

VII. MONTHLY EARNING RATES

(End of 1966/67)	No. of emp.	Average earning rates 1966 US \$
1. Local non-operatives		
TOTAL	8	116
- Managers	1	600
- Engineers	-	-
- Technicians	-	-
- Accountants	1	30
- Sales officers	6	50
- Other professional staff	-	-
- Clerks & typists	-	-
2. Local operatives		
TOTAL	25	48
- Supervisors	-	-
- Foremen	-	-
- Machine operators	24	48
- Craftsmen	-	-
- Truck drivers	-	-
- Other full-time operatives	1	41
- Unskilled A part-time operatives	-	-
3. Foreign employees		
TOTAL	-	-

V. ANNUAL CONSUMPTION

(1966/67)	Quantity consumed			Total consumption value 1966 US \$
	Unit	Purchase	% imported	
1. Energy and water				0.6
TOTAL				0.6
- Electricity	000 KwH	9.6		3.4
- Motoroil	m3	0.225		0.1
- Water	000 m3	0.190		0.1
2. Production materials				58.8
TOTAL				58.8
- Leather	m2	7,561		29.0
- Soles	kg	3,200		2.6
- Woolite	sheet	3,490	60 1.70 10	9.1
- Synthetic leather	a	2,743	100 0.75 10	3.6
- Microcellular soles	sheet	1,500	100 4.00 10	5.6
- Fibreboard	sheet	1,000	100 0.10 10	2.0
- Adhesives	gallons	800	100 0.25 10	2.1
- Curb bars	a	45,720	100 0.15 15	1.2
- Heels	pair	25,000	.. 0.75 10	3.0
- Others				0.6

3. Other materials & supplies

TOTAL		0.7
- Packaging (polyethylene bags)	100	0.4
- Repair & maintenance		1.2
- Non-factor service inputs		0.1

4. Business services purchased

TOTAL		1.5
- Transport, storage & insurance		1.0
- Communications, advertisements, etc.		0.5

5. Work performed by sub-contractors

TOTAL		-
TOTAL		61.6

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(196)	Industry group:		(NIC:)		
1. Size group by number of persons employed up to	Number of estab.	Number of emp.	Avg. emp. in est. per pers. 1966 US \$	Avg. gross prod. val. per pers. 1966 US \$	Avg. emp. gross prod. value* (2)
No data available.					
TOTAL					
2. Size group by value of annual production 1966 US \$ up to					
TOTAL					

IX. SUPPLEMENTS

Future plans:

By 1970, approx. US \$ 20,000 will have been invested for the expansion of the heels and soles shops. 6 persons are to be employed additionally on the first shift.

* Capital is defined as physical capital assets.

IV. ANNUAL PRODUCTION

(1966/67)		Quantity produced		Unit price on factory	Total production value
Yr. of prod.	Unit	Output	Capacity output	US \$ (Average)	1966 US \$
1966/67	m ²	2,160,000	2,400,000	1.05	2,225
TOTAL VALUE OF PRODUCTION:					2,225

* Unit prices vary by types of plywood. US \$ 1.05/m² is the average price, not including sales tax.

Exports:

Pine plywood is partly exported. Ex-factory price for exports is US \$ 0.64 per unit. Production of this special item absorbs a great quantity of veneer cores; production costs are therefore lower than for other types of plywood.

Capacity utilization:

Satisfactory

VI. VALUE ADDED

(1966/67)		Value 1966 US \$
1. Wages & salaries		
- Employees in direct production (159 persons)		206.3
- Other employees (56 persons)		367.3
2. Other payments for employees		
3. Annual depreciation		
4. Rentals paid		
5. Interest & royalties		
6. Sales tax (not incl. in TOTAL)		
7. Other ind. bus. taxes		
8. (-) Subsidies		
9. Corporate income before tax		
		1,091.5

VII. MONTHLY EARNING RATES

(End of July 1967)		No. of pers. emp.	Average earning rate 1966 US \$
1. Local non-operative			
TOTAL:			
- Managers	1	1,040	
- Engineers	1	480	
- Technicians	3	224	
- Accountants	5	272	
- Sales officers	2	400	
- Other professional staff	2	160	
- Clerks & typists	9	124	
2. Local operatives			
TOTAL:			
- Supervisors	1	640	
- Foremen	3	105	
- Machine operators	70	148	
- Craftsmen	14	114	
- Truck drivers	1	104	
- Other full-time operatives	12	64	
- Unskilled & part-time operatives	26	37	
3. Foreign employees			
TOTAL:			

V. ANNUAL CONSUMPTION

(1966/67)		Quantity consumed			Total consumption value
		Unit	Purchase	% Imported	Tot/1966 US \$
1. Energy and water					
TOTAL:					
- Electricity	000 Kwh	1,130	-		22.6
- Oil	000 l	2,580,000			13.7
- Steam					
- Water	000 m ³				9.6
2. Production materials					
TOTAL:					
- Logs	sq.ft. (Doyle)	8,030,000	-		749.0
- Glue					112.0

3. Other materials & supplies		Total consumption value
		1966 US \$
TOTAL:		
- Packagings		83.9
- Repair & maintenance	20	75.4
- Non-factor service inputs		4.6
4. Business services purchased		
TOTAL:		
- Transport, storage & insurance		17.8
- Commission, advertisements, etc.		106.3
5. Work performed by sub-contractors		
TOTAL:		

1,112.9

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)
Industry group: Sawmill, planing and other wood mills (ISIC: 251)

1. Size groups by number of persons employed:	Number of units	Number of empl.	Av. gross prod. vol. per pers.		Av. emp. ratio* (%)
			W. & S. US \$	US \$	
up to 50	1,385	6,040	433	1,921	56
51 - 250	68	9,037	589	3,530	78
over 251	34	16,453	645	2,748	103
TOTAL	1,487	31,530	589	2,814	33
2. Size groups by value of annual production (1966 US \$):					
up to 2	Number of units	Number of empl.	Av. gross prod. vol. per pers.		Av. emp. ratio* (%)
			W. & S. US \$	US \$	
2 - 8	814	2,250	288	1,327	33
8 - 800	319	14,370	425	1,937	23
800 - 1,600	21	6,742	634	3,481	60
over 4,000	12	7,339	991	4,718	128
TOTAL	4,803	35,945	516	2,554	86

* defined as physical capital assets.

IX. SUPPLEMENTS

FUTURE PLAN:

Within a period of 5 years, approximately US \$ 500,000 will be invested for general expansion of the enterprise.

GOVERNMENT POLICIES:

Government subsidy is required for infra-structural improvements.

Major Products:

Sawn timber, chopped lumber, saw dust, etc.
 In 1967 the company produced approximately 62,000 t of sawn timber and 10,000 t of chopped lumber and saw dust on 1-shift operation.

Reporting Unit:

A one-establishment enterprise; founded in 1903; privately owned; 150 employees; 95% exports; 2/3 of production material internally supplied.

I. FIXED CAPITAL ASSETS

(End of 1967)

	Original purchase value 1000 US \$	Replacement value 1000 US \$	Avg age (Yrs.)
1. Primary process equipment (including installation cost)			
TOTAL	356	411	-
- Process equipment *	354	409	-
- Hand tools & apparatus	2	2	-
2. Buildings			
TOTAL	350	600	-
- Primary industrial buildings (total floor space: 1,346 m ²)	231	397	10
- Auxiliary buildings	47	83	15
- Warehouses	-	-	-
- Office administration buildings	16	31	15
- Housing	56	100	20
3. Auxiliary facilities (excl buildings)			
TOTAL	77	100	-
- Internal power equipment	55	100	30
- Laboratory facilities	-	-	-
- Means of transportation	10	12	6
- Office equipment	12	23	5
TOTAL PHYSICAL FIXED ASSETS (excluding land)	783	1,111	-
4. Other fixed capital assets			
TOTAL	291	378	-
- Land (total acreage: 19,574 m ²)	86	146	-
- Land improvements (excl. 1,100 m ²)	9	9	-
- Others	117	117	-

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII.)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1967 monthly average)

	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	560 US\$
1. Local non-operative						
- Managers	-	-	-	-	1	1
- Engineers	-	-	-	-	-	-
- Technicians	1	-	2	-	-	-
- Accountants	-	-	-	-	-	-
- Sales officers	-	-	-	-	-	-
- Clerks and typists	3	-	2	-	-	-
- Others	-	-	-	5	-	-
2. Local operatives						
- Supervisors	-	-	-	-	1	-
- Foremen	-	-	-	-	-	-
- Skilled operatives	-	-	2	11	-	-
- Machine operators	-	20	3	-	-	-
- Craftsmen	-	-	-	4	-	-
- Truck drivers	-	-	-	-	-	-
- Unskilled operatives	-	5	-	-	-	-
- Other full-time operatives	-	-	-	-	-	-
- Part-time operative	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	20	-	-	-	-

EXTERNAL CONDITIONS:

Transport:	external long distance	fair
	internal long distance	"
	local and city	"
Utilities:	electricity	fair
	water	fair
	gas	insignificant
Community:	residence	excellent
	health and recreation	"
	education	"
Own Welfare Facilities:		cafeteria, sports club

III. INVENTORIES

(End of 1967)

	Actual value 1000 US \$	Number of months
Inventories	77	-
TOTAL:		
- Production materials	123	1
- Other input materials	4	1
- Work-in-process	-	-
- Finished products	21	1

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	
- Shifts/week: (*)	10	-	-	hours
- Actual hours/year:	2,295	-	-	hours
- Actual days/year:	230	-	-	days

(*) Actual shift hours due to overtime. Normal working time: 8 hrs/day

IV. MANNING TABLE

(Number of persons)

Shift categories: A: Supervisory staff and foremen (for all shifts)
 B: Skilled operatives
 C: Semi-skilled operatives (machine operators)
 D: Unskilled operatives

(1967 average)

	Total	1st Shift				2nd Shift		3rd Shift	
		A	B	C	D	B-C	D		
ALL SHOPS & UNITS:	140	11	113	-	-	-	-	-	
1. Primary operative shops	110	2	107	24	-	-	-	-	
- Round timber storage yard	18	1	1	4	4	-	-	-	
- Saw mill	65	1	30	16	-	-	-	-	
- Planing mill	1	-	1	-	-	-	-	-	
- Drying rooms	3	-	3	-	-	-	-	-	
2. Auxiliary operative units	61	3	58	-	-	-	-	-	
- Repair & maintenance	4	-	9	-	-	-	-	-	
- Mechanical shop	-	-	-	-	-	-	-	-	
- Tooling shop	-	-	-	-	-	-	-	-	
- Utilities control	-	-	-	-	-	-	-	-	
- Product & material storage	17	3	44	-	-	-	-	-	
- Off-site transport	-	-	-	-	-	-	-	-	
- Guards, cleaner, etc.	1	-	1	-	-	-	-	-	
- Others (cafeteria)	4	-	4	-	-	-	-	-	
3. Auxiliary non-operative units	11	11	-	-	-	-	-	-	
- Production management	2	2	-	-	-	-	-	-	
- Research & development	-	-	-	-	-	-	-	-	
- Sales unit	1	1	-	-	-	-	-	-	
- Accounting	3	3	-	-	-	-	-	-	
- General administration	2	2	-	-	-	-	-	-	

V. ANNUAL PRODUCTION

(1967)

Product or group of products	No. of the unit	Quantity produced		Per unit price in local MO	Total output value USD USD
		Units	Quantity		
Sawn timber	..	m ³	62,411	91.10	2,418
Chopped timber, saw dust, etc.	..	m ³	2,212	1.57	252

TOTAL VALUE OF PRODUCTION: 2,670

VI. VALUE ADDED

(1967)

	Total value USD USD
1. Annual wage & salaries	271
- Operative workers	271
(1) 133 persons	
- Non-operative workers	46
(1) 16 persons	
2. Other payments for employees	52
3. Annual depreciation	116
- Machinery & equipment	11
- Buildings & other facilities	11
- Non-physical capital assets	2
4. Revenue paid	68
5. Interest & royalties	-
6. Sales tax	81
7. Other indirect business taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	14

TOTAL VALUE ADDED: 642

DESCRIPTION OF MAJOR PRODUCTS:

- a) Sawn timber: Serial production, delivered in wagons of 50 m³ each, 6 weeks delivery time.
- b) Chopped timber, saw dust, etc.: by-product, delivered by trucks, not exportable, immediate delivery.

MARKET ASPECTS:

Consumers of products:

Construction firms, carpenters.

Sales organization:

Own representatives abroad. No domestic sales staff required, since only local market serviced. Export-oriented.

Share in domestic market:

Insignificant.

Exports:

2% of national export of sawn timber.
Exports to: Near East, Africa, Argentine, Southern and Western Europe.

Export price policy:

No influence on the market prices prevailing in importing countries.

EXPORT:

Total annual export: US \$ 2,245,000.

Major product	To Western Europe	To Eastern Europe	To Other Europe
Sawn timber	70%	-	10%

Governmental policies:

The government subsidizes exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under VI.6. has been adjusted accordingly.

VII. ANNUAL CONSUMPTION

(1967)

	Quantity consumed		Value in local MO	Total consumption value USD USD
	Units	Quantity		
1. Energy and other forms:				34
- Electricity	100 kWh	1,946		34
2. Production materials forms:				1,975
- Round timber	m ³	94,468		1,975

3. Other materials & supplies forms:	54
- Packaging material	-
- Parts, supplies & services	14
- Other materials & supplies	20
4. Business services purchased forms:	25
- Transportation, storage & insurance	16
- Communication, advertising & other business services	9
5. Work performed by subcontractors forms:	-

TOTAL VALUE OF CONSUMPTION: 2,088

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT S.12:

Number	Original Purchase Value (100 000 \$)	Replacement value (100 000 \$)	Age (yr)	Supplier country	Year of installation	Daily running time	Capacity output
1	30.8	34.8	5	Belgium	1962	9 hrs	35 m3/day
4	112.9	131.5	3	FR.Germ.	1962, 1967	2 "	70 m3/day
1	4.1	6.1	15	Austria	1951	1 "	35 m3/day
1	1.2	3.1	7				
2	5.8	15.5	17	FR.Germ.	1951	19 "	..
1	10.8	10.8	3	France	1964	9 "	260 m3/day
1	4.5	5.8	6	Austria	1961	2 "	6 m3/day
2	1.6	1.9	5				
2	7.2	8.5	5				
1	3.4	4.6	3				
1	27.7	32.0	1	Austria	1967	1 "	..
1	32.0	32.0	1	FR.Germ.	1967	1 "	..
1	2.5	2.5	2				
1	82.8	82.8	1	FR.Germ.	1964	1 "	
4	2.8	3.1	2				
17	2.8	3.1	6				
1	7.2	8.5	12				
1	4.4	8.5	10				
1	1.9	2.3	4				
1	1.5	2.7	5				
17	5.3	8.1	6				

CAPACITY POWER:
 Process equipment:
 - electric motor (17) 1,623 kW

Generating equipment:
 - installed capacity - 8VA

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Status	Rating
Round timber storage yard		C	III
Saw mill		D	III
Planing mill		E	III
Drying rooms		H	III
Sawn timber storage department		H	III

The round timber storage yard will receive highly mechanized transportation equipment.

CAPACITY UTILIZATION:

Full-capacity output: US \$ 2,000,000.- In 1967 US \$ 2,120,000.- worth of sawn timber was produced amounting to a capacity utilization of almost 80%.

Current utilization:

Major products or processes	Approximate %
Sawn timber	80

ML HISTORY & PLAN

Year	Total output (100 000 \$)	No. of persons employed	Total output (100 000 \$)
1963	2,636	175	2,572
1964	2,858	165	2,808
1965	2,734	164	2,686
1966	2,302	142	2,662
1967	2,691	149	2,567
1968	2,303	135	2,709

Period	Approximate amount (100 000 \$)	Type of investment
From 1964 to 1967	581	Machinery and conveying equipment
From 1968 to 1972	310	Further mechanization of machinery, equipment, workshops, and production process. Consequently, 10 persons could be employed less.

II. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1967)

Industry: Saw mill and planing mill (NIC Code: 251)

1. Size groups by number of persons employed	No. of emp.	No. of emp.	Avg. W. & A. per emp. (100 \$)	Avg. gross prod. val. per emp. (100 \$)	Avg. value added per emp. (100 \$)
up to 19	1,029	1,265	1,411	2,996	34
20 - 99	235	1,469	1,481	9,269	38
100 - 499	18	1,364	1,712	8,340	37
over 500	-	-	-	-	-
TOTAL:	1,282	20,398	1,471	1,447	36

2. Size groups by annual rate of production (100 000 \$)

Rate of production	No. of emp.	No. of emp.	Avg. W. & A. per emp. (100 \$)	Avg. gross prod. val. per emp. (100 \$)	Avg. value added per emp. (100 \$)
up to 20	1,345	995	1,262	8,262	45
20 - 40	360	1,221	1,244	8,304	42
40 - 200	406	1,399	1,399	9,819	39
200 - 1000	154	1,465	1,465	9,708	38
1000 - 2,000	72	1,676	1,676	10,238	35
over 2,000	5	1,191	1,691	11,511	32
TOTAL:	3,292	20,398	1,471	9,447	38

II. GENERAL AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service

- | | | |
|------------------------|---------------------------------------|---------------------------------|
| 1. Engineering study | 3. Technical and managerial personnel | 5. Import and export assistance |
| 2. Physical assistance | 4. Industrial training | 6. Admission of foreign labour |
| 7. Industrial services | 8. Equipment supply | 9. Technical consultancy |
| 10. Equipment supply | 11. Technical assistance | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service	Country or region	No. of projects	Field of industry	Description of projects
-----------------	-------------------	-----------------	-------------------	-------------------------

No co-operation possibilities with developing countries reported.

III. SUPPLEMENTS & NOTES

Bottlenecks:

Particular emphasis should be given to the improvement of the foreign sales organization. The national labour market can no longer provide a sufficient amount of workers.

Inventory problems:

Since it takes very much time to receive supplies of unseasoned timber, large quantities have to be stored in order to ensure continuous utilization of process equipment. As orders fluctuate during different periods of construction activities, the enterprise has to keep considerable inventories of finished products, too. Altogether finished products amount to 9.3% of the total output value.

Major Products: Chip board.
 Capable of producing annually 50,000 m³ of chip board based on 3-shift operation. Full-capacity output approximates US \$ 3.1 million.

Reporting Unit: A one-establishment enterprise; privately owned; founded in 1960; 36 employees; no exports; no research and development.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (1000 US \$)	Replacement value (1000 US \$)	Average age (Yrs)
1. Primary process equipment (including installation cost)			
TOTAL	1,513	1,800	
- Process equipment *	1,483	1,763	4
- Hand tools & apparatuses	30	37	-
2. Buildings			
TOTAL	613	675	
- Primary industrial buildings (total floor space: 13,400 m ²)	613	675	5
- Auxiliary buildings			
- Warehouse			
- Office administration buildings			
- Housing			
3. Auxiliary facilities (excl. buildings)			
TOTAL	62	74	
- Internal power equipment	-	-	-
- Laboratory facilities	13	16	4
- Means of transportation	27	32	5
- Office equipment	22	26	4
TOTAL PHYSICAL FIXED ASSETS (excluding land)	2,188	2,549	
4. Other fixed capital assets			
TOTAL	15	112	
- Land (total acreage: 600,000 m ²)	-	-	-
- Land improvements (t. acc. 60%, 30% *)	8	37	-
- Others	65	75	4

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section 1.B1).

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1967 monthly average)	up to 125 US\$	125 - 160 US\$	160 - 200 US\$	200 - 300 US\$	300 - 1,000 US\$	over 1,000 US\$
1. Local non-operatives						
- Managers	-	-	-	-	2	-
- Engineers	-	-	-	1	2	-
- Technicians	-	-	1	2	2	-
- Accountants	-	-	-	1	-	-
- Sales officers	-	-	-	-	-	-
- Clerks and typists	-	-	2	1	1	-
2. Local operatives						
- Supervisors (*)	-	-	-	-	-	-
- Foremen	-	-	-	-	-	-
- Skilled operatives	-	-	18	4	-	-
- Machine operators	-	-	10	16	-	-
- Craftsmen	-	-	-	-	-	-
- Truck drivers	-	-	-	-	-	-
- Unskilled operatives	-	2	7	5	-	-
- Other full-time operatives	-	-	11	8	-	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

(*) Company considers supervisors and foremen as local non-operatives.

EXTERNAL CONDITIONS:

Transport:	external long distance	} fair
	internal long distance	
	local and city	
Utilities:	electricity	} fair
	water	
	gas	
Community:	residence	-
	health and recreation	fair
	education	-
Own Welfare Facilities:		-

IV. MANNING TABLE

(Number of persons)

Skill categories: A: Supervisory staff and foremen (for all shifts)
 B: Skilled operatives
 C: Semi-skilled operatives (machine operators)
 D: Unskilled operatives

(1967 average)	Total	1st Shift				2nd Shift	
		A	B	C	D	B-D	C-D
ALL SHOPS & UNITS:	96	15		35		23	23
1. Primary operative shops	73	4	6	13	4	23	23
- Chip board production department	73	4	6	13	4	23	23
2. Auxiliary operative units	14	2		12		-	-
- Repair & maintenance	7	1		6		-	-
- Mechanical shop	-	-		-		-	-
- Tooling shop	-	-		-		-	-
- Utilities control	1	-		1		-	-
- Product & material storage	3	1		2		-	-
- Off-site transport	2	-		2		-	-
- Guards, cleaners, etc.	1	-		1		-	-
3. Auxiliary non-operative units	9	9		-		-	-
- Production management	2	2		-		-	-
- Research & development	1	1		-		-	-
- Sales unit	3	3		-		-	-
- Accounting	1	1		-		-	-
- General administration	2	2		-		-	-

III. INVENTORIES

(End of 1967)	Actual value (1000 US \$)	Number of months
Inventories	275	
TOTAL		
- Production materials	135	0.5
- Other input materials	14	0.5
- Work-in-process	3	-
- Finished products	123	0.5

WORKING TIME PER OPERATIVE WORKER

	1st shift	2nd shift	3rd shift	hours
Shift hours/day	8	8	8	
Actual hours/year	2,060	2,060	2,060	hours
Actual days/year	257.5	257.5	257.5	days

V. ANNUAL PRODUCTION

(1967)	Yr. of prod.	Quantity produced		Av. unit price as factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Products for group of products					
Chip board	1961	m ³	48,132	64.5	3,106
TOTAL VALUE OF PRODUCTION:					3,106

VI. VALUE ADDED

(1967)	Total value (000 US \$)	
1. Annual wages & salaries	296	
- Operative workers (81 persons)	223	
- Non-operative workers (15 persons)	75	
2. Other payments for employees	57	
3. Annual depreciation	242	
- Machinery & equipment	214	
- Buildings & other facilities	24	
- Non-physical capital assets	4	
4. Rentals paid	-	
5. Interests & royalties	19	
6. Sales tax	1.77	
7. Other indirect business taxes	-	
8. (-) Subsidies	-	
9. Corporate income before tax	197	
TOTAL VALUE ADDED:		1,120

DESCRIPTION OF MAJOR PRODUCTS:

Unfinished chip board of different thickness. Serial production.

MARKET ASPECTS:

Consumers of products:

Furniture industry, building trade, timber-merchants.

Sales organization:

Direct selling to large customers; agents for small customers.

Share in the domestic market:

4 - 5%.

Competition in the market:

Based on special terms of payment granted by other producers of chip board to large customers.

EXPORT: No exports.

Total annual export:

Major products	To Western countries	To Eastern countries	To Developing countries

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import price (US \$)	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL:					200
- Electricity	000 kWh	7,527	-	-	130
- Solid and liquid fuels	-	-	70
- Gas	..	..	-	-
- Steam	..	..	-	-
- Water	..	..	-	-
2. Production materials					
TOTAL:					1,332
- Pine wood, unbarbed	m ³	19,192	-	-	1,332
- Pine wood, barbed	m ³	35,107	-	-	
- Beechwood, unbarbed	m ³	26,194	-	-	
- Sawmill waste	m ³	870	-	-	
- Chips	m ³	25,974	-	-	
- Millings	m ³	628	-	-	
- Kraft glue	kg	4,221	-	-	
- Other chemicals	kg	120	-	-	

	Total consumption value (000 US \$)	
3. Other materials & supplies	63	
TOTAL:		
- Packaging material	-	
- Parts, supplies & services	63	
- Other materials & supplies	-	
4. Business services purchased	391	
TOTAL:	377	
- Transportation, storage & insurance	-	
- Commission, advertising & other business services	377	
5. Work performed by subcontractors	-	
TOTAL:	-	
TOTAL VALUE OF CONSUMPTION:		1,925

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (1):	Number	Original	Replaces	Av. Age (yrs)	Remarks	Supplier country	Year of installation	Daily running time
		Production Value (USD US \$)	with value (USD US \$)					
Chipping plants	2	13	16	2	..	Germany, F.R.G.	1966	2 shifts
Scattering devices	2	19	24	6	..	Germany, F.R.G.	1961, 1963	2 shifts
Platen-presses	2	59	74	6	..	Germany, F.R.G.	1961, 1963	1.5 shifts
Sanding machines	3	32	37	2	..	Germany, F.R.G.	1967	3 shifts
Gluing apparatuses	3	21	26	5	..			
Other specialized machines	..	200	240	4	30			
Other specialized devices	..	300	357	4	..			
Lift truck	1	10	13	3	..			
Cranes	2	19	27	5	..			
Common type machines	..	235	270	4	30			
	..	575	680	4	..			

CAPACITY POWER	
Process equipment electric motors	100 ..
Generating equipment installed capacity	100 ..

CAPACITY OF PRIMARY OPERATIVE DEPT.

Single primary operative dept.	Kind of process involved	Efficient	Autom.	Particular details
Chip board production department		B	11	The production process applied requires a continuous flow of material: the raw material is processed without any interruption until chip board is finished. No differentiation between departments and no in-process stock-taking required.

CAPACITY UTILIZATION:

Full capacity output: US \$ 3,125,000 based on 2-shift operation.

Current utilization: based on 2-shift operation.

Single products for present	Approximate % to 20	20	30	40	50	60	70	80	90	100
Chip board										

IX. HISTORY & PLAN

Year	Total output (USD US \$)	No. of persons employed	Total output (USD US \$)
1963	1,050	94	-
1964	1,930	96	-
1965	2,050	106	-
1966	2,910	102	-
1967	3,110	96	-
1968	-	-	-

2. Investments in the past:

From 19... to 19... : No details available.

in 1967 : 3%

3. Future Plan:

From 1967 to 1971 : 2,120

Expansion of product-mix, machinery and equipment in order to avoid any future bottlenecks with regard to production capacity; rationalization of production process. Labour requirements: additional 15 employees on all 3 shifts.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1968)

Head mills and related manufactures (NSIC Code: 261)

C = confidential; figures are included in total.

1. Size groups by number of persons employed	No. of estab.	No. of empl.	Av. No. of S. & S. per estab. (USD \$)	Av. sales per emp. (USD \$)	Av. value added/sales ratio (%)	2. Size groups by amount of sales (USD US \$)					
						No. of estab.	No. of empl.	Av. No. of S. & S. per emp. (USD \$)	Av. sales per emp. (USD \$)	Av. value added/sales ratio (%)	
up to 19	5,386	25,302	4,700	8,724	41	up to 250	5,897	33,297	761	7,991	28
20 - 49	909	17,537	1,901	9,274	40	250 - 500	319	11,328	C	9,722	C
50 - 99	141	9,065	1,597	10,061	40	500 - 1,250	164	12,774	C	9,700	C
100 - 499	111	22,748	1,754	10,225	39	1,250 - 2,500	56	9,702	1,737	10,084	42
500 - 999	16	10,724	1,250	11,134	45	2,500 - 6,250	32	11,031	1,846	11,236	38
over 1,000	5	5,713	2,134	10,177	48	over 6,250	19	C	C	C	C
TOTAL	6,108	92,151	1,562	9,717	41	TOTAL	5,997	92,154	1,401	9,717	36

III. COVERED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

- Type of service
- | | | |
|--------------------------|--|---------------------------------|
| 1. Feasibility study | 5. Technical and managerial assistance | 8. Import and export promotion |
| 2. Production assistance | 6. Technical training | 9. Admission of foreign capital |
| 3. Technical studies | 7. Technical cooperation | Other |
| 4. Equipment supply | | |
- availability & maintenance

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Name of industry	Description of project
-----------------	-------------------	-----------------	------------------	------------------------

The establishment is prepared to furnish technical advice (know-how) and to grant licenses for the production of chip board.

Neither import nor export transactions can be foreseen.

III. SUPPLEMENTS & NOTES

Bottleneck:

Due to increasing demand company has already reached full-capacity output. In order to abolish this bottleneck most of the 1969 - 71 investments will be utilized to expand the overall capacity.

Inventory policy:

On the average the value of the stock of finished products amounts to about 4% of the total value of production.

Major Products: Steel and wooden furniture. Capable of producing annually approximately 150,000 units of steel furniture and 5,000 units of wooden furniture on 1-shift operation.

Reporting Unit: A one-establishment enterprise, privately owned, founded in 1932, medium-sized. Company belongs to one of the fastest growing enterprises in this industry. Several domestic and foreign branch offices. Designing, exports, 170 employees.

I. FIXED CAPITAL ASSETS

(End of 1967)

	Original purchase value (1000 US \$)	Replacement value (1000 US \$)	Average age (Yrs.)
1 Primary process equipment (including installation cost)			
TOTAL	187	213	
Process equipment *	187	213	11
Hand tools & apparatus	-	-	-
2 Buildings			
TOTAL	360	1,068	
Primary industrial buildings (total floor space)	232	740	30
Auxiliary buildings	24	46	25
Warehouses	14	292	20
Office administration buildings	-	-	-
Housing	-	-	-
3 Auxiliary facilities (excl. buildings)			
TOTAL	114	214	
Internal power equipment	79	89	20
Laboratory facilities	-	-	-
Means of transportation	4	79	5
Office equipment	31	46	5
TOTAL PHYSICAL FIXED ASSETS (excluding land)	661	1,500	
4 Other fixed capital assets			
TOTAL	71	133	
Land (total average)	-	-	-
Land improvements (total average)	11	194	-
Others (sales offices)	60	39	30

*NK Details of process equipment and use of primary industrial shops are given on Page three (Section VII).

II. MONTHLY GROSS WAGES AND SALARIES

(1967 monthly average)

	Number of persons				
	up to 100 US\$	100-140 US\$	140-160 US\$	160-240 US\$	over 240 US\$
1. Local non operatives					
- Managers	-	-	-	-	-
- Engineers	1	-	3	-	1
- Technicians	-	2	-	2	-
- Accountants	1	4	-	7	4
- Sales officers	1	-	2	-	-
- Clerks and typists	-	1	-	3	1
- Dispatch and warehouse	-	-	-	-	-
2. Local operatives					
- Supervisors	-	-	-	5	4
- Foremen	-	3	9	5	-
- Skilled operatives	1	32	1	-	-
- Machine operators	-	1	-	2	-
- Craftsmen	2	-	3	5	-
- Truck drivers	45	-	-	1	-
- Unskilled operatives	-	-	-	-	-
- Other full-time operatives	-	-	-	-	-
- Part-time operatives	-	-	-	-	-
- Warehouse workers	4	6	1	1	-
- Apprentices	-	-	-	-	-
3. Foreign employees					
- Managerial staff	-	-	-	-	-
- Technical staff	-	-	-	-	-
- Other skilled opera	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-

EXTERNAL CONDITIONS

Transport	external long distance	fair
	internal long distance	excellent
	local and city	"
Utilities	electricity	excellent
	water	"
	gas	"
Community	residence	fair
	health and recreation	insignificant
	education	fair
Urban Welfare Facilities		-

III. INVENTORIES

(End of 1967)

	Actual value (1000 US \$)	Number of months
Inventories	435	
TOTAL	100	..
- Production materials	27	..
- Other input materials	142	..
- Work-in-process	133	1 - 1 1/2
- Finished products	-	-

WORKING TIME PER OPERATIVE WORKER

	1st shift	2nd shift	3rd shift	hours
Shift inventory	9	-	-	hours
Actual inventory	2,085	-	-	hours
Actual employees	231	-	-	days
Company operates 5 days/week				

IV. MANNING TABLE

(1967 average)

	Total	Skill categories					
		1st Shift			2nd Shift		3rd Shift
		A	B	C	D	E	F
ALL SHOPS & UNITS	169	40	129			-	-
1 Primary operative shops	106	5	22	35	44	-	-
- Metal cutting and bending shop	3	-	1	1	1	-	-
- Drilling and riveting shop	9	-	2	-	7	-	-
- Electrical and autogeneous welding shop	11	-	1	10	-	-	-
- Mechanical shop	17	-	6	1	10	-	-
- Paint shop	13	3	-	6	4	-	-
- Plastic stretching shop	11	-	-	1	10	-	-
- Fabric stretching shop	6	-	-	4	2	-	-
- Sewing shop	5	-	4	-	1	-	-
- Pressing and spring coiling shop	7	-	-	5	2	-	-
- Joiner's shop	24	2	6	7	7	-	-
2 Auxiliary operative units	35	12	23			-	-
- Repair & maintenance	-	-	-	-	-	-	-
- Mechanical shop	-	-	-	-	-	-	-
- Tooling shop	5	1	-	4	-	-	-
- Utilities control (*)	6	6	-	-	-	-	-
- Product & material storage	12	5	-	7	-	-	-
- Off-site transport	10	-	-	10	-	-	-
- Guards, cleaners, etc.	2	-	-	2	-	-	-
3. Auxiliary non-operative units	28	23	5			-	-
- Production management	1	1	-	-	-	-	-
- Research & development	-	-	-	-	-	-	-
- Sales unit	9	9	-	-	-	-	-
- Accounting	3	3	-	-	-	-	-
- General administration and sales agencies	15	10	-	5	-	-	-

(*) including payroll department

Major Products: Shoes (leather, rubber, PVC and canvas).
Capable of producing annually 9.5 million pairs of shoes on 1-shift operation.

Reporting Unit: A one-establishment, privately owned enterprise, founded in 1957. No foreign capital participation. Construction of the factory started in 1957, trial production in 1958 and commercial production in 1959; the first profits were made in 1961 when the output amounted to 1,670,000 pairs of shoes. Exports 300,000 to 500,000 pairs per annum. Possibility of further specialisation.

I. FIXED CAPITAL ASSETS

(End of 1968)	Original purchase value (1968 US \$)	Replacement value (1968 US \$)	Average age (Yrs.)
1 Primary process equipment (including installation cost)			
TOTAL	4,224	approx. 10% higher than original purchase value	
- Process equipment *	3,960		
- Hand tools & apparatus	264		
- Cost of installation incl.			
2 Buildings			
TOTAL	1,663	3,300	
- Primary industrial buildings (total floor space: m ²)			
- Auxiliary buildings			
- Warehouses	1,663	3,300	
- Office administration buildings			
- Housing			
3 Auxiliary facilities (excl. buildings)			
TOTAL	1,254	..	
- Internal power equipment	792	..	
- Laboratory facilities	-	-	
- Means of transportation	132	..	
- Office equipment	330	..	
TOTAL PHYSICAL FIXED ASSETS (including land):	7,141		
4 Other fixed capital assets			
TOTAL	792	..	
- Land (total acreage: 50,000 m ²)	317	..	
- Land improvements	-	-	
- Others	475	..	

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII.)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1968 monthly average)	US\$	US\$	US\$	US\$	US\$	US\$
1. Local non operatives						
- Managers		198	-		924	
- Engineers		-	-		-	
- Technicians		-	-		-	
- Accountants		92	-		396	
- Sales officers		132	-		264	
- Clerks and typists		132	-		264	
2. Local operatives						
- Supervisors					119	
- Foremen					-	
- Skilled operatives					-	
- Machine operators					3 *	
- Craftsmen		198	-		330	
- Truck drivers					132	
- Unskilled operatives					3 *)	
- Other full-time operatives					-	
- Part-time operatives					-	
3. Foreign employees						
- Managerial staff		462	-		..	
- Technical staff		462	-		..	
- Other skilled operatives		-	-		-	
- Unskilled operatives		-	-		-	

*) per day

EXTERNAL CONDITIONS:

Transport:	external long distance	fair
	internal long distance	fair
	local and city	excellent
Utilities:	electricity	excellent
	water	excellent
	gas	-
Community:	residence	excellent
	health and recreation	excellent
	education	excellent
Own Welfare Facilities:		-

IV. MANNING TABLE

(Number of persons)

NB categories: A Supervisory staff and foremen (for all shifts)
B Machine operators

(1968 average)	Total	1st Shift				2nd Shift		3rd Shift	
		A	B	C	D	B-B	B-B		
ALL SHOPS & UNITS:	2,941	12	1,311	-	-	-	-	-	
1. Primary operative shops	2,029	80	1,949	-	-	-	-		
- All shops	2,029	80	1,949 §)						

§) 1,949 is the figure for the annual cumulative total of which 200 worked only part of the year.

III. INVENTORIES

(End of 1968)	Actual value (1968 US \$)	Number of months
Inventories		
TOTAL:	5,927	
- Production materials	1,795	
- Other input materials	132	
- Work-in-process	172	
- Finished products	3,828	

(See Section XII. - Liquid assets and Desired working capital).

2. Auxiliary operative units	132	12	120	-	-
- Repair & maintenance incl. in primary operative shops					
- Mechanical shop					
- Tooling shop					
- Utilities control incl. in primary operative shops					
- Product & material storage	85	12	73		
- Off-site transport	-	-	-		
- Guards, cleaners, etc.	47	-	47		
3. Auxiliary non-operative units	780	740	-	-	-
- Production management	55	55			
- Research & development	-	-			
- Sales unit	484	484			
- Accounting and data processing	217	217			
- General administration	21	21			
- Others	3	3			

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift length/day	8	-	-	
Actual hours/year	2,352	-	-	
Normal days/year	294	-	-	days

70% of operatives work one or two hours overtime, when needed

V. ANNUAL PRODUCTION

(1967)	Yr. of first prod.	Quantity produced		Avg. unit price as factory (RUB B)	Total as first value (1958 US\$)
		Unit	Quantity		
Products for group of products					
Metal furniture:					
Deck-chairs	1945	pieces	29,579	5.41	160
Easy chairs	"	"	37,309	7.27	271
Chairs	"	"	3,998	7.51	30
Stools	"	"	6,333	2.61	17
Benches	"	"	1,390	19.35	27
Tables	"	"	19,729	11.09	219
Beds	1938	"	9,780	21.93	214
Swinging garden seats	1945	"	1,259	27.54	35
Ski-bobs	1947	"	500	21.05	11
Wooden furniture:					
Foldaway-beds, couches, bedside tables	1947	"	4,509	33.99	153
TOTAL VALUE OF PRODUCTION:					1,137

VI. VALUE ADDED

(1967)	Total value (1958 US\$)
1. Annual wages & salaries	300
- Operative workers (129 persons)	208
- Non-operative workers (40 persons)	92
2. Other payments for employees	68
3. Annual depreciation	24
- Machinery & equipment	7
- Buildings & other facilities	17
- Non-physical capital assets	-
4. Rentals paid (for storage)	5
5. Interest & royalties	19
6. Sales tax	48
7. Other indirect business taxes (*)	3
8. (-) Subsidies	-
9. Corporate income before tax	80
(*) Property tax, motor tax, transport tax, fee and stamps.	
TOTAL VALUE ADDED:	547

DESCRIPTION OF MAJOR PRODUCTS:

Patented folding bed: Very light, easily storable, very suitable for mobile mass accommodations, can also be delivered as tropical bed, steel-tube, enamel baked, mosquito-net holder, sinked wire mattress.
 Steel-tube and "room-sewing" beds: single or bunk; with or without board, wire mattress and rollers.
 Furniture and equipment for restaurants, gardens, terraces, and camping. Steel-tube, enamel baked, easily storable.
 Patented deck-chairs: Folding chair of chromatic steel-tube, PVC cord, smallest folding space.
 Couches: Can immediately be changed into beds. Plywood, PVC-mattress.

All products are produced in series or single.

Unit packing in cartboards or boxes.

Terms of delivery: Small orders can be delivered at once; large orders within 4 - 6 weeks.

MARKET ASPECTS:

Re-sales: Steel furniture, upholstery and mattresses. Turnover amounts to 10% of total sales.

Consumers of products: Wholesalers, hotels, youth hostels, hospitals, army, households.

Sales organization: Products are sold to wholesalers and final consumers by own sales department of the central office. Retail sales are handled by 3 stores.
 The establishment works to order because of the wide range of the product-mix.

Extent of the market: 90% of the total turnover results from own products and 10% from re-sales. 72% of the company's products is sold to wholesalers and hotels. 28% is sold to final consumers.

Share in the domestic market: About 62% of the market for steel furniture.

Export price policy: Export prices are fixed at manufacturing costs, since domestic prices ensure a reasonable profit. Manufacturing cost prices cover fixed and variable costs as well as a small profit.

Competition: All products are of superior quality and medium-priced which accounts for the competitiveness of the company.

EXPORT:

Total annual export: US \$ 95,000.

Major products	To Western countries	To Eastern countries	To (*) Developing countries
Folding and "room sewing" beds	66.6%	-	33.4%

(*) Middle and Far East.

Governmental policies:

The government subsidizes exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under No. 6. has been adjusted accordingly.

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import dollar	Total consumption value (1958 US\$)	Total consumption value (1958 US\$)
	Unit	Quantity				
1. Energy and water						
TOTAL:						
- Electricity	000 kWh	317,800			29	
- Fuel oil	t	190			10	
- Petrol-diesel oil	t	50			6	
- Dissolved acetylene and oxygen		..			6	
- Gas	000 m3	80			4	
- Water	000 m3	10			2	
					1	
2. Production materials						
TOTAL:						
- Tubes	t	847			115	
- Flat, angle and round iron	t	507			95	
- Textiles	000 m	68			35	
- Components, accessory material for metal furniture		..			90	
- Plastic material	000 m	1,981			42	
- Matchwood	t	147			19	
- Plywood	t	9			28	
- Sawm timber	t	24			10	
- Components - accessory material for wooden furniture		..			16	
3. Other materials & supplies						
TOTAL:						
- Packaging material (cardboards and other material)					20	
- Parts, supplies & services					14	
- Other materials & supplies					15	
					10	
4. Business services purchased						
TOTAL:						
- Transportation, storage & insurance					20	
- Communication, advertising & other business services					20	
5. Work performed by subcontractors						
TOTAL:						
					12	
TOTAL VALUE OF CONSUMPTION:					590	590

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (N.I.):	Number	Original Purchase Value (1959 US \$)	Replacement value (1959 US \$)	Av. Age (yrs)	Remarks	Supplier country	Year of installation	Daily running time	Remarks:
Bending press	1	14	15	2	SC	-	1967	7 hrs	
Automatic drilling units	5	14	15	5	SC	-	1963-1965	4 1/2 "	
Electrostatic plastic coating plant	1	28	33	3	SC	-	1966-1967	7 "	
Riveting machines	2	3	3	2	-	(i) Belgium	1960	6 "	
Stretcher	1	1	1	20	SC	(ii) FR.Germ.	1960	7-8 "	
Spring coiling machine	1	0.3	0.4	25	-				
Metal cutting machines	8	4	4	10	-				
Electrical welding sets (i)	17	10	12	15	-				
Autogenous welding sets	15	6	7	10	-				
Machine tools	24	10	12	12	-				
Electrostatic spraying plants - (ii)	23	14	18	10	-				
enamelling ovens									
Presses	20	15	19	30	SH				
Pressing machines	11	3	4	10	-				
Wood-working machines	51	340	464	7	-				
Other machines	..	26	28	..	..		

CAPACITY POWER:
 Process equipment:
 - electric motors 492 kW
 Generating equipment:
 - installed capacity - kVA

CAPACITY OF PRIMARY OPERATIVE SHOPS:		Mechanization:			Automation:			Capacity utilization:	
Major primary operative shops	Kind of process involved	Machin.	Autom.	Capacity output	Capacity utilize.	Daily running time			
Metal cutting and bending shop	Automatic tube cutting, bending, cold forming	..	II	..	80%	7 hrs			
Drilling and riveting shop	Drilling of banded tubes, fixing of links	B	-	360 units/6 hrs.	60%	-			
Welding shop	Resistance seam welding method	B	-	Reduction of welding time to 1/6 of normal time					
Mechanical shop	Manual assembly	-	-	Only parts which cannot be assembled by machines are assembled here					
Paint shop	Electrostatic spraying, plastic coating	B	II		70%				
Plastic stretching shop	Covering of seats and backs	manual		Products which are used out-doors					
Fabric stretching and assembly shop	Production of spring mattresses	"		Instead of springs company uses wire settings					
Sewing shop	Sewing of coverings	"							
Tool room	Production of dies	..	..				
Joiner's shop	Manufacture of couches, conveyor belt line	B	-		95%				
Pressing and spring coiling shop	Tension springs and single parts	B	-						

CAPACITY UTILIZATION:
 Full capacity output: US \$ 1.5 million, based on 1-shift operation.
 In order to reach this output 20 additional operatives have to be employed on the 1st shift.

Current utilization:

Major products for process	up to	Approximate %
	20	00
	00	00
	00	70
	00	00
	00	00
	100	

Fold-away and room saving beds: x
 Deck-chairs: x
 Garden furniture: x
 Springs and fold-away beds (vertical): x
 Couches: x

The current rate of utilization is due to bottlenecks in the paint shop and to an unsatisfactory supply of labour.

The demand for tubes is covered only once a year caused by irregularities in supply.

IX. HISTORY & PLAN

1. Performance in the past:

Year:	Total output (1959 US \$)	No. of persons employed	Total exports (1959 US \$)
1963	1,470	210	150
1964	1,490	197	170
1965	1,440	202	150
1966	1,480	202	120
1967	1,250	167	70
1968	1,240	162	100

2. Investments in the past:

From 1956 to 1959:	Investment (1959 US \$)	Type of investment
1956 to 1959	390	Reconstruction of primary industrial buildings
" 1956 " 1960:	50	Expansion of transport equipment
" 1956 " 1960:	270	Purchase of machinery
1968:	3	

3. Future Plan:

No major investments are planned for the next five years.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1964)

Industry: Manufacture of furniture (ISIC-Code: 260)

C - Confidential; figures are included in underlined size group.

1. Size groups by number of persons employed:						2. Size groups by annual value of production (1959 US \$):					
No. of estab.	No. of empl.	Av. W. & S. per pers. (1959 \$)	Av. gross prod. val./per pers. (1959 \$)	Av. value added/gross prod. ratio (%)		No. of estab.	No. of empl.	Av. W. & S. per pers. (1959 \$)	Av. gross prod. val./per pers. (1959 \$)	Av. value added/gross prod. ratio (%)	
up to 19	3,441	9,587	1,140	7,176	47	up to 20	2,455	3,151	885	5,748	51
20 - 99	187	7,333	1,558	6,962	52	20 - 40	497	2,072	1,127	6,632	47
100 - 499	28	7,031	1,822	8,478	54	40 - 200	555	6,221	1,365	6,959	48
500 - 999	2	C	C	C	C	200 - 400	81	2,845	1,564	7,301	51
over 1,000	-	-	-	-	-	400 - 2,000	61	5,512	1,688	8,540	50
						over 2,000	9	4,150	1,879	8,703	56
TOTAL:	3,658	21,951	1,468	7,493	51	TOTAL:	3,658	23,951	1,468	7,493	51

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|-------------------------|---|----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export transaction |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labor |
| 3. Industrial services | 7. Technical consultancy installation & maintenance | |
| 4. Equipment supply | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of services	Country or region	No. of projects	Field of industry	Description of projects
8				There is special interest to export various kinds of steel-tube beds to tropical and subtropical areas.
9				The company is willing to employ foreign workers in the future.

XII. SUPPLEMENTS & NOTES

Depreciation policy:

Normally the straight-line method is applied to the original purchase value. Some items, however, are depreciated at an accelerated rate.

Contract and commission work:

Subcontractors performed commission work on mattresses, cushions and upholstered parts of seats. Total commissions paid amounted to US \$ 12,000 annually. The work is based on short-term agreements.

Problems in the past:

Lack of skilled workers could not yet be solved completely.

Inventory policies:

On an average the value of finished products in stock amounts to 17% of the total value of production. This high rate is due to the fact that the supplying steel mill delivers the annual demand of tubes only once a year.

Major Products: Cardboard boxes and paper bags. Capable of producing annually 700 t on 3-shift operation.

Reporting Unit: A one-establishment enterprise, founded in 1962, no participation of foreign capital.

I. FIXED CAPITAL ASSETS		Year of installation	Orig. purchase value 1000 US \$	(*) Replacement value 1000 US \$
(End of 1965)				
1. Primary process equipment				
TOTAL				
- Process equipment			140	..
- Hand tools & apparatuses	1962/64	147	123	
- Cost of installation		3.5	..	
		incl.	..	
2. Primary industrial building				
TOTAL				
(total floor space: 120 m ²)		38	..	
		35	..	
3. Auxiliary facilities				
TOTAL				
- Water, steam, electricity, cooling & storing		7	..	
- Transportation facilities		-	..	
- Administrative facilities		1	..	
- Laboratory facilities		-	..	
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):				
		194	..	
4. Other fixed capital assets				
TOTAL				
- Land (total acreage: 800 m ²)		12	..	

DETAIL OF PROCESS EQUIPMENT (m.t.)	Supplier country	Year of installation	Orig. purchase value 1000 US \$	(*) Replacement value 1000 US \$
- Shear	USA	1962	2	2
- Printing machines	FR, Germ.	1962/63	34	30
- Extruder	USA	1962	11	10
- Paraffining machine	USA	1962	17	16
- Bending machines	FR, Germ.	1962-64	53	47
- Compressor	USA	1962	3	3
- Winchee	USA	1962	2	2
- Auxiliary equipment	FR, Germ.	1962-63	15	13

HISTORY OF INVESTMENT:
Construction of the factory started in 1962. The first trial as well as commercial production started in 1963. The following investments for expansion purposes were made: (in US \$ 000)

1963	approx.	40	production of folding boxes
1964	"	80	production of bags
1966	"	178	new building and additional equipment

(*) "Replacement value" in this case stands for "re-sale value" rather than the purchase value of new functional equivalents.

CAPACITY POWER:		
Process equipment:	80	kw
Generating equipment installed capacity:	-	kVA

EXTERNAL CONDITIONS:
Transport: Long distance and local area, excellent.
Utilities: Electricity, excellent; water, fair.
Community: Residential, health and recreational, educational, all fair.

II. INVENTORIES AND WORKING CAPITAL		(in 000 US \$)	
(End of 1965)			
1. Inventories	Actual value	2. Liquid assets	Actual value
TOTAL	37	TOTAL	22
- Production materials	17	- Cash (hand/bank)	1
- Other input materials	-	- Market, sec. & bonds	-
- Work-in-process	12	- Short-term investment	-
- Finished products	8	- Prepaid expenses	-
		- Accounts receivable	21
3. Desired working capital			
TOTAL	63		
- Production materials	2	31	
- Other input materials	2	2	
- Finished products	2	20	
- Wages & salaries	2	10	
- Other special items	-	-	

III. MANNING TABLE	Number of persons	A - Regular operation		B - Other operation	
		Total	1st shift A+B	2nd shift A+B	3rd shift A+B
(1965 average)					
ALL SHOPS & UNITS:	34	36	29	29	
1. Primary operative shops	71	20	4	24	23
- Cutting and extrusion	9	2	1	3	3
- Printing	27	9	1	9	9
- Paraffining	14	4	1	5	4
- Bending and rubberizing	21	6	1	7	7
2. Auxiliary operative units	9	4	2	3	
- Repair and maintenance	3	1	1	1	
- Mechanical shop	-	-	-	-	
- Utilities control	-	-	-	-	
- Product & material storage	3	1	1	1	
- Off-site transport	1	1	-	-	
- Guards, cleaners, etc.	2	1	-	1	
3. Auxiliary non-operative units	14	8	3	3	
- Production management	2	1	1	-	
- Research & development	-	-	-	-	
- Sales unit	1	1	-	-	
- General administration	2	2	-	-	
- Others	9	4	2	3	

WORKING TIME PER OPERATIVE WORKER:					
Normal hours/day	7	hours	Normal days/year	262	days
Actual hours/year	1,834	hours			

CAPACITY OF OPERATIVE SHOPS:

IV. ANNUAL PRODUCTION

(1965)	No. of est. prod.	Quantity produced		Unit price in current US \$	Total production value 1965 US \$
		Units	Output		
Cardboard boxes and paper bags	1963	1	667	700	600
TOTAL VALUE OF PRODUCTION					400

EXPORTS:

Boxes and bags are exported at US \$ 600.-/t. Exports to member countries of the Central American Common Market are facilitated.

CAPACITY UTILIZATION:

The existing capacity could be utilized up to 95% in 1965 due to sufficient demand. In 1966 additional production space and equipment could be acquired to increase the capacity. 11 more persons were employed.

VI. VALUE ADDED

(1965)	Value 1965 US \$
1. Wages & salaries	
- Employees in direct production (60 persons)	40
- Other employees (25 persons)	22
2. Other payments for employees	2
3. Annual depreciation	18
4. Rentals paid	-
5. Interest & royalties	4
6. Sales tax	-
7. Other ind. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	64
154	

VII. MONTHLY EARNING RATES

(End of 1965)	No. of emp.	Average earning rate US \$
1. Local non-operative TOTAL	4	285
- Managers	1	600
- Engineers	-	-
- Technicians	-	-
- Accountants	1	180
- Sales officers	1	280
- Other professional staff	-	-
- Clerks & typists	1	80
2. Local operative TOTAL	17	60
- Supervisors	1	400
- Foremen	-	-
- Machine operators	60	56
- Craftsmen	1	100
- Truck drivers	1	80
- Other full-time operatives	11	48
- Unskilled & part-time operatives	1	48
- Other specific category	2	52
3. Foreign employees TOTAL	1	600
- Engineers, trainers and other technical control staff	1	600

V. ANNUAL CONSUMPTION

(1965)	Quantity consumed		%	Imports	Total use	Value consumption value 1965 US \$
	Units	Purchase				
1. Energy and water TOTAL						7
- Electricity	000 kWh	324				5
- Water	000 m ³	720				2
2. Production materials TOTAL						202
- Cardboard and Bristol board	t	670	100	0.15	15	184
- Ink	kg	1,091	100	0.03	5	12
- Paraffin	kg	2,182	100	0.03	10	2
- Gum	gallons	600	100	0.10	10	4
3. Other materials & supplies TOTAL						18
- Packaging						12
- Repair & maintenance						3
- Non-factor service inputs						3
4. Business services purchased TOTAL						19
- Transport, storage & insurance						15
- Communication, advertisements, etc.						4
5. Work performed by sub-contractors TOTAL						-

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)	Number of		No. of		No. of	
Industry group	est.	emp.	est.	emp.	est.	emp.
1. One group by number of persons employed up to						
No data available.						
2. One group by value of annual production US \$ up to						

IX. COMMENTS

Governmental policies:

Any duties on imported production materials should be lowered if not even abolished to decrease costs of production.

Major Products: Cellulose (from cane bagasse). Capable of producing annually 3,200 t of cellulose on 3-shift operation.

Reporting Unit: A small enterprise, founded in 1958; privately owned; no participation of foreign capital.

I. FIXED CAPITAL ASSETS (End of 1966)

	Year of installation	Orig. purchase value (USD US \$)	Replacement value (USD US \$)
1. Primary process equipment			
TOTAL		326.0	511.6
- Process equipment		278.0	448.0
- Hand tools & apparatuses		8.0	9.6
- Cost of installation		40.0	56.0
2. Primary industrial building			
TOTAL		16.0	20.0
(total floor space: 4,000 sq)		16.0	20.0
3. Auxiliary facilities			
TOTAL		45.6	58.0
- Water, steam, electricity, cooling & storing		40.0	48.0
- Transportation facilities		4.0	9.0
- Administrative facilities		1.6	2.0
- Laboratory facilities		-	-
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		387.6	591.6
4. Other fixed capital assets			
TOTAL		96.0	96.0
- Land (total acreage: 12,000 sq)		96.0	96.0

DETAIL OF PROCESS EQUIPMENT (No.):

	Supplier country	Year of installation	Orig. purchase value (USD US \$)	Replacement value (USD US \$)
- Transporters	Mexico	1960	16.0	24.0
- Digestors	"	1957/66	40.0	64.0
- Washing equipment	U.S.A.	1961/66	24.0	40.0
- Bleaching equipment	"	1966	48.0	80.0
- Tanks	Mexico	1958	32.0	40.0
- Dyeing equipment	"	1961	54.0	80.0
- Purification equipment	U.S.A.	1961	24.0	32.0
- Others	Mexico	1960/66	40.0	48.0

HISTORY OF INVESTMENT:

The factory was constructed in 1956. Trial production started in 1957, commercial production in 1958. The first profits were made in 1961.

In 1961, approximately US \$ 128,000 were invested for the renovation of digestors, washing and bleaching equipment. In 1967, another approximately US \$ 80,000 were invested for the bleaching and washing equipment.

CAPACITY POWER:

Process equipment:	300 kW	Generating equipment:	Installed capacity: - tVA
--------------------	--------	-----------------------	---------------------------

EXTERNAL CONDITIONS:

Transport: Long distance, excellent; local area, fair.
Utilities: Electricity, excellent; water, poor.
Community: Residential, fair; health and recreational, poor; educational, fair.

II. INVENTORIES AND WORKING CAPITAL (End of 1966)

	Actual value	2. Liquid assets	Actual value
1. Inventories	36.8	TOTAL	40.0
TOTAL			
- Production materials	24.0	- Cash (hand/bank)	8.0
- Other input materials	8.0	- Market. sec. & bonds	-
- Work-in-process	2.4	- Short-term investments	40.0
- Finished products	2.4	- Prepaid expenses	-
		- Accounts receivable	-

3. Desired working capital

	Number of months	Value
TOTAL		184.0
- Production materials	3.5	40.0
- Other input materials	4.0	24.0
- Finished products	1.0	48.0
- Wages & salaries	3.0	16.0
- Other special items	..	56.0

III. MANAGING STAFF (1966 average)

	Total	No shift		24-shift	
		A	B	A+B	A+B
ALL SHOPS & UNITS:	40	18	11	11	11
1. Primary operative shops	27	9	-	9	9
- Digestion department	9	3	-	3	3
- Bleaching department	3	1	-	1	1
- Washing department	7	3	-	3	3
- Drying department	6	2	-	2	2

2. Auxiliary operative units

	9	5	2	2
- Repair and maintenance	2	2	-	-
- Mechanical shop	-	-	-	-
- Utilization control	3	1	1	1
- Product & material storage	1	1	-	-
- Off-site transport	-	-	-	-
- Guards, cleaners, etc.	3	1	1	1

3. Auxiliary non-operative units

	4	4	-	-
- Production management	2	2	-	-
- Research & development	-	-	-	-
- Sales unit	-	-	-	-
- General administration	2	2	-	-

WORKING TIME FOR OPERATIVE WORKERS:

Normal hours/yr:	8 hours	Normal days/yr:	310 days
Actual hours/yr:	2400 hours		

CAPACITY OF OPERATIVE SHOPS:

The capacity of the bleaching department is 3,200 t/year; bleaching in chloro-hydrochlorite. No automation.

IV. ANNUAL PRODUCTION

(1966)

Product or group of product

- Cellulose of cane bagasse (bleached)

W. of the plant	Quantity produced		Unit price in factory MS \$	Total production value MS \$ @
	Unit	Output		
..	tone	2,840	3,700	196*
TOTAL VALUE OF PRODUCTION:				511.5

* Not including sales tax

Competing imports:

The c.i.f. price of imported cellulose of cane bagasse without tariff is US \$ 130/t. 40% duty is charged on imports.

Exports: None

Capacity utilization:

The rate of utilization of the bleaching department is 89%.

VI. VALUE ADDED

(1966)

Value MS \$ @

1. Wages & salaries	
- Employees in direct production (27 persons)	7.0
- Other employees (11 persons)	11.6
2. Other payments for employees	7.0
3. Annual depreciation	42.0
4. Revenue paid	1.0
5. Interest	20.0
6. Sales tax (not incl. in PPA)	11.0
7. Other ind. bus. taxes	2.4
8. (-) Subsidies	1.0
9. Corporate income before tax	9.0
	116.0

VII. MONTHLY EARNING RATES

(End of 1966)

No. of emp. Average monthly wage MS \$

1. Local non-operative		
TOTAL	7	70.0
- Managers	1	100.0
- Engineers	1	70.0
- Technicians	1	34.0
- Accountants	1	34.0
- Sales officers	1	34.0
- Other professional staff	1	34.0
- Clerks & typists	1	34.0
2. Local operative		
TOTAL	24	22.0
- Supervisors	1	34.0
- Foremen	1	34.0
- Machine operators	14	22.0
- Craftsmen	1	34.0
- Truck drivers	1	34.0
- Other full-time operatives	1	34.0
- Unskilled & part-time operatives	6	20.0
3. Foreign employees		
TOTAL	1	34.0

V. ANNUAL CONSUMPTION

(1966)

1. Energy and water

TOTAL

- Electricity

- Liquid fuels and lubricants

- Water

2. Production materials

TOTAL

- Cane bagasse

- Caustic soda

- Chlorine (gas)

- Other chemical products

Unit	Quantity consumed		Value MS \$ @
	Purchase	% imported	
MS \$	1,500		16.0
1	1,410		49.6
..	..		2.4
			68.0

Value consumption MS \$ @

16.0

49.6

2.4

112.8

40.8

107.2

40.8

24.0

24.8

44.0

0.8

315.2

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)

Industry group: Manufacture of pulp, paper and paper board (NIC: 271)

1. Size group by number of persons employed	Number of units	Number of emp.	Inv. MS \$ @		Av. emp. per unit
			MS \$	MS \$	
up to 50	95	1,503	813	4,112	66
50 - 100	18	1,208	1,047	5,656	114
101 - 250	17	2,831	1,642	12,106	142
over 250	19	11,463	1,998	13,673	133
TOTAL	149	17,005	1,770	11,999	122

2. Size group by value of annual production MS \$ @

up to 40	62	554	519	1,752	95
40 - 200	39	1,355	775	2,920	124
200 - 1,000	22	2,313	1,065	5,573	132
over 1,000	26	12,783	2,056	14,493	125
TOTAL	151	17,005	1,769	11,997	122

* Based on official plant registration

IX. SUPPLEMENT

FUTURE PLAN:

In the period 1968 - 1969, approximately US \$ 90,000 will be invested for the expansion of the bleaching and washing department.

GOVERNMENT POLICIES:

Improvements of the old electricity tax system are desired. Production costs could be lowered with better supply of electricity at free choice of private electricity supplies.

Major Products:

Newsprint - Printing paper for books. Capable of producing annually 11,000 t on a three-shift operation.

Reporting Unit:

A one-establishment enterprise, founded in 1957; public corporation; no participation of foreign capital.

I. FIXED CAPITAL ASSETS

(End of 1967)		Year of installation	Orig. purchase value 1958 US \$	Replacement value 1958 US \$
1. Primary process equipment				
TOTAL				
- Process equipment	}	1958	17,840	21,040
- Hand tools & apparatuses			12,000	15,200
- Cost of installation			5,840	5,840
2. Primary industrial building				
TOTAL				
(total floor space: 60,000 m ²)		1958	3,600	4,800
			3,600	4,300
3. Auxiliary facilities				
TOTAL				
- Water, steam, electricity, cooling & storing	}	1958	..	..
- Transportation facilities				
- Administrative facilities				
- Laboratory facilities				
(Included partly in I.1 Installation costs and partly in I.2)				
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):			21,440	25,840
4. Other fixed capital assets				
TOTAL				
- Land (total acreage: .. m ²)			..	..
(Included in primary industrial building)				

DETAIL OF PROCESS EQUIPMENT (no.):	Supplier country	Year of installation	Orig. purchase value 1958 US \$	Replacement value 1958 US \$
- Jarda (1)	All from U.S.A.	1958	1,000	15,200
- Conical refiners (3)				
- Disc refiners (2)				
- Blast electifiers (4)				
- Centrifugers system				
- Fourdrinier (1)				
- Ground wood pulp mill				
- Continuous defibrator				
- Screens (4)				
- Cleaners (4)				
- Hydropulper				

HISTORY OF INVESTMENT:

The factory was constructed in 1957. Trial production started in July 1959; the first commercial production in January 1960. The enterprise has to operate at a 100% level of capacity utilization in order to be profitable. In 1964, approximately US \$ 4.3 million were invested for general expansion purposes.

CAPACITY POWER:	Generating equipment:
Process equipment:	Installed capacity
Electric motor: 20,000 kW	.. kVA

EXTERNAL CONDITIONS:
 Transport: Long distance and local roads, fair.
 Utilities: Electricity, water, gas, fair.
 Community: Residential, health and recreational, educational, fair.

II. INVENTORIES AND WORKING CAPITAL

In 000 US \$

(End of 1967)		Actual value	Actual value
1. Inventories		1,040	1,072
TOTAL			
- Production materials	560	- Cash (hand/bank)	80
- Other input materials	240	- Market. sec. & bonds	20
- Work-in-process	-	- Short-term investment	160
- Finished products	240	- Prepaid expenses	12
		- Accounts receivable	800
2. Liquid assets			
TOTAL			
3. Desired working capital		Number of months	Value
TOTAL			2,880
- Production materials	..	720	
- Other input materials	..	240	
- Finished products	..	320	
- Wages & salaries	..	320	
- Other special items	..	1,280	

III. MANNING TABLE

(Number of persons)

A - Shift operator
B - Other operative

(1967 average)	Total	1st shift		2nd shift	3rd shift
		A	B	A+B	A+B
ALL SHOPS & UNITS:	421	264		92	65
1. Primary operative shops	190	55	13	38	34
- Yard and handling of wood	15	15	-	10	10
- Preparation of pulp	18	16	-	11	11
- Paper-making machine	31	13	-	9	9
- Instruments and control	23	-	13	5	5
- Finishing and shipment	23	11	-	8	4
2. Auxiliary operative units	214	145		45	24
- Repair and maintenance	31	74		10	7
- Mechanical shop	-	-		-	-
- Utilities control	14	8		3	3
- Product & material storage	12	6		3	3
- Off-site transport	20	20		-	-
- Guards, cleaners, etc.	18	4		7	7
- Others	59	33		22	4
3. Auxiliary non-operative units	57	51		4	2
- Production management	4	4		-	-
- Research & development	3	3		-	-
- Sales unit	-	-		-	-
- General administrative	50	44		4	2

WORKING TIME PER OPERATIVE WORKER:

Normal hours/day	6 3/4	hours	Normal days/year:	305	days
Actual hours/year:	1,967	hours			

CAPACITY OF OPERATIVE SHOPS:

The installed capacities of different departments are considered to be in equilibrium. Utilization rate of process capacity is 70%. Moderately automated.

IV. ANNUAL PRODUCTION

(1967) Products (or group of products)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price on factory (US \$)	Total production value (1980 US \$)
		Unit	Output			
- Newsprint	1960	ton	37,150	51,000	145.4	5,403
- Printing paper for books	1960	"	11,700		164.2	1,945
TOTAL VALUE OF PRODUCTION:						7,348

COMPETING IMPORTS:

C.i.f. price of imported newsprint without tariff is US \$ 145.4; that of printing paper for books is US \$ 164 per t. On printing paper for books, import duty of US \$ 66 per t is charged. No import duty on newsprint import.

EXPORTS: None

CAPACITY OUTPUT:

The "Nominal capacity output" is based on the assumption of three-shift operation for 305 days per annum.

VI. VALUE ADDED

(1967)	Value (1980 US \$)
1. Wages & salaries	
- Employee in direct production (295 persons)	504
- Other employees (126 persons)	547
2. Other payments for employees	25.2
3. Annual depreciation	1,120
4. Rentals paid	-
5. Interest	1,000
6. Sales tax (not incl. in TOTAL)	(344)
7. Other ind. bus. taxes	328
8. (-) Subsidies	-
9. Corporate income before tax	(300)
	3,152

VII. MONTHLY EARNING RATES

(End of 1967)	No. of pers. emp.	Average earning rate (1980 US \$)
1. Least non-operative TOTAL	47	41.2
- Managers	2	1,240
- Engineers	12	560
- Technicians	12	300
- Assistants	4	400
- Sales managers	2	540
- Other professional staff	-	-
- Clerks & typists	15	160
2. Least operative TOTAL	177	1.3
- Supervisors	1	960
- Foremen	30	560
- Machine operators	100	240
- Craftsmen	60	540
- Truck drivers	7	40
- Other full-time operatives	174	96
- Unskilled & part-time operatives	-	-
3. Foreign employees TOTAL	2	1,520
- Managers	1	1,600
- Engineers, trainers and other ind. control staff	1	1,440

V. ANNUAL CONSUMPTION

(1967)	Quantity consumed				Total consumption value (1980 US \$)
	Unit	Purchase	% imported	Tariff rate	
1. Energy and water TOTAL					813
- Electricity	000 KwH	28,100	-	-	680
- Petroleum	000 l	11,500	-	-	120
- Water	000 m ³	1,017	-	-	13
2. Production materials TOTAL					3,598
- Semi-white sulfate pulp (20%)	t	9,750	100	free	1,326
- Mechanical wood pulp (80%)	t	40,000	-	(LAPTA)	-
- Wood	m ³	36,100	-	-	1,680
- Chemicals	..	..	..	..	592

* 50% of parts and supplies for equipment maintenance is imported, subject to 17% import tariff.

	Total consumption value (1980 US \$)
3. Other materials & supplies TOTAL	285
- Packaging	168
- Repair & maintenance*	109
- Non-factor services inputs	8
4. Business services purchased TOTAL	-
- Transport, storage & insurance	-
- Communication, advertisements, etc.	-
5. Work performed by sub-contractors TOTAL	-
	4,696

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1967)					
Industry group: <u>Manufacture of pulp, paper and paperboard</u> (ISIC: 271)					
1. Size group by number of persons employed	Number of units	Number of emp.	Avg. no. of emp. per unit (1980 US \$)	Avg. gross prod. val. per unit (1980 US \$)	Avg. emp. gross prod. rate* (1980 US \$)
up to 50	95	1,503	813	4,114	66
51 - 100	18	1,204	1,047	5,656	114
101 - 250	17	2,831	1,662	12,106	32
over 250	19	11,463	1,998	13,673	133
TOTAL	149	17,001	1,770	11,999	122
2. Size group by value of annual production (1980 US \$)	Number of units	Number of emp.	Avg. no. of emp. per unit (1980 US \$)	Avg. gross prod. val. per unit (1980 US \$)	Avg. emp. gross prod. rate* (1980 US \$)
up to 40	62	554	519	1,752	95
40 - 240	39	1,355	775	2,920	124
240 - 1,600	22	2,313	1,065	5,973	32
over 1,600	26	12,783	2,056	14,493	125
TOTAL	151	17,005	1,769	11,997	122

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

CORPORATE PROFIT:

The enterprise declares that even the 100% capacity operation does not prove profitable. The high financial costs are one of the reasons.

GOVERNMENT POLICIES:

Federal price policy measures affect profitability of enterprise. Products are sold at international price level. No taxes to be paid for newsprint coming from LAPTA countries.

FUTURE PLAN:

In 1968 approximately US \$ 560,000 will be invested for general expansion purposes.

Major Products: Pergamin and paper bags, cartons and prints. Partly 2-shift operation. Annual capacity output amounts to about US \$ 4.6 million annually.

Reporting Unit: A 2-establishment enterprise, privately owned, founded in 1969. One establishment processes paper, the other cartons. Altogether 490 employees. Largest enterprise of its industry in the country, among the 5 largest in Europe. Supplies establishments of various industries with its products; exports; partly licenced production. Although the company is rather old, its process equipment has an average age of 4.5 years only.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (1000 US \$)	Replacement value (1000 US \$)	Average age (Yrs.)
1 Primary process equipment (including installation cost)			
TOTAL	2,746	4,047	
- Process equipment *	2,249	3,397	4.1
- Hand tools & apparatus	497	650	..
2 Buildings			
TOTAL	1,741	3,135	
- Primary industrial buildings (**)	1,521	2,985	..
(total floor space: 10,257 m ²)			
- Auxiliary buildings	16	19	15
- Warehouses	149	169	15
- Office administration buildings	33	33	7
- Housing	..	19	5
3 Auxiliary facilities (excl. buildings)			
TOTAL	146	273	
- Internal power equipment	-	-	-
- Laboratory facilities	-	-	-
- Means of transportation	25	25	2.5
- Office equipment	124	248	10
TOTAL PHYSICAL FIXED ASSETS (including land)	4,833	7,420	
4 Other fixed capital assets			
TOTAL	333	378	
- Land (total acreage: 77,544 m ²)	243	273	-
- Land improvements (t.acr. 13,464 m ²)	40	50	-
- Others	50	55	-

(**) 50% of the primary industrial buildings is 3 years old, 49% is 15 years old and 1% is 100 years old.

*NB: Details of process equipment and capacity of primary operations shops are given in Page three, Section VIII.

II. MONTHLY GROSS WAGES AND SALARIES

(1967 monthly average)	Number of persons					
	up to 100 US\$	100-140 US\$	140-160 US\$	160-240 US\$	240-560 US\$	over 560 US\$
1. Local non-operative						
- Managers	-	-	-	-	1	1
- Engineers	-	-	-	1	21	-
- Technicians	-	-	-	3	1	-
- Accountants	-	-	-	5	2	-
- Sales officers	-	-	-	2	7	1
- Clerks and typists	-	-	-	7	5	-
- Others (non-operative of auxiliary shops)	-	-	-	-	-	-
2. Local operatives						
- Supervisors	-	-	-	-	7	-
- Foremen	-	-	-	-	-	-
- Skilled operatives	-	-	-	-	-	-
- Machine operators (*)	-	110	117	-	-	-
- Craftsmen	-	-	-	59	-	-
- Truck drivers	-	-	-	-	-	-
- Unskilled operatives	-	10	-	-	-	-
- Other full-time operatives	-	-	-	40	67	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	1	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives (**)	-	-	1	6	-	-
- Unskilled operatives	-	-	-	-	-	-

(*) Including skilled operatives
(**) Including foreign foremen

EXTERNAL CONDITIONS:

Transport	external long distance	Fair
	internal long distance	excellent
	local and city	"
Utilities	electricity	Fair
	water	poor (**)
	gas	insignificant
Community	residence	insignificant
	health and recreation	"
	education	"

(Own Welfare Facilities: Construction of a canteen is envisaged for 1970.)

(*) Since the enterprise is expanding continuously, new water pipes will have to be installed.

III. INVENTORIES

(End of 1967)	Actual value (1000 US \$)	Number of months
Inventories	110	
TOTAL		
- Production materials	1	1.5
- Other input materials	12	1
- Work-in-process	11	1
- Finished products	86	1.5

WORKING TIME PER OPERATIVE WORKER

	1st shift	2nd shift	3rd shift	
Shift hours/day	8	7.5	-	hours
Actual hours/year	2,300	2,175	-	hours
Actual days/year	295	287	-	days

IV. MANAGING TABLE

(1967 average)	Total	Number of persons				
		A	B	C	2nd Shift	3rd Shift
ALL SHOPS & UNITS:	47	17	122	25	49	95
1. Primary operative shops	40A	17	122	25	49	95
- Offset photo	8	3	5	-	-	-
- Litho	19	1	18	-	-	-
- Proofing	5	-	3	-	2	-
- Mounting	7	1	5	-	1	-
- Copy	11	1	8	-	2	-
- Offset-process (1,2,4-c colours)	109	3	27	-	79	-
- Scanner	1	-	1	-	-	-
- Gravure photo	5	1	4	-	-	-
- Retouching	16	2	14	-	-	-
- Etching department	10	1	6	-	3	-
- Galvanizing dept.	2	-	2	-	-	-
- Sheet-fed gravure	4	-	2	-	2	-
- Rotation and letter press	23	1	12	-	10	-
- Finishing department (*)	101	1	-	50	-	50
2. Auxiliary operative units	7	1	-	12	-	-
- Repair & maintenance	18	2	-	16	-	-
- Mechanical shop	-	-	-	-	-	-
- Tooling shop	-	-	-	-	-	-
- Utilities control	-	-	-	-	-	-
- Product & material storage	14	1	-	14	-	-
- Off-site transport	-	-	-	-	-	-
- Guards, cleaners, etc.	3	-	-	3	-	-
- Others	1	1	-	-	-	-
3. Auxiliary non-operative units	47	47	-	-	-	-
- Production management	1	1	-	-	-	-
- Research & development	-	-	-	-	-	-
- Sales unit	9	9	-	-	-	-
- Accounting	8	8	-	-	-	-
- General administration	29	29	-	-	-	-
(*) - Box making department	87	2	15	15	-	35

(*) - Box making department

V. ANNUAL PRODUCTION

(1968)	Yr of prod.	Quantity produced		*) Av. unit price on factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Products for group of products					
- Leather shoes	1959	pair	7.85 mill.	1.32	10,362
- Rubber shoes					
- PVC shoes					
- Canvas shoes					
- Others (soles, heels, hot water bags, door mats and carpets)	1959	piece	192,000	0.46	88
*) excluding sales tax					
TOTAL VALUE OF PRODUCTION:					10,450

VI. VALUE ADDED

(1968)	Total value (000 US \$)
1. Annual wages & salaries	2,220
- Operative workers (1,794 persons)	1,032
- Non-operative workers (1,992 persons)	1,188
2. Other payments for employees	-
3. Annual depreciation	630
- Machinery & equipment	477
- Buildings & other facilities	153
- Non-physical capital assets	-
4. Rentals paid	-
5. Interest & royalties	528
6. Sales tax	-
7. Other indirect business taxes	-
8. (-) Subsidies	(-) 20
9. Corporate income before tax	152
TOTAL VALUE ADDED:	
	3,510

DESCRIPTION OF MAJOR PRODUCTS:

Leather, rubber, PVC and canvas shoes, soles, heels, hot water bags, door mats and carpets.

MARKET ASPECTS:

Consumers of products:

Private persons, police, banks and other firms.

Sales organization:

Own retail shops (400).

Extent of the market:

Enterprise supplies the whole country.

Share in the domestic market:

About 70%.

Export price policy:

The enterprise hopes to increase exports up to 20% of total production within the next two years.

Competition with imported products:

No shoes are imported.

Acquisition of production materials:

Rubber is imported from South East Asia. PVC, synthetic rubber, and Nylon from France, Japan, F.R.Germany, and USA. Leather and textiles are from domestic sources.

EXPORT:

Total annual export approx. US \$924,000.

Major products	% Western countries	% Eastern countries	% Developing countries
Leather shoes	10%	90%	-
Other shoes	10%	90%	-

The shoes were exported at a unit price of US \$ 3.3 per pair.

VII. ANNUAL CONSUMPTION

(1968)	Quantity consumed		% Import	Average import duties	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL:					161
- Electricity	000 kWh	2,600			95
- Liquid fuels and lubricants	000 l	5,000			66
2. Production materials					
TOTAL:					5,724
- Rubber	t	4,000	100	-	1,502
- Leather					
- PVC					
- S.O.F.					
- Textile	t	16,000	80	-	4,222
- Nylon					
- Cement and others					
- Chemicals					

	Total consumption value (000 US \$)
3. Other materials & supplies	594
TOTAL:	196
- Packaging material (Cardboard, etc.)	
- Parts, supplies & services	198
- Other materials & supplies	-
4. Business services purchased	461
TOTAL:	82
- Transportation, storage & insurance	
- Commissions, advertising & other business services	179
5. Work performed by subcontractors	-
TOTAL:	-
TOTAL VALUE OF CONSUMPTION:	
	6,940

V. ANNUAL PRODUCTION

(1967)	W of prod.	Quantity produced		Avg unit price in USS \$	Total output value USS US \$
		Unit	Quantity		
Bags: Initiation parchment paper, coated and uncoated	..	000 pos	712,000	0.3	194
Cartons for: Candies, detergents, food, sweets, cigarettes	..	000 pos	939,700	1.5	1,413
Prints: Catalogues, picture-books, folders, labels, newspaper covers	196A	..	..	..	1,566
Revenue from commission work					915
Other revenue					7
TOTAL VALUE OF PRODUCTION:					4,215

VI. VALUE ADDED

(1967)	Total value USS US \$
1 Annual wages & salaries	1,750
- Operative workers	803
(423 persons)	
- Non-operative workers	947
(68 persons)	
2 Other payments for employees	139
3 Annual depreciation (*)	143
- Machinery & equipment	107
- Buildings & other facilities	36
- Non-physical capital assets	0
4 Dividend paid	12
5 Interest & royalties	10
6 Sales tax	100
7 Other indirect business taxes	12
8 (-) Subsidies	-
9 Corporate income before tax	(-1) 34
(*) See page 4 XII.	
TOTAL VALUE ADDED:	1,950

DESCRIPTION OF MAJOR PRODUCTS:

All products are exclusively manufactured to order.

Bags: Made out of paper, initated parchment, uncoated material, foil, material coated with PVC and polyethylene, printed or unprinted, laced and vacuumproof. Sizes ranging from 65 x 100 cm to 115 x 167 cm. Bags for food packing must be manufactured in accordance with legal requirements. Transportability for export. Bags are packed in units as specified by the customer. Time of delivery: 1-5 weeks.

Folding boxes: Including folding boxes of various types (coated, uncoated, galvanized, different kinds of closures, etc.); candy boxes of various types, cartons for detergents, for pharmaceuticals, food, sweets, cigarettes and bottles. Sizes ranging from 30 x 60 mm to 120 x 30 cm. Folding boxes are delivered in corrugated cardboard boxes or on pallets. For overseas exports they are packed in containers. Time of delivery: 1-2 weeks, depending on raw material supply.

Prints: Including labels, packing rings, signs, revenue stamps, catalogues, picture books, newspaper covers, advertising prints, etc. Kind of process: offset, intaglio or typography print. Sizes ranging from about 30 x 70 mm to 100 x 140 cm. Packaging: as desired by the customer. Delivered on pallets fixed with band iron. For overseas exports pallets are wrapped in bituminized paper. Time of delivery: 2-6 weeks.

MARKET ASPECTS:

Consumers of products:

Processing industries (e.g. manufacturers of detergents, sweets, pharmaceuticals, cigarettes, food, and drinks) as well as advertising agencies, tourist offices and publishers.

Sales organization:

One central and two out of town sales offices.

Extent of the market:

Presently the enterprise serves 350 customers with 30 customers accounting for 70% of the sales. Products are sold throughout the whole country. Part of production is exported.

Share in domestic market:

Packings: about 10 - 15%. Prints: no data available.

Competition in the market:

The reporting enterprise is able to face any foreign competition due to most modern equipment installed in the plant.

EXPORT:

Total annual export: US \$ 43,000.

Major products	To Western countries	To Eastern countries	To Developing countries
Educational prints	-	-	100 %
Picture books	100 %	-	-
Folding boxes, labels, candy boxes, prints	100 %	-	-

Governmental policies:

The government subsidizes exports by way of paying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under 21.6. has been deducted accordingly.

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		Average input ratio	Total enterprise value USS US \$
	Unit	Quantity		
I. Energy and water				
TPMs:				
- Electricity	000 kWh	1,739		43
- Fuel oil medium	t	172.5		34
- Water	000 m3	40,500		5
				4
II. Production materials				
TPMs:				
- Paper	t	2,127	10	18
- Cardboard and board	"	3,223	10	25
- Ink	"	67	3	2
- Bronze	"	11	-	-
- Varnishes	"	70	-	-
- Dilution	"	94	-	-
- Photo material	"	-	-	-
- Adhesives and other raw material	t	16	-	-
				27

	Total enterprise value USS US \$
3. Other materials & supplies	270
TPMs:	
- Packaging material (wrapping paper, wooden paper, pallets, band iron, covering and bottom boards)	12
- Parts, supplies & services	37
- Other materials & supplies	201
4. Business services purchased	262
TPMs:	
- Transportation, storage & insurance	141
- Communication, advertising & other business services	121
5. Work performed by subcontractors	-
TPMs:	
TOTAL VALUE OF CONSUMPTION: 2,235	

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (N.I.):	Number	Original	Replacement	Av. Age (yrs)	Remarks	Supplier country	Daily running time	Output
		Value (\$00 US \$)	Value (\$00 US \$)					
Single colour offset printing machines	3	81.3	120.0	5		D.R.Germ.	fully utilised	3,000-5,000 sheets/hr
Two colours offset printing machines	7	213.3	433.4	10		" " "	" " "	" " "
Four colours offset printing machines	3	302.0	372.0	4		FR.Germ.	" " "	" " "
Six colours offset printing machines	2	463.0	463.0	1		" " "	" " "	" " "
High frequency varnishing machine	1	8.4	17.4	11		Italy	12 hrs	1,000-1,200 sheets/hr up to 32 pages/folding process
High frequency folding machine	1	9.8	11.6	2		" " "	6 "	3,000-4,000 sheets/hr
Automatic stapling machine	1	22.5	29.0	3		" " "	8 "	" " "
Bandroling machine	1	3.5	3.5	1		" " "	4 "	8,000 bags/hr
Bag sealing machine	1	6.2	9.3	4		" " "	" " "	" " "
Sheet counting machine	1	9.0	10.8	4		" " "	" " "	" " "
Linotype setting machine	1	13.9	17.4	5		" " "	5 "	6,000 letters/hr
High-speed cutting machines	6	60.6	74.4	7		" " "	16 "	4,000 sheets/hr
Platen press	1	11.0	43.5	3		" " "	" " "	" " "
Foldmaster carton unfolding machine	1	3.2	5.4	4		Switzerl.	16 "	punching of cartons; 2,500-4,000 sheets/hr
Automatic and semi-automatic punching and stapling press	4	263.7	344.5	6		" " "	" " "	stamping of paper; 1,500-2,500 sheets/hr

for continuation see page 4/XII.

CAPACITY POWER:
Process equipment:
- electric motors 850 kW

Generating equipment:
- installed capacity - kVA

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Station	Automation	Further details:
Offset printing	Photographing - retouching - lithographing assembly - proof copy - single and multi colour printing	A	I	Printing capacity: appr. 350,000 a2/hr
Intaglio printing	Photographing, retouching, etching, galvanising, rotating, rewinding	B	I	Capacity: 7,000-8,000 m/hr, 2-shift operation
Typography	Applied for small editions only	A/C	I	Capacity: 9,000 sheets/hr
Finishing department	Coating, stamping, cutting, folding, stapling, etc.	A/C	II	2-shift operation
Box making department	Stamping, punching, gluing, etc.	A	III	

CAPACITY UTILIZATION:

Full capacity output: US \$ 4,740,000 based on 1-shift operation except for the intaglio printing and finishing departments which operate 2-shifts.

Current utilization:

Major products for process	Approximate %								
	to 20	40	60	80	70	80	90	100	
Offset printing									x
Intaglio printing									x
Typography									x
Finishing department									x
Box making department									x

All shops are more or less fully utilized. Sometimes demand cannot be met in time. Full-capacity output can be reached without any additional investments or operatives to be employed. Future plans, however, envisage expansion of plant capacity.

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output (\$00 US \$)	No. of persons employed	Total output (\$00 US \$)
1963	2,530	332	30
1964	2,760	351	30
1965	3,320	397	60
1966	3,770	427	90
1967	4,210	491	90
1968	4,900	511	520

2. Investments in the past:

From 1955 to 1962	Investment (\$00 US \$)	Type of investment
1955-1962	340	Land and buildings
1963-1965	1,385	Machinery and equipment
1966	74	Land and buildings
1966	722	Machinery and equipment
1966	522	Land and primary industrial buildings
1967	301	Machinery and equipment
1967	1,471	Primary industrial building and machinery

3. Future Plan:

From 1969 to 1973: 2,515 Expansion, rationalisation and specialisation of product-mix, machinery and auxiliary facilities 10 additional operatives and 5 non-operatives will have to be employed on the 1st shift. On the 2nd shift 20 additional auxiliary operatives will be required.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C - Confidential; these size groups are included in the underlined figures.

(1964)

Industry Paper and paperboard manufacturing mills NSIC Code 271

1 Size groups by number of persons employed	No. of estab.	No. of emp.	Av. value	Av. value	Av. value	2 Size groups by annual value of production (\$00 US \$)	No. of estab.	No. of emp.	Av.	Av. value	Av. value
			W.O.S. per emp. (\$00 \$)	per emp. (\$00 \$)					W.O.S. per emp. (\$00 \$)	addition/emp. (\$00 \$)	
up to 19	104	998	1,297	7,004	51	up to 20	75	116	882	5,040	61
20 - 99	76	3,618	1,494	6,694	19	20 - 40	28	159	1,188	4,663	96
100 - 499	19	3,937	1,723	11,312	30	40 - 200	99	1,625	1,247	5,184	52
500 - 999	1	0	0	0	0	200 - 400	23	934	1,392	6,781	69
over 1,000	-	-	-	-	-	400 - 2,000	38	3,544	1,703	8,136	89
						over 2,000	7	2,175	1,890	14,181	35
Total	260	8,553	1,600	9,358	44	Total	260	8,553	1,600	9,858	44

XII. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|---|---------------------------------------|-----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export transactions |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of services	Country or region	No. of projects	Field of industry	Description of project
1				Company reports willingness to prepare a pre-feasibility study on the creation of a graphic industry.
2				Joint venture could be possible in connection with a know-how contract.
3				Company could supply patents for folding boxes.
4				Second-hand machinery could be supplied.
6				Within the framework of a know-how contract company is willing to train photographers, retouchers, printers and mechanics for the repair and maintenance shop.
7				Trouble-shooting advisory services could be rendered.
9				Seasonal as well as permanent foreign labourers can be admitted.

XIII. SUPPLEMENTS & NOTES

Inventory policy: On an average, the value of finished products amounts to 4% of the total production value.

Depreciation policy: Application of the straight-line method. The "Export Promotion Law" grants accelerated depreciation rates which in this particular case accounted for the loss accrued in 1967. Total depreciation amounted to US \$ 632,000 including US \$ 449,000 of special depreciation. Facing a loss of US \$ 345,000, the company could have easily been profitable. Company produces with very modern machinery.

Commission work: Catalogues, packaging for cigarettes, folding boxes and labels were manufactured on commission basis for 12 contractors. Offset and intaglio printing as well as the most advanced labelling methods were applied. The commissions received amounted to US \$ 915,000. The work is based on a short-term contract.

Major bottlenecks during the past: Due to severe shortage of floor space the company had to construct a new plant. Some US \$ 1.5 million were invested in 1966/67 to expand the floor space by 8,000 m². Furthermore, the company reports a lack of skilled workers. Although in-plant training programmes have been promoted to enlarge the number of company-trained skilled workers, present demand could not yet be met. Management complains about the difficulty to convince labour that personal efforts and sense for responsibility account for increases in productivity. The importance of further training is clearly recognised by management.

VIII. TECHNOLOGICAL CHARACTERISTICS (cont'd):
Detail of Process Equipment (I.)

	Number	Original Purchase Value (000 US \$)	Replacement value (000 US \$)	Avr. age (yrs)	Supplier country	Daily running time	Output
High frequency gluing machine	1	18.8	29.0	9	Switzerl.	16 hrs	5,000-60,000 sheets/hr
Rectangular finishing machine	1	55.4	69.7	3	USA	16 "	2,000-10,000 pieces/hr
Speed folder	1	6.6	10.8	5			
Scantrol (adjustment of rasters)	1	59.0	73.5	5	UK	5 "	1 set offset; 2.5 hr beam-time 1 set intaglio; 1 " " "
Coletron	1	30.2	30.2	1	Switzerl.	5 "	
Intaglio printing machine	1	70.9	92.9	3	FR.Germ.	9 "	carton; 3,500 sheets/hr., paper; 2,800 "
Four-colour intaglio rotary printing press	1	162.7	309.6	8	" "	20 "	7,000-10,000 n/hr
Copper and chrome plating equipment	1	17.4	23.2	5	" "	9 "	
Sticking equipment	1	5.2	5.2	1	Switzerl.	3 "	
Lifts	2	19.0	24.0	6			
Knife grinding machine	1	5.3	9.7	10			
Multi-purpose lathe	1	11.2	13.5	2			
Transformer station	1	51.7	51.7	..			
Air conditioning plant	1	49.2	49.2	..			
Central heating	1	56.4	56.4	..			
Others	..	..	..	..

Major Products: Illustration paper, book paper, writing paper and wallpaper.
 Capable of producing annually 94,000 t of paper based on 3-shift operation. Full-capacity output amounts to US \$ 19 million.

Reporting Unit: A one-establishment enterprise; founded in 1493; privately owned; 7,000 employees; some exports.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (1000 US \$)	Wear insurance value (1000 US \$)	Average (Yrs.)
1 Primary process equipment (including installation cost)			
TOTAL	..	1,975	..
- Process equipment *	..	1,975	..
- Hand tools & apparatus	..		
2 Buildings			
TOTAL	..	3,71	13
- Primary industrial buildings (total floor space: m ²)	..	3,71	13
- Auxiliary buildings	..	77	16
- Warehouses	..	1	1
- Office administration buildings	..	275	11
- Housing	..	65	11
3 Auxiliary facilities (excl. buildings)			
TOTAL	..	2,779	13
- Internal power equipment	..	2,779	13
- Laboratory facilities	..	17	4
- Means of transportation	..	50	3
- Office equipment	..	63	1
TOTAL PHYSICAL FIXED ASSETS (excluding land):	-----	17,309	
4 Other fixed capital assets			
TOTAL	..	1,534	..
- Land (total acreage: m ²)	..	1,400	..
- Land improvements	..		
- Others	..	134	5

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII).

II. MONTHLY GROSS WAGES AND SALARIES

(1967 monthly average)	Number of persons					
	up to 125 US\$	125 - 150 US\$	150 - 200 US\$	200 - 300 US\$	300 - 400 US\$	over 400 US\$
1 Local non-operatives						
- Managers	-	-	-	-	4	-
- Engineers	-	-	-	6	11	-
- Technicians	-	-	-	7	12	-
- Accountants	-	-	-	1	2	-
- Sales officers	-	-	-	2	1	-
- Clerks and typists	-	-	-	4	1	-
2 Local operatives						
- Supervisors	included in local non-operatives					
- Foremen	-	-	-	-	-	-
- Skilled operatives	-	-	4	45	39	-
- Machine operators	-	-	2	17	34	-
- Craftsmen	-	-	-	-	-	-
- Truck drivers	-	-	-	-	-	-
- Unskilled operatives	-	-	13	75	2	-
- Other full-time operatives	-	-	34	133	123	-
- Part-time operatives	-	-	-	-	-	-
3 Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	2	14	11	-
- Unskilled operatives	-	-	4	11	-	-

EXTERNAL CONDITIONS:

Transport:	external long distance	Fair
	internal long distance	excellent
	local and city	Fair
Utilities:	electricity	Fair
	water	excellent
	gas	excellent
Community:	residence	Fair
	health and recreation	Fair
	education	Fair
Own Welfare Facilities:	apartments; pension fund; aid fund.	

III. INVENTORIES

(End of 1967)	Actual value (1000 US \$)	Number of months
Inventories	1,400	
Raw Materials:		
- Production materials	1,117	2
- Other input materials	124	1
- Work-in-process	-	-
- Finished products	159	1.1

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift length:	9.5 (*)	9.5 (*)	9.5 (*)	hours
Actual employees:	2,007	2,817	1,977	hours
Actual days:	210	210	210	days

(*) Actual; normal: 8.5 hrs.

IV. MANNING TABLE

(End of 1967)	Total	Number of persons					
		1st Shift			2nd Shift		3rd Shift
		A	B	C	D	E	F
ALL SHOPS & UNITS:	766	62	361			141	142
1 Primary operative shops	450	24	19	117	7	141	112
- Barking department	43	2	7	6	-	14	14
- Food grinding department	17	3	5	20	5	32	32
- Bleaching department	39	2	7	4	2	10	13
- Paper manufacturing dept.	272	17	-	87	-	85	83
2 Auxiliary operative units	212	3	204			-	-
- Repair & maintenance	96	5	91			-	-
- Mechanical shop	-	-	-			-	-
- Tooling shop	-	-	-			-	-
- Utilities control	-	-	-			-	-
- Product & material storage	62	3	59			-	-
- Off-site transport	25	-	25			-	-
- Guards, cleaners, etc.	29	-	29			-	-
3 Auxiliary non-operative units	104	3	14			-	-
- Production management	3	3	-			-	-
- Research & development	21	7	14			-	-
- Sales unit	6	6	-			-	-
- Accounting	3	3	-			-	-
- General administration	11	11	-			-	-

V. ANNUAL PRODUCTION

(1967)	Yr. of first prod.	Quantity produced		Av. unit price on factory floor (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Products for group of products					
Illustration paper	..	t	79,596	180.1	15,131
Book paper	..	t	4,112	170.4	703
Writing paper	..	t	5,883	230.1	1,357
Wallpaper (unprinted)	..	t	3,172	221.3	702
TOTAL VALUE OF PRODUCTION:					17,731

VI. VALUE ADDED

(1967)	Total value (000 US \$)
1. Annual wages & salaries	2,132
- Operative workers (644 persons)	1,301
- Non-operative workers (62 persons)	211
2. Other payments for employees	133
3. Annual depreciation	107
- Machinery & equipment	107
- Buildings & other facilities	-
- Non-physical capital assets	-
4. Rentals paid	-
5. Interests & royalties	31
6. Sales tax	133
7. Other indirect business taxes	136
8. (-) Subsidies	-
9. Corporate income before tax	1,711
TOTAL VALUE ADDED:	5,702

DESCRIPTION OF MAJOR PRODUCTS:

Company mainly manufactures illustration paper with a weight of 60 - 70 g/m².

All other types of paper are of inferior quality.

Serial production. Prompt delivery.

MARKET ASPECTS:

Consumers of products:

Publishers, printers, mail order houses and wholesalers.

Sales organization:

Domestic market: 6 sales offices.

Foreign market: 5 sales agencies.

Share in the domestic market:

3 - 5%.

Major foreign sales areas:

Western European countries.

Competition in the market:

A few large manufacturers of paper dominate the domestic market (oligopoly).

Export price policy:

Adjustment to world market prices.

EXPORT:

Total annual export: 110,000 t.

Major products	To Western countries	To Eastern countries	To Developing countries
Illustration paper	100	-	-

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed (t)		% input	Average input dollar	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					
FFPA:					1,325
- Electricity	000 kWh	4,226 (*)	-	-	128
- Coal	t	1,810	-	-	140
- Heavy fuel oil	t	46,105	-	-	1,057
(*) Not including internal supply of 132,000 kWh.					
2. Production materials					7,112
FFPA:					
- Pine wood	m ³	167,216	-	-	2,012
- Pulp	t	18,680	-	-	3,226
- Kaolin and other materials	t	3,462	-	-	1,874

	Total consumption value (000 US \$)
3. Other materials & supplies	1,265
FFPA:	
- Packaging material (cardboard boxes)	201
- Parts, supplies & services	621
- Other materials & supplies (sifters and felts)	1,143
4. Business services purchased	1,012
FFPA:	
- Transportation, storage & insurance	23
- Communication, advertising & other business services	132
5. Work performed by subcontractors	105
FFPA:	
TOTAL VALUE OF CONSUMPTION:	11,549

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT E.T.:

Number	Original Purchase Value (USD US \$)	Replacement value (USD US \$)	Age (yr)	Supplier country	Year of installation	Daily running time (hrs)	Speed of machines	Width of machines
Paper machine I	1			Germany, P.R.	1923 (reconstructed in 1959)	22	420 m/min.	3,800 mm
Paper machine II	1			Germany, P.R.	1955 (reconstructed in 1967)	20	600 m/min.	4,500 mm
Hydraulic paper glazing calendars	3		12	Germany, P.R.	1958	20	700 m/min.	4,600
Continuous grinders	7		8	Germany, P.R.	1958	20	Output: 50-120 m ³ /day	..
Paper reel cutters	2	No details available.	6	Germany, P.R.	1955	16-20	2,200 m/min.	4,500 mm
Paper rewinding machines	2		23	Germany, P.R.	1955	20	..	2,100 mm
Keelin resolver	1		12					
Peeling drums	2		8					
Steam turbines	4		15					
Water turbines	2		11					
Steam boilers	5		7					
Parking equipment	2		4					

CAPACITY POWER:
 Process equipment: electric motors 10 20,000
 Generating equipment: installed capacity 1VA 67,000

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of goods involved	Station	Autom.
Barking department		C	III
Koed grinding department		B	III
Bleaching department		B	II
Paper manufacturing department		B	II
Power generating department		F	I

CAPACITY UTILIZATION:

Full-capacity output: 100 11,750,000

Current utilization: Based on 3-shift operation

Major products for present	up to	Approximate %
Illustration paper	X	
Book paper	X	
Writing paper	X	
Wallpaper (unprinted)	X	

III. HISTORY & PLAN

Year	Total output (USD US \$)	No. of persons employed	Total capacity (USD US \$)
1963	10,470	872	200
1964	15,000	623	180
1965	16,120	641	70
1966	18,300	664	280
1967	17,630	706	480
1968	18,980	740	500

2. Investments in the past:

From	To	Investment (USD US \$)	Type of investment
1955	1956	3,500	Machinery and equipment
1966	1967	3,075	Power plant and machinery

3. Future Plan:

From 1969 to 1973: 1,300 Rationalization and expansion of process and auxiliary equipment. Additional 45 semi-skilled and 10 unskilled operations as well as 6 non-operatives will be required on the 3rd shift.

IX. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(C - confidential; figures of these size groups are included in total.)

(1968) Paper, pulp and paperboard manufacturing industry (NSIC Code: 271)

1. Size groups by number of persons employed	No. of estab.	No. of emp.	As. W. & B. per emp. (USD US \$)	As. sales per emp. (USD US \$)	As. value added/sales ratio (%)	2. Size groups by amount of sales	No. of estab.	No. of emp.	As. W. & B. per emp. (USD US \$)	As. sales per emp. (USD US \$)	As. value added/sales ratio (%)
up to 19	62	537	1,433	5,738	57	up to 1,250	177	C	C	C	C
20 - 99	93	4,076	1,311	9,415	53	1,250 - 2,500	30	C	C	C	C
100 - 199	44	6,100	1,970	11,208	47	2,500 - 6,250	49	17,467	2,092	10,961	48
200 - 499	59	20,154	2,131	11,508	48	6,250 - 12,500	17	11,597	2,179	12,655	48
500 - 999	14	9,664	1,371	11,188	43	12,500 - 25,000	8	11,199	2,194	12,901	43
over 1,000	16	41,324	2,317	13,477	46	over 25,000	7	28,429	2,400	14,311	46
TOTAL	288	82,755	2,174	12,173	47	TOTAL	288	82,755	2,172	12,173	47

10. BUSINESS AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service

- | | | |
|--|---------------------------------------|--------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export promotion |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
3 and 5				The enterprise is willing to sign know-how contracts and license agreements as well as to provide experts and other skilled personnel and to act as technical consultant as far as paper manufacturing is concerned.
8				The company is interested to import pulp from developing countries provided quality and prices meet requirements.

11. SUPPLEMENTARY NOTES

Contract and commission work:

To some extent paper was cut by a few sub-contractors. Commission paid amounted to US \$ 155,000.

Bottlenecks in the plant:

Lack of skilled operatives.

Current problems:

Bottlenecks in the flow of production materials as well as in the interdepartmental transportation system due to old production premises.

Inventory policy:

The company applied the declining balance method.

Inventory policy:

On the average the value of finished products in stock amounts to about 1% of the total value of production since the enterprise produces to order only.

Major Products:

Printing of books, booklets, stationery, etc. Capable of producing annually US \$ 140,000 worth of goods on one-shift operation.

Reporting Unit:

A one-establishment enterprise, founded in 1966, privately owned, no participation of foreign capital.

I. FIXED CAPITAL ASSETS

(End of 1966/67)

	Year of installation	Orig. purchase value (USD US \$)	Replacement value (USD US \$)
1. Primary process equipment		55.7	61.2
TOTAL:		55.7	61.2
- Process equipment		54.3	59.6
- Hand tools & apparatuses		1.4	1.6
- Cost of installation (incl. in process equ.)		-	-
2. Primary industrial building (rented)		-	-
TOTAL:		-	-
(total floor space: .. m2)		-	-
3. Auxiliary facilities		3.5	4.0
TOTAL:		3.5	4.0
- Water, steam, electricity, cooling & storing		-	-
- Transportation facilities	1965	2.2	2.4
- Administrative facilities	1966	1.3	1.6
- Laboratory facilities		-	-
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		59.2	65.2
4. Other fixed capital assets		-	-
TOTAL:		-	-
- Land (total acreage: .. m2)		-	-

DETAIL OF PROCESS EQUIPMENT (incl.):

	Supplier country	Year of installation	Orig. purchase value (USD US \$)	Replacement value (USD US \$)
- Printing machines	USA Sweden	1966	39.3	43.2
- Shears	Sweden	"	10.6	11.6
- Photographic equipment	USA	"	3.0	3.3
- Printing types	USA FR.Germ.	"	1.4	1.5

HISTORY OF INVESTMENT:

Construction of the factory as well as trial and commercial production started in 1966. In 1967 US \$ 10,000 were invested to expand the lithographic equipment.

CAPACITY POWER:

Process equipment: - MW

Generating equipment: installed capacity

- IVA

EXTERNAL CONDITIONS:

Transport: Long distance and local area, fair.
Utilities: Electricity and water, fair.
Community: Residential, excellent; health and recreational and educational poor. - Training facilities for workers should be improved through industrial development loans.

II. INVENTORIES AND WORKING CAPITAL

In USD US \$

(End of 1966/67)

	Actual value	2. Liquid assets	Actual value
1. Inventories	19.0	TOTAL	14.2
TOTAL:	19.0		
- Production materials	15.1	- Cash (hand/bank)	0.4
- Other input materials	1.0	- Market, sec. & bonds	-
- Work-in-process	1.0	- Short-term investment	-
- Finished products	1.9	- Prepaid expenses	-
		- Accounts receivable	13.8
3. Desired working capital	Number of months	Value	
TOTAL:		40.0	
- Production materials	4	16.0	
- Other input materials	4	4.0	
- Finished products	4	6.0	
- Wages & salaries	4	13.2	
- Other special items	4	0.8	

III. MANPOWER TABLE

Number of persons

A - Active operators
B - Other operators

(1966/67)

	Total	1st shift	2nd shift	3rd shift
		A	B	A+B
ALL SHOPS & UNITS:	13	13	-	-
1. Primary operative shops	12	9	3	-
- All shops	12	9	3	-
2. Auxiliary operative units	1	1	-	-
- Repair and maintenance	-	-	-	-
- Mechanical shop	-	-	-	-
- Utilities control	-	-	-	-
- Product & material storage	-	-	-	-
- Off-site transport	-	-	-	-
- Guards, cleaners, etc.	1	1	-	-
3. Auxiliary non-operative units	-	-	-	-
- Production management	-	-	-	-
- Research & development	-	-	-	-
- Sales unit	-	-	-	-
- General administration	-	-	-	-

WORKING TIME PER OPERATIVE WORKER:

- Normal hours/day: 8 hours - Normal days/year: 260 days
 - Actual hours/year: 2,080 hours

CAPACITY OF OPERATIVE SHOPS:

IV. ANNUAL PRODUCTION

(1966/67)	Wt. of the prod.	Quantity produced		*)	Unit price in factory US \$	Total production value US\$ US \$
		Units	Output			
Products for group of products						
- Labels	1966	000 pcs	15,822	32,000	1.80	24.5
- Cardboard boxes	"	000 "	247	550	26.00	6.4
- Stationery (coupon-books)	"	"	3,560	1,000	0.60	2.1
- Posters	"	000 "	267	500	40.000	10.7
- Calendars	"	"	1,017	2,000	1.4	1.4
- Miscellaneous (books, booklets, etc.)	"	"	53,340	100,000	0.40	21.3
TOTAL VALUE OF PRODUCTION						67.4

* The production capacity depends upon the size and complexity of the products as well as on the kinds and colours of inks to be used.

COMPETING IMPORTS:

The following tariff rates are imposed on imported goods like:

Products	Tariff rate	
	per gross kg	ad valorem
Labels	US \$ 1.50	15%
Cardboard boxes	" " 0.15	15%
Stationery	" " 0.60	10%
Posters	" " 0.03	free
Calendars	" " 1.50	25%
Books and booklets	free	free

IMPORTS:

Labels are imported at US \$ 1.80/000 pieces, posters at US \$ 26.00/000 pieces.

CAPACITY UTILIZATION:

Due to lack of sufficient working capital the existing capacity could only be utilized up to 50%. Furthermore it has to be considered that production only started recently.

V. ANNUAL CONSUMPTION

(1966/67)	Quantity consumed		%	Total consumption value US\$ US \$		
	Units	Purchase				
1. Energy and water				0.6		
- Electricity	000 Kwh	9.14		0.3		
- Detergents and lubricants	m3	2.21		0.3		
2. Production materials				23.7		
			per gross kg ad valorem US \$ %			
- Paper	t	30	100	0.15	15	14.3
- Cardboard	t	75	100	0.10	10	6.0
- Inks	kg	1,190	100	0.03	15	3.6

VI. VALUE ADDED

(1966/67)	Value US\$ US \$
1. Wages & salaries	
- Employees in direct production (13 persons)	16.1
- Other employees (3 persons)	3.8
2. Other payments for employees	1.2
3. Annual depreciation	1.2
4. Overhead paid	1.2
5. Interest & royalties	0.2
6. Sales tax	0.2
7. Other ind. bus. taxes	0.2
8. (-) Subsidies	0.2
9. Corporate income before tax	0.2
	47.3

VII. MONTHLY EARNING RATES

(End of 1966/67)	No. of emp.	Average earning rate US\$ US \$
1. Local non-operative		
TOTAL	130	
- Managers		
- Engineers		
- Technicians		
- Accountants		200
- Sales officers		
- Other professional staff		
- Clerks & typists		60
2. Local operative		
TOTAL	14	114
- Supervisors		
- Foremen		
- Machine operators		144
- Craftsmen		60
- Truck drivers		
- Other full-time operatives		
- Unskilled & part-time operatives		8
3. Foreign employees		
TOTAL		

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1966)	Industry group:		(HSIC:)		
1. Size groups by number of persons employed up to	Number of units	Number of empl.	Avg. emp. US \$ per unit	Avg. prod. val. per unit US \$	Avg. emp. prod. ratio* (%)
No data available.					
TOTAL					
2. Size groups by value of annual production up to					
TOTAL					

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

Governmental policies:

An adequate industrial development law should be passed in order to facilitate programmes of technical and financial assistance.

Future plan:

Presently the company evaluates investment possibilities to increase the output of labels, cardboard boxes, stationery, etc. by 1969/70.

Major Products:

Dressed skins for ladies' handbags. Capable of producing annually 300,000 m² dressed skin for ladies' handbags plus some leather for shoes; 1-shift operation.

Reporting Unit:

A one-establishment enterprise; founded in 1920 but expanded considerably in 1949-50; privately owned; 12% participation of foreign capital.

I. FIXED CAPITAL ASSETS

(End of 1966)	Year of installation	Orig. purchase value 1966 US \$	Replacement value 1966 US \$
1. Primary process equipment			
TOTAL		151.3	112.0
- Process equipment		114.6	280.0
- Hand tools & apparatuses		4.0	5.0
- Cost of installation		32.4	24.0
2. Primary industrial building			
TOTAL		41.8	11.0
(total floor space: 6,627 m ²)		41.8	11.0
3. Auxiliary facilities			
TOTAL		36.5	11.0
- Water, steam, electricity, cooling & storing		15.0	11.0
- Transportation facilities		5.0	11.0
- Administrative facilities		26.3	11.0
- Laboratory facilities		1.0	11.0
- Others		5.2	11.0
TOTAL PHYSICAL FIXED CAPITAL ASSETS		324.3	144.0
(including land):		324.3	144.0
4. Other fixed capital assets			
TOTAL		76.3	11.0
- Land (total acreage: 6,627 m ²)		76.3	11.0

SEVAL OF PROCESS EQUIPMENT (no.)	Supplier country	Year of installation	Orig. purchase value 1966 US \$	Replacement value 1966 US \$
Fleshing machines	3 FR, Germ. UK	1936-66	11.0	
Polishing machines	4 FR, Germ. UK	1945-68	14.0	
Brushing machines	3 UK, Mexico	1960	4.1	
Shaving machines	4 SA, FR, Germ.	1960	4.1	
Squeezing machines	4 UK, Italy	1960	11.0	280.0
Pressing machines	2 USA	1960	22.2	
Colouring machine	1 UK	1960	11.0	
Trimming machine	1 UK	1960	5.0	
Thermic dry cells	14 Mexico	1925	14.0	
Machines for semi-finished hides	2 USA	1924-66	4.2	
Others			11.0	

HISTORY OF INVESTMENT:

The construction of the factory, the first trial as well as commercial production started in 1920. Expansion of production of following products was made by following investments:

1929	approx. US \$ 14,000	Cattle-, goat and lamb skin
1949	" " 144,000	Cattle- and calf skin
1950	" " 30,000	" " " "
1956	" " 32,000	" " " "

CAPACITY POWER:

Process equipment:		Generating equipment:	
Electric motors:	700 kW	Installed capacity:	1 kVA

EXTERNAL CONDITIONS:

Transport: Long distance and local area, fair.
Utilities: Electricity, fair; water, excellent.
Community: Residential, health and recreational, educational, fair.

II. INVENTORIES AND WORKING CAPITAL

In 1966 US \$

(End of 1966)	Actual value	2. Liquid assets	Actual value
1. Inventories		TOTAL	332.5
TOTAL	392.6		
- Production materials	68.4	- Cash (hand/bank)	33.2
- Other input materials	29.4	- Market, sec. & bonds	-
- Work-in-process	127.0	- Short-term investment	108.6
- Finished products	167.8	- Prepaid expenses	3.3
		- Accounts receivable	188.4
3. Deceiv working capital			
TOTAL		Number of months	Value
			504.0
- Production materials	2	100.0	
- Other input materials	2	36.0	
- Finished products	1	168.0	
- Wages & salaries	-	-	
- Other special items	..	200.0	

III. MANNING TABLE

(number of persons)

A - Regular operators
B - Other operators

(1966 average)	Total	1st shift	2nd shift	3rd shift
		A	B	A+B
ALL SHOPS & UNITS:	148	147	1	-
1. Primary operative shops	103	29	74	-
	103	29	74	-
Only one unit with mostly unskilled workers; they change from one machine to another				
2. Auxiliary operative units	12	11	1	-
- Repair and maintenance	2	2	-	-
- Mechanical shop	2	2	-	-
- Utilities control	-	-	-	-
- Product & material storage	1	1	-	-
- Off-site transport	2	2	-	-
- Guards, cleaners, etc.	5	4	1	-
3. Auxiliary non-operative units	33	33	-	-
- Production management	14	14	-	-
- Research & development	-	-	-	-
- Sales unit	2	2	-	-
- General administration	16	16	-	-
- Others (agent for purchasing raw hides)	1	1	-	-

WORKING TIME PER OPERATIVE WORKER:

Normal hours/day:	8 hours	Normal days/year:	288 days
Actual hours/year:	2,304 hours		

CAPACITY OF OPERATIVE SHOPS:

The processing capacity of skin finishing department is 300,000 m²/year on one-shift operation; moderate automation.

ADVANTAGE CONNECTED WITH THE PARTICIPATION OF FOREIGN CAPITAL:

The general manager is a foreigner and his technical ability as well as his liaison with foreign trading organizations has been essential for the successful business.

VII. TECHNOLOGICAL CHARACTERISTICS

DETAILS OF PROCESS EQUIPMENT (1):

Special machines and equipment (hydraulic press, sewing and cutting machines, sizers and conveyors)
Common type of machines and equipment

Number	Original Purchase Value (1960 US \$)	Replacement value (1960 US \$)	Avg. Age (yrs)	Remarks
120	2,772	approx. 10% higher than original purchase value		
	1,188			

Remarks:
 (1) Purchased or used here
 (2) Imported
 (3) Rebuilt
 (4) Self-constructed

Further details:

CAPACITY POWER

Process equipment: electric motors 1.7

Generating equipment installed capacity 1.4A

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops

Kind of goods produced

Station

Automation

Further details:

Plastic and rubber shoe production

B

II

Textile and leather shoe production

B

II

Abbreviations:
 A. most advanced
 B. considerably high standard

C. moderate standard
 D. appreciably short of today's standard
 E. almost outdated

Automation:
 I. fully automated II. semi-automated III. non-automated

CAPACITY UTILIZATION:

Full-capacity output: Approx. US \$ 12.5 billion.

Current utilization

Major products (by process)	Approximate %										
	10	20	30	40	50	60	70	80	90	100	

The over-all capacity utilization rate is considered to be about 11%.

For full-capacity utilization additional 262 operatives would be needed.

Also approximately US \$ 2.6 billion should be invested to correct the

existing bottleneck to reach the nominal full-capacity production.

III. HISTORY & PLAN

1. Performance in the past:

Year	Total output (1960 US \$)	No. of persons employed	Total output (1960 US \$)
1961	5,280	1,000	-
1964	5,680	1,500	-
1965	6,200	1,600	-
1966	6,860	1,700	920
1967	7,660	2,000	1,800
1968	10,250	2,940	920

2. Investments in the past:

From 1965 to 1968	Approximate amount (1960 US \$)	Type of investment
From 1965 to 1968	3,960	60% machinery and 40% building

3. Future Plan:

From 1969 to 1973 : 2.6 mill. Expansion of production and administrative and welfare facilities; technological improvement of all facilities. Additional 200 primary operatives, 50 auxiliary operatives and 12 persons for management and administration will be employed then.

IV. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

* Data of 4 selected modern establishments manufacturing shoes, thus representing only part of ISIC-code 241/300.

(1967)						
Industry: Shoe manufacturing (ISIC Code 241/300) [*]						
1. Size groups by number of persons employed	No. of estab.	No. of emp.	Avg. gross prod. (1960 US \$)	Avg. gross prod. (1960 US \$) per emp.	Avg. value added (1960 US \$) per emp.	Fixed physical capital assets per person (US \$)
up to 99	1	96	844	4,626	29	4,206
100 - 120	2	227	1,586	20,209	21	3,291
Three enterprises	1	1,741	1,345	5,379	28	3,524
TOTAL	4	2,064	1,331	6,692	26	3,527

IV. ANNUAL PRODUCTION

(1966)	V. of first prod.	Quantity produced		Nominal capacity output	Unit price in factory (US \$)	Total production value (US \$ @)
		Units	Output			
Products for group of product						
- Dressed skin for ladies footwear	1920	000 m2	48	60	480	23,112
- Dressed skin for handbags	1966	000 m2	251	800	5,100	1,286.7
TOTAL VALUE OF PRODUCTION						1,311.7

PRODUCTS AND PRICES:

The major products have lately shifted from inexpensive footwear leather to more expensive leather for handbags. The prices as above, exclude the sales tax.

EXPORTS:

No direct exports. But part of the output is believed to be exported.

CAPACITY UTILIZATION:

In the case of 2-shift operation, capacity output will rise to 480,000 m2 per year. The current rate of utilization (85%) is considered as being satisfactory.

VI. VALUE ADDED

(1966)	Value (US \$ @)
1. Wages & salaries	
- Employees in direct production (107 persons)	102.4
- Other employees (41 persons)	122.4
2. Other payments for employees	8.2
3. Annual depreciation	14.4
4. Rentals paid	-
5. Interest & royalties	11.4
6. Sales tax (not incl. in B/F/A/E)	(19.0)
7. Other ind. bus. taxes	13.1
8. (-) Subsidies	-
9. Corporate income before tax	59.0
	169.7

VII. MONTHLY EARNING RATES

(End of 1966)	No. of emp.	Average earnings (US \$)
1. Local non-operatives		
TOTAL	30	224
- Managers	1	800
- Engl. workers	-	-
- Technicians	-	-
- Accountants	2	416
- Sales officers	1	616
- Other professional staff	-	-
- Clerks & typists	6	184
2. Local operatives		
TOTAL	116	95
- Supervisors	1	128
- Foremen	-	-
- Machine operators	26	96
- Craftsmen	1	112
- Truck drivers	1	96
- Other full-time operatives	80	88
- Unskilled & part-time operatives	-	-
3. Foreign employees		
TOTAL	2	1,292
- Managers	1	1,504
- Engineers, trainers and other tech. control staff	1	1,080

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed				Total consumption value (US \$ @)
	Units	Purchase	% imported	Tariff rate	
1. Energy and water					22.1
TOTAL					22.1
- Electricity	000 Kwh	427			9.7
- Crude petroleum	000 l	632			8.4
- Water	000 m3	63			4.0
2. Production materials					804.5
TOTAL					804.5
- Cattle skin	pieces	34,000	21	(*) 5%	511.6
- Lamb skin	"	31,851	7		72.1
- Chemical products	"	..	11		220.8

(*) In addition to these ad valorem, there are charges per physical unit.

3. Other materials & supplies	IMP.	Tariff rate	Total consumption value (US \$ @)
TOTAL			33.5
- Packaging	15		2.1
- Repair & maintenance	20	25	26.9
- Non-factor service inputs			4.5
4. Business services purchased			80.2
TOTAL			80.2
- Transport, storage & insurance			15.2
- Communication, advertisements, etc.			15.0
5. Work performed by sub-contractors			51.7
TOTAL			51.7
			942.0

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)					
Industry group: Tanneries and leather finishing plants (ISIC: 291)					
1. Size groups by number of persons employed	Number of units	Number of emp.	Avg. no. of emp. per unit (US \$)	Avg. gross prod. val. per emp. (US \$)	Avg. emp. gross prod. ratio* (%)
up to 25	690	3,797	530	3,227	49
26 - 50	38	1,332	1,004	5,984	65
51 - 75	20	1,211	1,008	5,883	58
over 75	21	3,219	1,286	7,616	73
TOTAL	769	9,559	911	22,710	61
2. Size groups by value of annual production (US \$ @)	Number of units	Number of emp.	Avg. no. of emp. per unit (US \$)	Avg. gross prod. val. per emp. (US \$)	Avg. emp. gross prod. ratio* (%)
up to 2	585	942	49	566	42
2 - 5	399	1,228	249	1,339	42
5 - 10	213	1,548	515	2,566	51
10 - 20	76	1,239	768	4,367	53
20 - 40	34	1,029	1,035	6,116	59
over 40	46	4,475	1,240	7,834	68
TOTAL	1,353	10,461	833	5,058	63

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

Commission work:

Commission contract with sales agents. This involves a chain-store type arrangement for marketing.

Future plan:

Within a period of 3 years approx. US \$ 480,000 will be invested for a general expansion of production capacity by about 50%.

Government policies:

No comments.

Major Products:

Tyres, tubes, flaps, and other rubber products. Producing annually approximately 11,000 tons or about 750,000 tyres and tubes of various kinds based on three-shift operation. Full-capacity output amounts to US \$ 19 million.

Reporting Unit:

A branch-establishment of a fairly decentralized enterprise with 42 establishments including the central office, which is located in USA. This branch was founded in 1964. It is privately owned. Share of foreign capital amounts to 35%. Trial and commercial production were first started in 1965.

I. FIXED CAPITAL ASSETS

(End of 1968)

	Original purchase value 1000 US \$	Replacement value 1000 US \$	Avg age (Yrs.)
1 Primary process equipment (including installation cost)			
TOTAL	..	..	..
- Process equipment *	4,776	..	..
- Hand tools & apparatuses	..	..	..
- Cost of installation	incl.	incl.	..
2 Buildings			
TOTAL	1,548	..	..
- Primary industrial buildings (total floor space: .. m ²)	1,417	..	..
- Auxiliary buildings	..	..	..
- Warehouse	..	..	..
- Office administration buildings (Housing included in primary industrial and auxiliary buildings.)	..	..	..
3 Auxiliary facilities (incl. buildings)			
TOTAL	162	..	..
- Internal power equipment	..	..	..
- Laboratory facilities	..	..	..
- Means of transportation	162	..	..
- Office equipment	..	..	..
TOTAL PHYSICAL FIXED ASSETS (excluding land)	..	..	..
4 Other fixed capital assets			
TOTAL	331	..	..
- Land (total acreage: 101,000 m ²)	172	..	..
- Land improvements	4	..	..
- Others	155	..	..

*NB Details of process equipment and capacity of primary operating departments are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1968 monthly average)

	US\$	US\$	US\$	US\$	US\$	US\$
1. Local non-operatives						
- Managers
- Engineers
- Technicians
- Accountants
- Sales officers
- Clerks and typists
- Others
2 Local operatives						
- Supervisors
- Foremen
- Skilled operatives
- Machine operators
- Craftsmen
- Truck drivers
- Unskilled operatives
- Other full-time operatives
- Part-time operatives
3 Foreign employees						
- Managerial staff
- Technical staff
- Other skilled operatives
- Unskilled operatives

EXTERNAL CONDITIONS:

Transport	external long distance	insignificant
	internal long distance	excellent
	local and city	excellent
Utilities	electricity	fair
	water	fair
	gas	insignificant
Community	residence	excellent
	health and recreation	excellent
	education	excellent
Own Welfare Facilities:		-

III. INVENTORIES

(End of 1968)

	Actual value 1000 US \$	Number of months
Inventories		
TOTAL	3,544	..
- Production materials	1,661	3
- Other input materials	127	3
- Work-in-process	164	..
- Finished products	1,587	..

(See XII. for liquid assets and desired working capital).

WORKING TIME PER OPERATIVE WORKER

	1st shift	2nd shift	3rd shift	hours days
Shift hours/day	8	8	8	..
Actual hours/year	2,030	2,030	2,030	..
Normal days/year:	290	290	290	..

IV. MANNING TABLE

(Number of persons)

Shift categories: A Supervisory staff and foremen (for all shifts)
B Machine operators
C Other operatives
D

(1968 average)

ALL SHOPS & UNITS:

1 Primary operative shops

- Total primary operative

staff

Total	1st Shift			2nd Shift	3rd Shift
	A	B	C	D	D
940	241	203	248	248	248
243	8	49	24	81	81
243	8	49	24	81	81

2 Auxiliary operative units

- Repair & maintenance
- Mechanical shop
- Tooling shop
- Utilities control
- Product & material storage
- Off-site transport
- Guards, cleaners, etc.
- Other units

Total	A	1st Shift			2nd Shift	3rd Shift
501	37	130	167	167	167	
198	6	60	66	66	66	
..	
18	1	5	6	6	6	
96	9	23	32	32	32	
..	
78	13	13	26	26	26	
111	8	29	37	37	37	

3. Auxiliary non-operative units *

- Production management
- Research & development
- Sales unit
- Accounting
- General administration
- Other departments

Total	A	1st Shift			2nd Shift	3rd Shift
196	196	..	..	..	..
4	4	..	..	..	..
..	
29	29	..	..	..	..
53	53	..	..	..	..
37	37	..	..	..	..
73	73	..	..	..	..

(* See XII. Supplements)

V ANNUAL PRODUCTION

Products for group of products	W of feet prod.	Quantity produced		Avg unit price in factory (US \$)	Total output value (100 US \$)
		Unit	Quantity		
- Tyres for passenger cars		pieces	111,458	12 - 22	..
- Light truck tyres		"	65,437	28 - 48	..
- Truck tyres		"	109,467	61 - 147	..
- Others		"	97	34 - 218	..
- Tubes for passenger cars		"	50,324	2 - 4	..
- Tubes for trucks		"	75,124	5 - 12	..
- Flaps		"	112,532	..	..
- Accessories	1965	kg	201,697	..	..
- Repair material		"	14,318	..	..
- Customer compounds		"	1,161	..	..
- Patches		"	1,380	..	..
- Ash-tray tyres		pieces	1,703	..	..

1) Not for sale, but for advertising purposes

TOTAL VALUE OF PRODUCTION: 11,483
(not including sales tax) *****

VI VALUE ADDED

(1968)	Total value (100 US \$)
1 Annual wages & salaries	3,345
- Operative workers	
(744 persons)	
- Non-operative workers	
(196 persons)	
2 Other payments for employees	374
3 Annual depreciation	598
- Machinery & equipment	..
- Buildings & other facilities	133
- Non-physical capital assets	..
4 Rentals paid	..
5 Interests & royalties	..
6 Sales tax	180
7 Other indirect business taxes	..
8 () Subsidies	..
9 Corporate income before tax	213

TOTAL VALUE ADDED: 5,943 *****

DESCRIPTION OF MAJOR PRODUCTS:

Automobile, truck, bus, agricultural tractor tyres and tubes of different ring sizes and appropriate quantities of flaps.

Tyre repair material and retread rubber.

Numerous patents involved in production; only one quality manufactured.

MARKET ASPECTS:

Imports: Insignificant.

Consumers of products: Car manufacturers and government.

Sales organization: Selling through dealers at discounts between 20% to 30% depending on size of order and amount of cash payments; special discounts are provided for civil defense and car manufacturers.

Extent of the market: Domestic market only.

Share in the domestic market: 40%.

Competition with imported products: Very keen competition.

Imports of production materials: All exempted from import duties. Natural rubber from Malaysia and Singapore. Nylon tyre cord, synthetic rubber, Polybutadiene are from France, F.R. Germany and Japan. Carbon black and rubber chemicals are from Western Europe as well as USA.

EXPORT:

Total annual export: None.

Major products	To Western countries	To Eastern countries	To Developing countries

Good prospects for exports in the future.

VII. ANNUAL CONSUMPTION

(1968)	Quantity consumed		% Import	Average import duties	Total consumption value (100 US \$)
	Unit	Quantity			
1. Energy and water					244
TOTAL:					
- Electricity	000 kWh	7,200 *	-	-	95
- Liquid fuels and lubricants	..	..	-	-	124
- Water	000 m ³	..	-	-	3
- Others	..	..	-	-	22
2. Production materials					4,948
TOTAL:					
- Natural rubber	t	2,500	100	..	consumption value not available
- Synthetic rubber	"	1,775	100		
- Carbon black	"	1,969	100		
- Nylon fabrics	"	868	100		
- Chemicals	"	900	40		
- Lead wire	"	240	100		
- Solvents	"	300	100		
- Liners	"	85	100		
- Tube valves	pieces	15,000	100		
- Others	..	..	..

* Not including internal supply of 960,000 kWh at a unit price of US \$ 0.02.

** Raw materials are all exempted from import duties.

3. Other materials & supplies	337
TOTAL	143
- Packaging material	
- Parts, supplies & services	178
- Other materials & supplies	16
4. Business services purchased	364
TOTAL:	74
- Transportation, storage & insurance	
- Communication, advertising & other business services	290
5. Work performed by subcontractors	-
TOTAL:	-

TOTAL VALUE OF CONSUMPTION: 5,893 *****

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF SHOPS:

- Processing department: Rubber cutting; compounding; mixing and milling; dip unit; calender and liner re-rolling; tubes; cement house.
- Assembly department: Stock preparation; bead building; band building; tyre construction of single and twin beads.
- Vulcanisation and finishing department: Curing of tyres; final inspection of tyres; building, curing, inspection and boxing of tubes, flaps and airbags.
- Service departments: Repair new products; raw material receiving and storing; supplies receiving and storing; material handling; finished goods warehouse and shipping; compounding and laboratory; production engineering; quality control; title study and standards; plant safety; production scheduling; purchasing; industrial and personnel relations; etc.

Remarks:
 SM Purchased second-hand
 TB Imported
 R Rebuilt
 X Self-constructed

Further details:

Tyre manufacturing requires a great amount of manual labour especially for assembly departments and product control.

CAPACITY POWER:

Process equipment:	
electric motors	2,200 kW
- other furnaces (steam generator)	16,000 /hr.
Generating equipment:	
installed capacity (nomin.)	1,530 kVA
- actual production in 1968	1,076,980 kWh

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Shop primary operative shops	Kind of process involved	Machine	Automation
Dip department	Nylons are dipped in chemical mixtures	B	II
Tube manufacturing department	-	C	II
Tyre construction (single bead)	Tyre building drums for primary shape of tyres	C	II

For the size of the factory the degree of automation and mechanization is equivalent or even superior to any factory in the world. With an increase in production scale, conveyors will replace manual transport of materials and tyres. The present level of production, however, does not economically justify such replacements.

CAPACITY UTILIZATION:

Full-capacity output: approximately US \$ 18,000,000.

Current utilization:



The over-all capacity utilization rate is considered to be about 75%. This is partly due to competition of imported tyres. The company expects to improve the present utilization rate after a car manufacturing factory starts operation.

For full utilization of the actual capacity an increase in labour would be required: for operative shops 40 man-years on the 1st shift; 30 on the 2nd and 3rd shift respectively; for non-operative shops 150 man-years on the 1st shift. Also an investment of about US \$ 410,000 will be required for expansion of production facilities especially of the vulcanisation department.

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output t	No. of persons employed	Total capacity US\$ US\$
1963	-	-	-
1964	-	-	-
1965 *)	260	360	-
1966	4,772	509	-
1967	5,222	524	-
1968	8,060	940	-

*) Four months' operation for production of tyres and one month for tubes.

2. Investments in the past:

In	US\$ US\$	Type of investment
In 1968 :	70	1 press
" 1969 :	1,000	Tyre building machines and building

3. Future Plan:

Within the next five years a capital investment of US \$ 2,200,000 is planned for replacement of process machinery and equipment and other primary production facilities; new additions to product-line and process machinery and equipment; at the same time technological improvement of products and process equipment will be involved in these investments from which a decrease of 50 man-years per shift (40 primary and 10 auxiliary operatives) will become possible.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(196)

Industry _____ (NIC Code: _____)

1. Size groups by number of persons employed: up to	No. of units	No. of empl.	Avg. W. & S. per pers. US\$	Avg. gross prod. val./per pers. US\$	Avg. value added/gross prod. ratio (%)
TOTAL:					

2. Size groups by annual value of production US\$ US\$ (t): up to	No. of units	No. of empl.	Avg. W. & S. per pers. US\$	Avg. gross prod. val./per pers. US\$	Avg. value added/gross prod. ratio (%)
TOTAL:					

IX. DESIGN AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

- Type of service:
- 1. Engineering study
 - 2. Feasibility studies
 - 3. Industrial surveys
 - 4. Equipment supply
 - 5. Installation & maintenance
 - 6. Technical and managerial personnel
 - 7. Industrial training
 - 8. Technical consultation
 - 9. Import and export services
 - 10. Admission of foreign labor

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

1. Services performed during the past five years:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
-----------------	-------------------	-----------------	-------------------	-------------------------

XI. SUPPLEMENTS & NOTES

Liquid assets (current):	(000 Rls)	Fixed working capital: (under current business conditions)	(000 Rls)	Equivalent number of assets
Cash on hand and in bank	81	Production materials	1,660	1
Marketable securities and bonds	-	Other materials and supplies	140	3
Accounts receivable from delivery of goods and services	4,024	Finished products	170	3
Other accounts receivable	595	Wages for primary operative workers	60	3
Prepaid expenses	112	Other wages and salaries incl. training costs	60	1
Total	4,812	Administrative costs	449	
		Sales costs	265	
		Contingencies	481	1,700
		Other special items plus advertising	550	-
		Total	3,820	1

Regulation policy:

In accordance with the Iranian laws of income tax; depreciation rate of buildings amounts to 10%.

Governmental policy:

Imports of production materials are all duty-exempt. But competitive imports are not banned.

Relation of the reporting establishment to the other sister establishments:

The parent company (located in USA): no special advantage regarding the supply of raw material and outlet of products. But patents and know-how, temporary assistance of skilled operatives are received. In the future, marketing co-operation is envisaged when the products of this branch become exportable.

A Pakistan branch: occasional help in regard to the supply of raw material and outlet of products but not crucial.

Ad IV. Manning table:

In 1968 the following additional administrative salaried staff was employed:

General management	2
Treasury, finance and purchasing	71
Sales	30
Factory office maintenance	35
Total	138

MEXICO 300 - (1)

Major Products:

Natural and synthetic rubber tyres, tubes and floor coverings. Capable of producing annually 272,000 tyres for automobiles on a three-shift operation.

Reporting Unit:

A one-establishment enterprise, founded in 1958, by reorganizing a small-scale enterprise which had existed for several years; with 49% foreign capital participation.

I. FIXED CAPITAL ASSETS

(End of 1966)

	Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
1 Primary process equipment			
TOTAL		1,491	1,491
- Process equipment		1,465	1,465
- Hand tools & apparatuses		26	26
- Cost of installation		(included in process equip.)	
2 Primary industrial building		191	191
TOTAL		191	191
(total floor space: 5,101 m ²)			
3 Auxiliary facilities		200	200
TOTAL		200	200
- Water, steam, electricity, cooling & storing		68	68
- Transportation facilities		132	132
- Administrative facilities		0	0
- Laboratory facilities		0	0
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land)		1,882	1,882
4 Other fixed capital assets		494	494
TOTAL		2,376	2,376
- Land (total acreage: 1,447 m ²)		0	0
- Others (in the process of installation)		494	494

DETAIL OF PROCESS EQUIPMENT (no.)

	Supplier country	Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
- Tubing machine	USA	1961	120	120
- 84" mills	Sweden	1958-67	182	182
- 40" mills	U.S.A.	1950-54	334	334
- Automatic "bob"	"	1962	176	176
- Semi-automatic presses	"	1963	202	202
- Banbury mixer	"	1963	277	277
- Calender	"	1964	320	320
- Dies	"	1964	662	662
- Tyre building machines	"	1965	213	213
- Impregnating machine	"	1965	270	270

On the whole 60-65% higher

HISTORY OF INVESTMENT:

In 1958, production was continued on an enlarged scale as the older enterprise was converted into the present form. Profitability conditions were not interrupted due to this process. Since 1963 approximately 85% of the funds have been invested for further expansion of the tyre and tube production capacity.

CAPACITY POWER:

Process equipment: 2,424 kW
Electric motors:

Generating equipment:

Installed capacity: - kVA

EXTERNAL CONDITIONS:

Transport: Long distance and local area, fair.

Utilities: *Electricity, poor; water, gas, fair.

Community: Residential, health, recreational, educational, fair;
*Electricity is poor because of frequent interruptions; often motors burn, because of voltage variations. (Estimated costs US \$ 4,000).

II. INVENTORIES AND WORKING CAPITAL

(in 1000 US \$)

(End of 1966)

	Actual value	2 Liquid assets	Actual value
1 Inventories	3,361	TOTAL	2,448
TOTAL	3,361		
- Production materials	101	- Cash (hand/bank)	402
- Other input materials	22	- Market. sec. & bonds	18
- Work-in-process	100	- Short-term investment	-
- Finished products	2,138	- Prepaid expenses	2,028
		- Accounts receivable	-
3 Deared working capital			
TOTAL	5,210		
- Production materials	1,5	640	
- Other input materials	3	20	
- Finished products	4	2,000	
- Wages & salaries	1	140	
- Other special items	..	2,410	

III. MANNING TABLE

(number of persons)

A - Shifts operation
B - Other operatives

(1966 average)

	Total	No shift		2nd shift		3rd shift	
		A	B	A+B	A+B	A+B	A+B
ALL SHOPS & UNITS:	496	343	84	69	496	496	496
1 Primary operative shops	170	45	23	37	20	11	16
- Banbury and mills	9	4	5	4	5	4	4
- Preparation	98	20	2	14	5	1	5
- Construction	42	10	4	10	4	10	4
- Vulcanization of tyres	24	5	3	5	3	5	3
- " " " tubes	12	2	3	2	3	2	3
- Final inspection	7	2	1	2	1	1	1
2 Auxiliary operative units	63	35	16	12			
- Repair and maintenance	23	8	8	8	7		
- Mechanical shop	6	2	2	2	2		
- Utilition control	-	-	-	-	-		
- Product & material storage	12	12	-	-	-		
- Off-site transport	5	5	-	-	-		
- Guards, cleaners, etc.	12	8	6	6	3		
3 Auxiliary non-operative units	263	242	11	10			
- Production management	6	6	-	-	-		
- Research & development	19	10	5	4			
- Sales unit foreign offices	100	100	-	-			
- General administration	19	-	-	-			
- Others (Supervisors, sales administration etc.)	99	87	6	6			

WORKING TIME PER OPERATIVE WORKER:

Normal hours/day	hours	Normal days/year:	290	days
Actual hours/year	2,320	hours		

CAPACITY OF OPERATIVE SHOPS:

The Banbury and milling department is fully utilized (272,000 tyres a year). It is not automated.

The technical advantages connected with the participation of foreign capital are in terms of:

Special training for employees, special machinery and equipment, patents and know-how of the foreign company, new production materials and specialized personnel for marketing of products.

IV. ANNUAL PRODUCTION

(1966)	V. of Prod prod	Quantity produced		Nominal capacity output	Unit price in factory	Total production value
		Unit	Output			
Products for group of products						
- Tyres for cars	195R	pieces				
- " " trucks	"	"	272,000	272,000	05,36	1,451
- " " tractors	"	"				
- Tubes	"	"	124,000	124,000	1,00	124
- Rubber floor coverings	"	t	100,000	100,000	0,40	40
Allowance for rejects and special discounts						72,190
TOTAL VALUE OF PRODUCTION:						1,614

(*) **UNIT PRICES:** Do not include sales tax

EXPORTS: None.

CAPACITY UTILIZATION:

The capacity estimates are geared to the installed capacity of the Banbury and mills. The capacity is currently fully utilized, thus pressing for further expansion investment (another plant of a similar size).

VI. VALUE ADDED

(1966)	Value 1966 US \$
1. Wages & salaries	
- Employees in direct production	
- () persons	
- Other employees	
- () persons	
2. Other payments for employees	
3. Annual depreciation	
4. Rentals paid	
5. Interests & royalties	
6. Sales tax (not incl. in total)	
7. Other ind. bus. taxes	
8. () Subsidies	
9. Corporate income before tax	
TOTAL	1,111

VII. MONTHLY SALARIES RATES

(End of 1965)	No. of emp.	Average monthly wage US \$
1. Local non-operative		
TOTAL	14	14
- Managers	1	140
- Engineers	1	120
- Technicians	1	80
- Accountants	1	40
- Sales officers	1	20
- Other professional staff	1	20
- Clerks & typists	1	10
2. Local operatives		
TOTAL	131	100
- Supervisors	1	120
- Foreman	1	100
- Machine operators	111	80
- Craftsmen	1	20
- Truck drivers	1	10
- Other full time operatives	1	10
- Unskilled & part-time operatives	1	10
3. Foreign employees		
TOTAL	1	1,000
- Managerial staff	1	1,000
- Engineers, technicians, and other technicians	1	1,440
- Other employees	1	1,000

V. ANNUAL CONSUMPTION

(1966)	Capacity consumed				Total consumption value
	Unit	Quantity	% required	Value	
1. Energy and water					
TOTAL					14
- Electricity	000 Kwh	..	..	..	100
- Gas	000 m ³	..	..	..	..
- Water	000 m ³	..	..	..	..
2. Production materials					
TOTAL					4,301
- Natural rubber	t	1,050	100	15	602
- Synthetic rubber	"	1,928	20	7	1,056
- Fabrics, Rayon, Nylon	"	603	-	-	1,306
- Pigments	"	2,853	11	11	40
- Valves and parts	000 pieces	146	5	40	44
- Wires	t	160	-	-	72
- Other materials		..	..	..	145

3. Other materials & supplies

TOTAL	171	10
- Packaging	1	10
- Repair & maintenance	1	10
- Non-factor service inputs	1	10
4. Business services purchased		
TOTAL		1,000
- Transport, storage & insurance		10
- Communication, advertisements, etc.		1,000
5. Work performed by sub-contractors (million)		
TOTAL		107
TOTAL	1,091	1,111

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)	Industry group: <u>Manufacture of rubber products</u> (HSIC: 100)				
1. Size groups by number of persons employed	Number of estab.	Number of emp.	Avg. no. of persons per estab.	Avg. gross prod. per person	Avg. emp. gross prod. rate* (%)
up to 5	760	1,832	359	2,112	39
over 5	276	13,814	1,971	11,412	64
TOTAL	1,036	15,646	1,782	10,323	64
2. Size groups by value of annual production 1966 US \$:					
up to 2	1,540	2,326	67	122	33
2 - 8	496	1,229	291	1,483	41
over 8	339	14,001	1,955	11,410	64
TOTAL	2,375	17,556	1,588	9,286	63

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

COMMISSION WORK:

Total commissions paid for milling amount to U.S. \$14,000. For the year considered.

GOVERNMENT POLICIES:

The sales price for tyres, which is controlled by the Government, has been the same since 1957. The enterprise wishes to see that the Government should allow the price to be raised, since all costs are rising. There are also severe importation restrictions for some raw materials. Local average price for raw materials is believed to be 25% higher than the international price.

FUTURE PLAN:

During 1967 - 1970, US \$ 15,200 will be invested for an additional plant to be built in the enterprise. The additional labour to be employed will be:

1st shift	125 persons
2nd shift	100 "
3rd shift	100 persons



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IX. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service:

- | | | |
|-------------------------------|---------------------------------------|-----------------------------------|
| 1. Engineering study | 3. Technical and managerial personnel | 6. Import and export transactions |
| 2. Financial assistance | 4. Industrial training | 7. Admission of foreign labour |
| 5. Industrial services | 7. Technical consultation | |
| 8. Equipment supply | | |
| 9. Installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

1. Services performed during the past five years:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
-----------------	-------------------	-----------------	-------------------	-------------------------

XII. SUPPLEMENTS & NOTES

Depreciation policy:

The following depreciation rates were applied: Building 10%
Machinery 10%
Furniture 20%.

Governmental policies:

Government provides financial assistance, import facilities, restriction on competitive imports and customs duty exemption for imported production materials.

Training:

US \$ 3,430 are spent annually for training by experts in a special training department, which was established in 1967.

<u>Liquid assets (net) annual average:</u>	<u>000 US \$</u>	<u>Required working capital:</u>	<u>Value in 000 US \$</u>	<u>Equivalent number of months</u>
- Cash on hand and in bank	34	- Production materials	6,860	12
- Marketable securities and bonds	145	- Other materials and supplies	380	12
- Accounts receivable from delivery of goods and services	990	- Finished products	-	-
- Other accounts receivable	4,330	- Wages for primary operative workers	870	12
- Prepaid expenses	92	- Other wages and salaries	1,190	12
<u>Total average liquid assets</u>	<u>5,591</u>	- Training costs	-	-
		- Administrative costs, sales costs, and contingencies	870	12
		- <u>Other capital items</u>	<u>1,760</u>	<u>12</u>
		<u>Total desired working capital</u>	<u>11,930</u>	<u>12</u>

Major Products:

Ladies' shoes.

Capable of producing 61,000 pairs of ladies' shoes per year. Full capacity cost amounts to US \$ 460,000 based on 1-shift operation.

Reporting Unit:

A one-establishment enterprise; privately owned; founded in 1952; 70 employees; favourably situated; 25% exports. Although originally founded in 1918; machinery and equipment meet modern standards of mechanization.

I. FIXED CAPITAL ASSETS

(End of 1965)

	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average (Yrs)
1. Primary process equipment (including installation cost)	52	97	
TOTAL	52	97	5
- Process equipment *	-	-	-
- Hand tools & apparatuses	-	-	-
2. Buildings	-	-	-
TOTAL	-	-	-
- Primary industrial buildings (total floor space: 750 m ²)	-	-	-
- Auxiliary buildings	-	-	-
- Warehouses	-	-	-
- Office administration buildings	-	-	-
- Housing	-	-	-
3. Auxiliary facilities (excl. buildings)	-	-	-
TOTAL	-	-	-
- Internal power equipment	-	-	-
- Laboratory facilities	-	-	-
- Means of transportation	-	-	-
- Office equipment	-	-	-
TOTAL PHYSICAL FIXED ASSETS (excluding land):	52	97	
4. Other fixed capital assets	-	-	-
TOTAL	-	-	-
- Land (total acreage: m ²)	-	-	-
- Land improvements	-	-	-
- Others	-	-	-

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1965 monthly average)

	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 460 US\$	over 460 US\$
1. Local non operatives	-	-	-	-	-	-
- Managers	-	-	-	-	-	-
- Engineers	-	-	-	-	-	-
- Technicians	-	-	-	1	-	-
- Accountants	-	1	1	-	-	-
- Sales officers	-	-	-	-	-	-
- Clerks and typists	2	3	-	-	-	-
2. Local operatives	-	-	-	-	-	-
- Supervisors	-	4	-	-	-	-
- Foremen	-	-	-	-	-	-
- Skilled operatives	-	-	-	-	-	-
- Machine operators	20	-	-	-	-	-
- Craftsmen	2	-	-	-	-	-
- Truck drivers	11	-	-	-	-	-
- Unskilled operatives	11	-	-	-	-	-
- Other full-time operatives	7	14	-	-	-	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees	-	-	-	-	-	-
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	6	-	-	-	-	-

EXTERNAL CONDITIONS:

Transport	external long distance	-
	internal long distance	-
	local and city	fair
Utilities:	electricity	fair
	water	"
	gas	"
Community:	residence	-
	health and recreation	-
	education	-
Own Welfare Facilities:		-

III. INVENTORIES

(End of 1965)

	Actual value (000 US \$)	Number of months
Inventories	36	
TOTAL:		
- Production materials	12	1
- Other input materials	11	1
- Work-in-process	6	0.5
- Finished products	7	0.25

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
- Shift hours/day	7	-	-	hours
- Actual hours/year	2,130	-	-	hours
- Actual days/year	237	-	-	days

IV. MANNING TABLE

(Number of persons)

Shift categories: A: Supervisory staff and foremen (for all shifts)
B: Skilled operatives
C: Semi-skilled operatives (machine operators)
D: Unskilled operatives

(1965 average)

	Total	1st Shift				2nd Shift		3rd Shift	
		A	B	C	D	B-C	D		
ALL SHOPS & UNITS:	31	12	11	5	2	2	-	-	
1. Primary operative shops	21	1	11	7	17	-	-	-	
- Cutting shop	1	1	2	3	1	-	-	-	
- Stitching shop	12	1	-	13	5	-	-	-	
- Bottom shop	22	1	1	3	6	-	-	-	
- Finishing shop	6	1	-	2	2	-	-	-	
2. Auxiliary operative units	2	-	-	2	-	-	-	-	
- Repair & maintenance	-	-	-	-	-	-	-	-	
- Mechanical shop	-	-	-	-	-	-	-	-	
- Tooling shop	-	-	-	-	-	-	-	-	
- Utilities control	-	-	-	-	-	-	-	-	
- Product & material storage	-	-	-	-	-	-	-	-	
- Off-site transport	-	-	-	-	-	-	-	-	
- Guards, cleaners, etc.	1	-	-	1	-	-	-	-	
- Other auxiliary operatives	1	-	-	1	-	-	-	-	
3. Auxiliary non-operative units	8	-	-	-	-	-	-	-	
- Production management	2	-	-	-	-	-	-	-	
- Research & development	1	-	-	-	-	-	-	-	
- Sales unit	2	-	-	-	-	-	-	-	
- Accounting	1	-	-	-	-	-	-	-	
- General administration	2	-	-	-	-	-	-	-	

V. ANNUAL PRODUCTION

(1965)	Pr. of final prod.	Quantity produced		Av. unit price on factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Indies' shoes	1147	pair	46,000	7.13	337
TOTAL VALUE OF PRODUCTION:					342

VI. VALUE ADDED

(1965)	Total value (000 US \$)
1. Annual wage & salaries	
- Operative workers	
() personal	
- Non-operative workers	
() personal	
2. Other payments for employees	
3. Annual depreciation	
- Machinery & equipment	
- Buildings & other facilities	
- Non-physical capital assets	
4. Rentals paid	
5. Interest & royalties	
6. Sales tax	
7. Other indirect business taxes	
8. (-) Subsidies	
9. Corporate income before tax	
TOTAL VALUE ADDED:	

DESCRIPTION OF MAJOR PRODUCTS:

Indies' shoes, serial production, high quality products, short-term delivery.

MARKET ASPECTS:

Consumers of products:

Domestic and foreign wholesalers and retailers.

Sales organization:

Two sales agents, production to order only.

Share in the domestic market: About 0.5%.

Foreign sales areas: Sweden, Norway, Denmark.

Competition in the market:

Imports from Southern Europe have a very strong impact on domestic pricing particularly of cheaper products.

EXPORT:

Total annual export: 100,000,000

Major product	To Western countries	To Eastern countries	To Developing countries
Indies' shoes	100	-	-

Export price policy:

International competitiveness is increased due to export subsidies (exemption from sales tax). The government subsidizes exports by way of relaxing the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under 21.6% has been allocated accordingly.

VII. ANNUAL CONSUMPTION

(1965)	Quantity consumed		% import	Average import price	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL:					1
- Electricity	000 kWh	51	-	-	1
- Gas	000 m3	2.9	-	-	0.1
2. Production materials					
TOTAL:					135
- Upper leather	m2	7,054	-	-	73
- Lining leather	"	6,600	-	-	26
- Bottom material	"	"	-	-	24
- Heels	"	"	-	-	12

3. Other materials & supplies

	Total consumption value (000 US \$)
TOTAL:	9
- Packaging material (in box, wrapping paper)	4
- Parts, supplies & services	3
- Other materials & supplies	1
4. Business services purchased	
TOTAL:	5
- Transportation, storage & insurance	1
- Communication, advertising & other business services	4
5. Work performed by subcontractors	
TOTAL:	1
TOTAL VALUE OF CONSUMPTION:	
	150

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT 8.1:

Number	Original Purchase Value USD US \$	Replacement value USD US \$	Age (yr)	Remarks	Daily running time	Capacity output	Capacity utilization
Folding machines	1	1	1				
Stitching machines	10	1	1				
Lasting machines	3	14	1				
Presses and roughing machines	5	1	1				
Stamping machines	4	6	1				
Eyeletting machines and other devices	1	0.2	1				
Pressing machines	2	2	1				
Heel attaching machines and other devices	4	3	1				
Milling cutters	3	3	1				
Compressors	7	3	1				
Polishing machine	1	0.1	1				
Rolling machines	3	2	1				
Pressing machine	1	1	1				
Fastening machine	1	1	1				

CAPACITY POWER

Process equipment:

electric motors 11 kW

Generating equipment

installed capacity 1 kVA

CAPACITY OF PRIMARY OPERATIVE SHOPS

Major primary operative shops	Kind of process involved	Station	Automation	Further details
Cutting shop	Cutting and assembling leather and cloth, mostly manual		III	
Stitching shop	Stitching of upper and lining and stitching of sole		III	
Shoe sole manufacturer	Production of soles and insoles, mostly manual	B	III	
Finishing shop	Finishing of shoes	B	III	

CAPACITY UTILIZATION

Full capacity output: 100% (1965)

Current utilization: 100% (1965)

Major products by process	Approximate %									
	10	20	30	40	50	60	70	80	90	100
Ladies' shoes										

In order to achieve full-capacity output of additional shoes operative as well as 15-20 operative will be required in the future.

III. HISTORY & PLAN

1. Performance in the past:

Year	Total output USD US \$	No. of persons employed	Total capacity USD US \$
1963	100	70	70
1964	150	78	70
1965	200	80	70
1966	-	-	-
1967	-	-	-
1968	-	-	-

2. Investments in the past:

From 19 - to 19 -	Approximate amount USD US \$	Type of investment
1960 - 1965	100	Machinery and equipment

3. Future Plan:

From 19 - to 19 - : No investments anticipated for the near future.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1964)

Industry: Manufacture of footwear (ISIC Code: 241)

1. Size groups by number of persons employed

No. of empl.	No. of estab.	Avg. W & B. per pers. (US \$)	Avg. gross prod. val. per pers. (US \$)	Avg. value added/gross prod. ratio (%)
up to 19	4,738	1,189	1,276	10
20 - 99	23	1,200	1,200	19
100 - 499	26	1,200	1,200	15
500 - 999	2	-	-	7
over 1,000	2	-	-	0
TOTAL:	4,851	17,000	17,156	15

2. Size groups by annual value of production USD US \$:

No. of estab.	No. of empl.	Avg. W & B. per pers. (US \$)	Avg. gross prod. val. per pers. (US \$)	Avg. value added/gross prod. ratio (%)
up to 100,000	1,132	1,119	1,119	48
100,000 - 250,000	13	1,134	1,134	35
250,000 - 500,000	27	1,111	1,111	47
500,000 - 1,000,000	3	1,267	1,267	49
1,000,000 - 2,500,000	11	1,130	1,130	45
over 2,500,000	11	1,214	1,214	45
TOTAL:	4,361	17,365	17,439	45

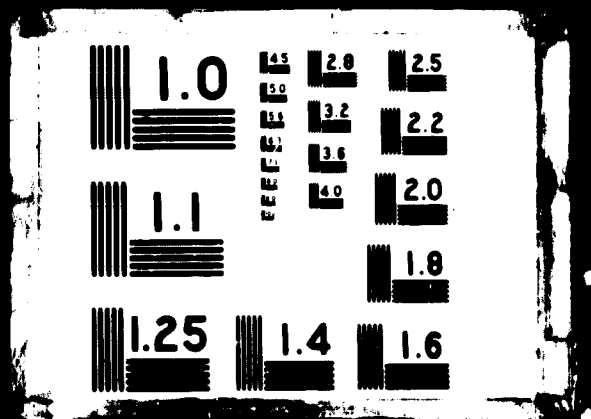
Confidential; the figures of those size groups are included in those underlined.

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Major Products: Tyres, V-belts and conveyor belts.
Capable of producing annually approximately 43,000 t of tyres, 380 t of V-belts and 950 t of conveyor belts based on 2 and 3-shift operation. Full-capacity output amounts to US \$ 58 million.

Reporting Unit: A branch of a 4-establishment joint stock company; privately owned; founded in 1890. The process equipment utilised meets most modern standards. 3,200 employees. Closely located to domestic markets. The establishment is the only tyre manufacturing plant in the country. Centralised research and development laboratories. Partly licensed production. 34% exports; share in the world market for tyres: 1%. Another establishment of this company is presented in MIDDLE EUROPE : 300 - (1 b).

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (1000 US \$)	Fire insurance value (1000 US \$)	Average (Yrs.)
1. Primary process equipment (including installation cost)	..	24,179	..
TOTAL	..	24,179	..
- Process equipment *			
- Hand tools & apparatuses			
2. Buildings	..	11,139	..
TOTAL:			
- Primary industrial buildings (total floor space: 64,826 m ²)	..	11,139	..
- Auxiliary buildings			
- Warehouses			
- Office administration buildings			
- Housing			
3. Auxiliary facilities (excl. buildings)			
TOTAL:			
- Internal power equipment			
- Laboratory facilities			
- Means of transportation (**)			
- Office equipment			
TOTAL PHYSICAL FIXED ASSETS (excluding land):	..	35,318	
4. Other fixed capital assets	
TOTAL:			
- Land (total acreage: 636,621 m ²)			
- Land improvements (t. ac. 134,542 ")	
- Others			

(**) Figures are included in both primary process equipment and buildings.

*NB Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII).

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1967 monthly average)	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1. Local non-operatives						
- Managers	-	-	-	-	-	12
- Engineers	-	-	-	-	47	23
- Technicians	-	4	17	81	108	-
- Accountants	-	-	-	-	8	2
- Sales officers	-	-	-	25	48	-
- Clerks and typists	-	5	29	-	-	-
- Supervisors	-	-	-	-	43	-
2. Local operatives						
- Supervisors (*)	-	-	-	-	-	-
- Foremen	-	-	-	-	381	-
- Skilled operatives	-	-	-	393	-	-
- Machine operators	-	-	-	340	22	-
- Craftsmen	-	-	-	14	-	-
- Truck drivers	-	80	106	-	-	-
- Unskilled operatives	-	-	55	1,301	-	-
- Other full-time operatives	-	-	-	-	-	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

Figures are included in local non-operatives and operatives.

(*) Company considers supervisors and foremen as local non-operatives.

EXTERNAL CONDITIONS:

Transport:	external long distance: excellent internal long distance: insignificant local and city: insignificant
Utilities:	electricity: excellent water: fair gas: excellent
Community:	residence: excellent health and recreation: excellent education: excellent
Own Welfare Facilities:	-

III. INVENTORIES

(End of 1967)	Actual value (1000 US \$)	Number of months
Inventories	9,698	
TOTAL:		
- Production materials	1,267	0.7
- Other input materials	760	3.5
- Work-in-process	798	0.2
- Finished products	6,865	1.5

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hour hours
Shift hours/day:		8		
Actual hours/year:		1,767		
Actual days/year:		221		

IV. MANNING TABLE

(number of persons)

Skill categories: A: Supervisory staff and foremen (for all shifts)
B: Skilled operatives
C: Semi-skilled operatives (machine operators)
D: Unskilled operatives

(As per 30 June 1968)

	Total	1st Shift (*)				2nd Shift		3rd Shift	
		A	B	C	D	B-D	B-D		
ALL SHOPS & UNITS:	3,218	451	2,767 (*)				-		
1. Primary operative shops	1,901	80	1,821 (**)				-		
- Raw material processing dept.	173	8	165				-		
- Calendaring department	202	10	192				-		
- Tyre trimming department	518	12	506				-		
- Tyre vulcanizing department	347	15	332				-		
- Tubes department	149	5	144				-		
- Bicycles, tyres and tubes dept.	184	8	176				-		
- V-belts, conveyor belts dept.	84	6	78				-		
- Radial tyres	234	14	220				-		
- Others	10	2	8				-		
2. Auxiliary operative units	957	98	859				-		
- Repair & maintenance	405	40	365				-		
- Mechanical shop	-	-	-				-		
- Tooling shop	-	-	-				-		
- Utilities control	166	16	150				-		
- Product & material storage	278	35	243				-		
- Off-site transport	48	2	46				-		
- Guards, cleaners, etc.	32	-	32				-		
- Others	28	5	23				-		
3. Auxiliary non-operative units	360	273	87				-		
- Production management	33	3	30				-		
- Research & development	127	127	-				-		
- Sales unit	4	4	-				-		
- Accounting	9	9	-				-		
- General administration	187	130	57				-		

(*) 2 and 3-shift operation.

(**) This figure includes 544 skilled, 723 semi-skilled, and 544 unskilled operatives.

IV. ANNUAL PRODUCTION

(1966)	Yr. of first prod.	Quantity produced		(*) Nominal capacity output	Unit price at factory (US \$)	Total production value (1000 US \$)
		Unit	Output			
Products for group of products						
- Ammonium sulphate	1951	t	123,763	150,000	53.36	6,604
- Single super phosphate	1953	t	86,119	118,000	31.92	2,745
Intermediate products:						
(Ammonia)	1951	t	(22,385)	(22,000)	-	-
(Sulphuric acid)	1951	t	(108,042)	(135,000)	-	-
TOTAL VALUE OF PRODUCTION						9,349

(*) Assuming a 3-shift operation and 335 working days. (There are 69 substitutes or relief workers to make possible 6 days/week continuous operation).

(**) Unit price does not include sales tax.

COMPETING IMPORTS:

C.I.F. price of competing imports without tariff for ammonium sulphate is \$ 53.84/t to which tariff rate of \$ 0.05/t + 3% ad valorem is applied. Single super phosphate is not imported.

EXPORTS: None.

CAPACITY UTILIZATION:

Productive capacity is underutilized due to insufficient supply of the raw materials which are dependent on imports.

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed			Total consumption value (1000 US \$)
	Unit	Purchase	% imported	
1. Energy and water				
TOTAL:				830
- Electricity	000 Kwh	19,240		296
- Liquid fuels and lubricants		..		37
- Gas (included in production mat.)	000 m3	17,522		155
- Steam	000 t	223		304
- Water	000 m3	1,662		38
2. Production materials				
TOTAL				3,154
- Natural gas	000 m3	-		157
- Sulphure	t	-		1,074
- Ammonia	t	71		648
- Sulphuric acid (purchased from outside)	t	89		211
- Phosphoric rock (*)	t	-	100	1,064

(*) Import license is required for phosphoric rock.

VI. VALUE ADDED

(1966)	Value (1000 US \$)
1. Wages & salaries	
- Employees in direct production (475 persons)	681
- Other employees (171 persons)	277
2. Other payments for employees	168
3. Annual depreciation	680
4. Rentals paid	-
5. Interests & royalties	114
6. Sales tax (not incl. in TOTAL)	(102)
7. Other ind. bus. taxes	24
8. (-) Subsidies	-
9. Corporate income before tax	2,018
	4,162

VII. MONTHLY EARNING RATES

(End of 1966)	No. of pers. emp.	Average earning rates (US \$)
1. Local non-operatives		
TOTAL:	85	270
- Supervisors	3	680
- Engineers	30	320
- Technicians	20	320
- Accountants	1	400
- Sales officers	-	-
- Other professional staff(*)	1	200
- Clerks & typists	30	144
2. Local operatives		
TOTAL:	492	132
- Supervisors	-	-
- Foremen	-	-
- Machine operators	40	192
- Craftsmen	40	192
- Truck drivers	3	152
- Other full-time operatives	409	120
- Unskilled & part-time operatives	-	-
3. Foreign employees		
TOTAL:	-	-

(*) Physician, part-time employed.

3. Other materials & supplies

TOTAL:	Total consumption value (1000 US \$)
TOTAL:	1,165
- Packaging	568
- Repair & maintenance	564
- Non-factor service inputs	41
4. Business services purchased	
TOTAL:	20
- Transport, storage & insurance	20
- Communication, advertisements, etc.	-
5. Work performed by sub-contractors	
TOTAL:	18

5,187

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)						
Industry group: Basic industrial chemicals, including fertilizers (ISIC:311)						
1. Size groups by number of persons employed		Number of estab.	Number of empl.	Avg. W. & E. per pers. (US \$)	Avg. gross prod. val. per pers. (US \$)	Avg. emp. rate* (%)
up to	25	249	21,242	1,894	15,117	113
over	25					
TOTAL		249	21,242	1,894	15,117	113
2. Size groups by value of annual production (1000 US \$)		Number of estab.	Number of empl.	Avg. W. & E. per pers. (US \$)	Avg. gross prod. val. per pers. (US \$)	Avg. emp. rate* (%)
up to	2	385	21,457	1,875	14,970	113
over	2					
TOTAL		385	21,457	1,875	14,970	113

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

Branch profit accounting:

This branch as such has practically no overhead expenditures for sales and purchase activities. The profit, as recorded in VI. and above, is believed not to be adjusted for the possible share in the imputable operating costs of the corporate headquarters.

Government policies:

No specific opinions.

Future plan:

In 1968 approx. US \$ 68,000 will be invested for modification of the sulphuric acid plant.

Major Products: Fertilisers, organic and inorganic chemicals, plant protection products, pharmaceuticals, adhesives.
In 1967 the total value of production surpassed US \$ 80 million based on 3-shift operation. Company operated at almost full capacity.

Reporting Unit: A wholly government-owned, one-establishment enterprise; founded in 1939; nationalised in 1946; 6,400 employees; largest chemical enterprise in the country; production programme comparable with other European companies. Favourably located; 43% exports. The company has 490 employees working on research and development and spends about 3.5% of the annual sales in this field. Enterprise is continuously expanding.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average (Yrs.)
1. Primary process equipment (including installation cost)	65,123	..	..
TOTAL	61,749	97,384	..
- Process equipment *	3,374	..	..
- Hand tools & apparatuses	..	..	..
2. Buildings	19,694	21,679	..
TOTAL	8,021	..	..
- Primary industrial buildings (total floor space: 88,800 m ²)	5,884	..	..
- Auxiliary buildings	3,350	..	..
- Warehouses	1,541	..	..
- Office administration buildings	898	..	..
- Housing	..	..	..
3. Auxiliary facilities (excl. buildings)	6,330	..	..
TOTAL	5,179	..	..
- Internal power equipment	..	..	..
- Laboratory facilities (**)	321	..	..
- Means of transportation	830	..	..
- Office equipment	..	..	..
TOTAL PHYSICAL FIXED ASSETS (excluding land):	91,147	..	..
4. Other fixed capital assets	12,408	..	..
TOTAL	50	1,314	..
- Land (total acreage: 1,479,457 m ²)	1,264	..	..
- Land improvements (1,231,182 ")	11,094	..	..
- Others	..	..	..

(**) Included in I.1. "Hand tools and apparatuses".

*NB Details of process equipment and capacities of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1967 monthly average)	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1. Local non-operatives	-	-	-	-	-	48
- Managers	-	-	-	200	60	-
- Engineers	-	-	48	192	299	-
- Technicians	-	-	-	-	45	20
- Accountants	-	-	-	-	120	20
- Sales officers	-	7	48	257	325	-
- Clerks and typists	-	-	-	-	245	-
- Foremen	-	-	-	-	-	-
2. Local operatives	-	-	-	-	-	-
- Supervisors (*)	-	-	-	376	-	-
- Foremen (*)	-	-	-	577	-	-
- Skilled operatives	-	-	-	-	26	-
- Machine operators	-	-	-	1,488	-	-
- Craftsmen	-	-	-	-	36	-
- Truck drivers	-	168	253	5	-	-
- Unskilled operatives	-	-	262	1,215	-	-
- Other full-time operatives	-	-	-	-	-	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees (**)	-	-	-	-	-	-
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

(*) Included in local non-operatives.

(**) Included in local non-operatives and local operatives.

EXTERNAL CONDITIONS:

Transport:	external long distance	fair
	internal long distance	"
	local and city	"
Utilities:	electricity	fair
	water	"
	gas	"
Community:	residence	fair
	health and recreation	"
	education	"
Own Welfare Facilities:		

IV. MANNING TABLE

(number of persons)

Skill categories: A. Supervisory staff and foremen (for all shifts)
B. Skilled operatives
C. Semi-skilled operatives (machine operators)
D. Unskilled operatives

(End of 1967)	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	B-D	B-D
ALL SHOPS & UNITS:	6,393	1,209	3,555	276	553	276	553
1. Primary operative shops	1,696	255	334	263	15	276	553 (*)
Manufacturing shops and units of all divisions	1,696	255	334	263	15	276	553 (*)
2. Auxiliary operative units	3,205	509	2,696	-	-	-	-
- Repair & maintenance (**)	1,456	242	1,214	-	-	-	-
- Mechanical shop (***)	-	-	-	-	-	-	-
- Tooling shop (***)	-	-	-	-	-	-	-
- Utilities control	49	10	39	-	-	-	-
- Product & material storage	189	40	149	-	-	-	-
- Off-site transport	743	120	623	-	-	-	-
- Guards, cleaners, sto.	635	97	538	-	-	-	-
- Apprentices	133	-	133	-	-	-	-
3. Auxiliary non-operative units	1,492	1,145	347	-	-	-	-
- Production management	131	112	19	-	-	-	-
- Research & development	589	402	187	-	-	-	-
- Sales unit	334	314	20	-	-	-	-
- Accounting	173	169	4	-	-	-	-
- General administration	265	148	117	-	-	-	-

(*) Including extra-shift with 2/7 operatives.

(**) and installation of new plants.

(***) Included in IV.2 - "Repair and maintenance and installation of new plants."

III. INVENTORIES

(End of 1967)	Actual value (000 US \$)	Number of months
Inventories	18,802	
TOTAL:	3,575	2
- Production materials	3,955	6
- Other input materials (*)	1,021	1
- Work-in-process	10,251	1
- Finished products	..	..
(*) and spare-parts	..	..

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
- Shift hours/day:				hours
- Actual hours/year:	1,862	1,862	1,862	hours
- Actual days/year: Cannot be determined since some days primary operative shops are working around the clock				hours

V. ANNUAL PRODUCTION

(1967) Products (or group of products)	Yr. of first prod.	Quantity produced		Av. unit price ex factory (US \$)	Total output value (1000 US\$)
		Unit	Quantity		
- Fertilisers	1943	t	1,257,666	39.0	48,993
- Organic chemicals	1950	"	31,485	335.8	10,571
- Inorganic chemicals	1943	"	166,470	45.3	7,535
- Plant protection products	1946/50	"	1,278	4,419.9	5,649
- Adhesives, pharmaceuticals					
- Other revenue	..	..	..	..	7,526
TOTAL VALUE OF PRODUCTION:					80,274

VI. VALUE ADDED

(1967)	Total value (1000 US \$)
1. Annual wages & salaries	16,914
- Operative workers (4,449 persons)	9,500
- Non-operative workers (1,947 persons)	7,414
2. Other payments for employees	4,202
3. Annual depreciation	8,163
- Machinery & equipment	6,030
- Buildings & other facilities	1,951
- Non-physical capital assets	162
4. Rentals paid	285
5. Interest & royalties	1,761
6. Sales tax	595
7. Other indirect business taxes	145
8. (-) Subsidies	-
9. Corporate income before tax	5,317
TOTAL VALUE ADDED:	

DESCRIPTION OF MAJOR PRODUCTS:

Fertilisers: Ammonium sulfate from natural anhydrite, natural gypsum, or by-product gypsum respectively. The reaction of gypsum or anhydrite with ammonium carbonate solution, prepared from ammonia and carbon-dioxide, leads to ammonium sulfate and lime is obtained as by-product. Nitrogen content of nitrogenous fertilisers varies between 21 and 46%. Compound fertilisers are manufactured on the basis of nitrogen, phosphoric acid and potassium in different concentrations and combinations.

Plant protection products: Herbicides, insecticides, and fungicides.

Chemicals: Aluminium fluoride from fluorine containing off-gases from the digestion of rock phosphate. Fluorine containing off-gases are converted to fluosilicic acid by absorption, the latter reacts with aluminium hydroxide under formation of aluminium fluoride hydrate. By appropriate calcination pure aluminium fluoride is obtained, suitable for aluminium electrolysis. Other chemicals manufactured: ammonia, liquid, 99.9% and 99.96% purity. Ammonium sulphuric acid, maleic anhydride, melamine, phthalic anhydride, urea, sodium nitrite, sodium nitrate, nitric acid.

Catalysts: For cracking liquid and gaseous hydrocarbons, catalysts for processing sulphur-free as well as sulphurous materials, high-efficiency catalyst for ammonia synthesis.

Plastics: Sold under a trade name in various modifications and colours for injection moulding, extrusion and blow moulding. Properties of product: high strength, ideal surface properties, resistance to heat, acids, and alkaline solutions, low weight.

Continuation see page 4/XII - Supplements

MARKET ASPECTS:

Re-sales:

Completion of the product-mix. Re-sales are sometimes used to open up markets for products which are planned to be manufactured by the company.

Consumers of products:

Agricultural establishments, chemical processing industry, manufacturing establishments, households (pharmaceuticals).

Sales organization:

Fertilisers and plant protection products are sold through agricultural co-operatives and wholesalers. Representatives abroad. Partly direct selling.

Market and competition:

The enterprise supplies customers all over the world with the exception of North-America. The share in the domestic market for fertilisers and organic chemicals amounts to 100%. 2% of the world nitrogen production is manufactured by this company.

EXPORT:

Total annual export: US \$ 39,160,000. The company exports to almost 80 countries.

Major products	To Western countries	To Eastern countries	To Developing countries
- Fertilisers	36.6%	35.5%	27.9%
- Organic chemicals			
- Plastics			
- Pharmaceuticals			

Export price policy:

Depending on the world market.

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import duties (1000 US \$)	Total consumption value (1000 US \$)
	Unit	Quantity			
1. Energy and water	TOTAL: 6,934				
- Electricity	000 kWh	637,014 (*)	-	-	6,121
- Coke and coal	t	207	-	-	6
- Fuel oil	t	19,630	-	122	401
- Gas	m3	25	-	-	1
- Steam	t	68 (**)	-	-	205
- Water	m3	80,372 (***)	-	-	200
2. Production materials	TOTAL: 24,983				
- Coal gas	000 m3	273,706	-	-	3,544
- Natural gas	300 m3	95,832	-	-	1,943
- Crude phosphate	t	176,370	100	-	3,577
- Alcohol	t	11,000	95	-	2,605
- Potassium chloride and sulphate	t	54,900	33	-	2,138
- Oxygen mol	t	9,600	96	65	1,463
- Naphthalene	t	9,000	33	24	1,343
- Oxygen and anhydride	t	349,300	9	-	1,663
- Others	t	89,000	-30	101	6,713

(*) Not including internal supply of: 000 kWh 2,131
 (**) " " " " " 000 t 899
 (***) " " " " " 000 m3 181,598

	Average import duties (1000 US \$)	Total consumption value (1000 US \$)
3. Other materials & supplies	TOTAL: 7,943	
- Packaging material	17	3,542
- Parts, supplies & services	385	3,852
- Other materials & supplies	-	549
4. Business services purchased	TOTAL: 3,032	
- Transportation, storage & insurance	-	221
- Communication, advertising & other business services	-	2,811
5. Work performed by subcontractors	TOTAL: -	
TOTAL VALUE OF CONSUMPTION: 42,892		

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT N.I.:

Due to the size of the enterprise it is only possible to present a small portion of the process equipment:

	Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Avg. Age (yrs)	Remarks
High-pressure gas compressors	9	1,746	..	..
Air-compressors for pressure-type carburetors	2	324	..	..
Turbo compressor for contact gas	1	186	..	..
Copper lys pressure pumps	4	46	..	..
Mole-pumps	6	91	..	..
NH ₃ -compressors	2	143	..	..
Nitrous vitriol-blasts	5	147	..	..
NH ₃ -air mixture-blasts	4	24	..	..
CO ₂ -compressors for urea	2	207	..	..
NH ₃ -compressors	2	73	..	..
SO ₂ -blast for sulphuric acid	2	10	..	..
Ball mills (air-scept-mill)	5	368	..	..
Cain mills	2	108	..	..
Centrifugal pumps	15	99	..	..
Compressed-air compressors	12	108	..	..
Coke-oven gas turbo blast	2	72	..	..
Air-compressors	4	33	..	..
Generators	5	312	..	..
Petrol tanks	2	273	..	..

Remarks:
 00: Purchased from abroad
 01: Domestic
 R: Acquired
 SC: Self-constructed

Further details:
 Research and development as well as production facilities are continuously kept at most modern standards. The following plants have been installed since 1952:

- 1952: Ammonium sulphate plant, phthalic anhydride plant
- 1955: Sulphuric acid plant, pharmaceutical plant, superphosphate plant
- 1958: Urea plant
- 1961: Malic acid anhydride plant
- 1963: Urea plant, ammonium nitrate plant
- 1964: Fertiliser plant
- 1966: Consolidation of nitric acid plant
- 1967: Phosphoric acid plant

CAPACITY POWER:

Process equipment:
 - electric motors kW 131,200
 - Other prime movers 1,310

Generating equipment:
 - installed capacity kVA 1,592
 - Other prime movers kW 1,460

CAPACITY OF PRIMARY OPERATIVE CHOPS:

Major primary operative chops	Kind of process involved	Mechan.	Autom.	Further details:
Fertiliser division		A	II	Due to the complexity of the processes applied none of them can be described in detail. The enterprise uses the most advanced techniques in research, development and production.
Organic chemical division		A	II	

Mechanisms:
 A: most advanced
 B: considerably high standard
 C: moderate standard
 D: appreciably short of today's standard
 E: almost outdated

Automation:
 I: fully automated
 II: semi-automated
 III: unautomated

CAPACITY UTILIZATION:

Full capacity output US \$ 80,000,000

Current utilization: Based on 3-shift operation

Major products (in percent)	Approximate %				
	up to 30	40	50	60	70

The company reports to produce at almost full-capacity.

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output (1000 US \$)	No. of persons employed	Total output (1000 US \$)
1963	60,200	5,221	24,800
1964	57,390	5,389	26,120
1965	69,260	5,798	27,680
1966	77,400	6,203	30,930
1967	81,670	6,393	39,160
1968			

2. Investments in the past:

From	Approximate amount (1000 US \$)	Type of investment
1945 to 1966	61,100	Land, buildings
" " " "	30,200	Machinery and equipment, tools, office equipment

In 1967 investments amounted to about US \$ 12,300,000 excluding securities and capital participations.

3. Future Plan:

From 1968 to 1972: 69,660 Expansion of the product-mix; rationalisation and expansion of both the machinery and the methods of production used. The quantity of additional personnel required is not yet known.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C - confidential; figures included in underlined size-groups.

(1964)

Industry Basic industrial chemicals (ISIC Code 311)

1. Size groups by number of persons employed:	No. of estab.	No. of empl.	Avg. W. & S. per pers. (US \$)	Avg. gross prod. vol. per pers. (US \$)	Avg. value added/gross prod. ratio (%)
up to 19	59	318	1,623	12,076	41
20 - 99	39	1,802	2,057	12,755	48
100 - 499	15	3,285	2,196	12,279	48
500 - 999	3	11,480	2,321	12,166	44
over 1,000	3	6	C	C	C
TOTAL:	119	16,885	2,256	12,249	45

2. Size groups by annual rate of production (1000 US \$):

	No. of estab.	No. of empl.	Avg. W. & S. per pers. (US \$)	Avg. gross prod. vol. per pers. (US \$)	Avg. value added/gross prod. ratio (%)
up to 20	21	16	1,953	9,687	39
20 - 40	8	45	1,356	5,008	64
40 - 200	30	269	1,739	8,732	56
200 - 400	14	433	1,713	9,785	48
400 - 2,000	30	2,241	2,176	11,467	47
over 2,000	16	13,861	2,300	18,601	45
TOTAL:	119	16,885	2,256	12,249	45

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|---|---------------------------------------|---------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export assistance |
| 2. Financial estimates | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
-----------------	-------------------	-----------------	-------------------	-------------------------

The establishment is interested in co-operating with developing countries, provided problems of financing and risk taking could be solved.

License and know-how contracts can be furnished. Able to supply consultants for preparation of engineering studies.

XII. SUPPLEMENTS & NOTES

ad V. ANNUAL PRODUCTION - DESCRIPTION OF MAJOR PRODUCTS (cont'd):

Adhesives: Glutine glues, gelatine, cold setting glues, film adhesives, construction glues, casein glues, solvent-type adhesives, metal adhesives.

Pharmaceuticals: Analgetics, anaesthetics, antiglaucomatosa, antimicrobics, antirheumatica, cholerae, haemostatics, vasoregulators, hypnotics, oestrogenic preparations, X-ray contrast agents, sulfonamides.

The company produces also

pharmaceutical active substances (belonging mainly to the group of organic-synthetic active substances) and fine chemicals and intermediary products (e.g. succinic acid, urethane, various kinds of esters).

History of investment:

The company was founded in 1939. Construction of the plant started one year later, production, however, could not be taken up before 1943. Severe reduction of business activities caused by war damages. The break-even point could not be surpassed for the first time until 1947, when sales amounted to US \$ 2,700,000.

Outlooks in the next and current problems:

Production could sometimes not meet the demand for organic chemicals. Company is interested in having a steady supply of cheap raw materials for the production of nitrogen. The production of plastics, plasticizers, pharmaceuticals and insecticides will be expanded.

Major Products:

Aluminium sulphate. Capable of producing annually 15,000 of aluminium sulphate (10,000 t of sulphuric acid) on a three-shift operation.

Reporting Unit:

A one-establishment enterprise, founded in 1951; private corporation.

I. FIXED CAPITAL ASSETS

(End of 1966)

	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
1. Primary process equipment			
TOTAL		747	..
- Process equipment		747	..
- Hand tools & apparatuses			
- Cost of installation (included in process equipment)			
2. Primary industrial building			
TOTAL		47	..
(total floor space: 500 m ²)		47	..
3. Auxiliary facilities			
TOTAL		74	..
- Water, steam, electricity, cooling & storing		64	
- Transportation facilities		-	..
- Administrative facilities		6	
- Laboratory facilities		2	
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		868	..
4. Other fixed capital assets			
TOTAL		28	..
- Land (total acreage: 1,000 m ²)		28	

DETAIL OF PROCESS EQUIPMENT (in \$)

	Supplier country	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
- Sulphuric acid department		1951	141	
- Furnace		1961	144	
- Evaporator			72	
- Reactor			74	..
- Generator		mostly	4	
- Milling				
- Cooling bands		1961	4	
- Others			195	

HISTORY OF INVESTMENT:

Construction of the factory, the trial as well as commercial production started in 1951. The factory made its first profits in 1952. In 1964, approximately US \$ 136,000 were invested for an expansion of the furnace department, and in 1965, approximately U.S. \$40,000 were invested for expansion of the evaporation department. The annual investment for general purposes averaged US \$ 24,000 in other years.

CAPACITY POWER:

Process equipment:	401 kW	Generating equipment installed capacity	-	EVA
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EXTERNAL CONDITIONS:

Transport: }
 Utilities: } All facilities are considered fair.
 Community: }

II. INVENTORIES AND WORKING CAPITAL

(in 000 US \$)

(End of 1966)

	Actual value 96	2. Liquid assets TOTAL	Actual value 129
1. Inventories			
TOTAL	96		
- Production materials	17	- Cash (hand/bank)	0.9
- Other input materials	6	- Market. sec. & bonds	0.1
- Work-in-process	-	- Short-term investment	5.0
- Finished products	73	- Prepaid expenses	11.0
		- Accounts receivable	112.0
3. Desired working capital	Number of months	Value	
TOTAL	-	-	
- Production materials			
- Other input materials			
- Finished products			
- Wages & salaries			
- Other special items			

III. MANNING TABLE

(number of persons)

A - Machine operators

B - Other operatives

(1966 average)

	Total	1st shift A B	2nd shift A + B	3rd shift A + B
ALL SHOPS & UNITS:	145	73	41	31
	89	33	28	28
1. Primary operative shops				
- Sulphuric acid plant	8	4	2	2
- Cooling bands department	3	1	1	1
- Evaporation department	6	2	2	2
- Furnace department	9	3	3	3
- Packaging and milling dept.	18	6	6	6
- Others	45	17	14	14
2. Auxiliary operative units	36	20	13	3
- Repair and maintenance	16	10	6	-
- Mechanical shop	-	-	-	-
- Utilities control	5	3	2	-
- Product & material storage	4	2	2	-
- Off-site transport	-	-	-	-
- Guards, cleaners, etc.	4	2	1	1
- Others (yard)	7	3	2	2
3. Auxiliary non-operative units	20	20	-	-
- Production management	1	1	-	-
- Research & development	-	-	-	-
- Sales unit	2	2	-	-
- General administration	17	17	-	-

WORKING TIME PER OPERATIVE WORKER:

Normal hours/day:	8 hours	Normal days/year:	330 days
Actual hours/year:	2,640 hours		

CAPACITY OF OPERATIVE SHOPS:

The sulphuric-acid plant produces 10,000 tons per year. It is fully utilized and moderately automated and mechanized.

IV. ANNUAL PRODUCTION

Products (or group of products)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price on factory (US \$)	Total production value (1988 US \$)
		Unit	Output			
- Aluminium sulphate	1951	t	14,024	15,000	62	970
- Sulphuric acid	1954	"	9,186	10,000	(internal consump.)	
- Various	-	-	981	-	29	28
						37
TOTAL VALUE OF PRODUCTION:						915

* The unit prices does not include sales tax

EXPORTS: None.

CAPACITY UTILIZATION:

The capacity is fully utilized.

VI. VALUE ADDED

(1966)	Value (1988 US \$)
1. Wages & salaries	
- Employees in direct production (125 persons)	129
- Other employees (20 persons)	101
2. Other payments for employees	19
3. Annual depreciation	58
4. Rentals paid	7
5. Interests & royalties	7
6. Sales tax (not incl. in TOTAL)	(213)
7. Other ind. bus. taxes	22
8. (-) Subsidies	-
9. Corporate income before tax	101
	498

VII. MONTHLY EARNING RATES

(End of 1966)	No. of emp.	Average earning rate (US \$)
1. Local non-operatives		
TOTAL:	30	308
- Managers	1	800
- Engineers	4	640
- Technicians	1	160
- Accountants	3	240
- Sales officers	2	400
- Other professional staff	1	160
- Clerks & typists	8	120
2. Local operatives		
TOTAL:	125	85
- Supervisors	-	-
- Foreman	3	160
- Machine operators	19	96
- Craftsmen	8	96
- Truck drivers	95	80
- Other full-time operatives	-	-
- Unskilled & part-time operatives	-	-
3. Foreign employees		
TOTAL:	-	-

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed				Total consumption value (1988 US \$)
	Unit	Purchase	% imported	Tariff rate	
1. Energy and water					
TOTAL:					84
- Electricity	000 Kwh	1,640			25
- Liquid fuels and lubricants		..			5
- Gas	000 m ³	6,289			54
2. Production materials					
TOTAL:					292
- Sulphur	t	3,299	-		105
- Kaolin	t	20,819	-		112
- Aluminium hydrate	t	527	100	50%	72
- Others		..			3

	Total consumption value (1988 US \$)
3. Other materials & supplies	
TOTAL:	84
- Packaging (406,000 bags)	44
- Repair & maintenance	18
- Non-factor service inputs	2
4. Business services purchased	
TOTAL:	17
- Transport, storage & insurance	9
- Communication, advertisements, etc.	8
5. Work performed by sub-contractors	
TOTAL:	-
	477

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)
Industry group: Main industrial chemicals including fertilizers (NIC: 311)

1. Size groups by number of persons employed	Number of		Av. W. & S. per emp. (US \$)	Av. gross prod. val. per emp. (US \$)	Av. cap. gross prod. value* (M)
	estab.	empl.			
up to 25	249	21,242	1,694	15,117	113
over 25					
TOTAL	249	21,242	1,694	15,117	113
2. Size groups by value of annual production (1988 US \$)	Number of		Av. W. & S. per emp. (US \$)	Av. gross prod. val. per emp. (US \$)	Av. cap. gross prod. value* (M)
	estab.	empl.			
up to 2	385	21,457	1,875	14,970	113
over 2					
TOTAL	385	21,457	1,875	14,970	113

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

FUTURE PLAN:

In the first half of the 1970's, no more than U.S. \$160,000 will be invested for general renovation purposes. Increase in the plant scale is not envisaged. These investment expenditures are mostly for automation. The personnel will then be reduced by 15%.

GOVERNMENT POLICIES:

No observations.

Major Products:

Sodium carbonate, caustic soda and sodium chloride. Capable of producing annually 135,000 t of sodium carbonate, 50,000 t of caustic soda and 15,000 t of sodium chloride on a three-shift operation.

Reporting Unit:

An enterprise, including limestone quarry, founded in 1943 and significantly expanded after 1956. Privately owned. Business year 1966 from 1 November 1965 to 31 October 1966. Foreign capital participates only through purchase of bonds.

I. FIXED CAPITAL ASSETS

(End of 1966)

	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
1. Primary process equipment		8,448	11,880
TOTAL		8,448	11,880
- Process equipment		6,400	8,624
- Hand tools & apparatuses		4	56
- Cost of installation		2,000	3,200
2. Primary industrial building		432	900
TOTAL		432	900
(total floor space: 2,500 m ²)		432	900
3. Auxiliary facilities		2,960	6,252
TOTAL		2,960	6,252
- Water, steam, electricity, cooling & storing		808	1,612
- Transportation facilities		88	240
- Administrative facilities		92	1,200
- Laboratory facilities		-	-
- Auxiliary installation for brine camps		1,972	3,200
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		11,840	18,932
4. Other fixed capital assets		550	1,120
TOTAL		550	1,120
- Land (total acreage: 1,000,000 m ²)		210	900
- Construction in process for site extension		320	320

DETAIL OF PROCESS EQUIPMENT (see:)	Supplier country	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
- Equipment for brines			40	60
- Lime and CO ₂ equipment			480	720
- Bicarbonate equipment		mostly	1,680	2,340
- Soda ash equipment		after	1,480	1,980
- Caustic soda equipment		1956	960	1,380
- Water, steam and electricity equipment			1,680	2,240
- Others			80	104

Years of installation range from 1948 to 1966. In the case of replacement of primary process equipment, about 10% of its value is likely to be imported from abroad.

HISTORY OF INVESTMENT:

The factory was constructed in 1943. Trial production started only in 1947 and the first commercial production in 1948. The factory became profitable in 1956 for the first time. During the period from 1956 to the present, approximately US \$ 8 million have been invested for the expansion of soda ash production and approx. US \$ 3.7 million for the expansion of caustic soda production; and approx. US \$ 0.6 million for the expansion of sodium chloride production.

FOREIGN FINANCIAL ASSISTANCE:

Foreign assistance has taken the option of corporate bonds purchase; the bond sales were conducted under a technical assistance contract and not under a joint-venture type share holding contract.

CAPACITY POWER:

Process equipment: 9,000 kW
 Generating equipment: Installed capacity 1,750 KVA

EXTERNAL CONDITIONS:

Transport: Long distance, local area, poor (great delays in railroad transport).
 Utilities: Electricity, poor (high prices); gas, excellent.
 Community: Residential, health and recreational, educational all fair.

II. INVENTORIES AND WORKING CAPITAL

(in 000 US \$)

(End of 1966)

	Actual value	2. Liquid assets	Actual value
1. Inventories	1,172.2	TOTAL	
TOTAL:	1,172.2	- Cash (hand/bank)	
- Production materials	341.9	- Market. sec. & bonds	
- Other input materials	585.1	- Short-term investment	
- Work-in-process	48.4	- Prepaid expenses	
- Finished products	196.8	- Accounts receivable	
3. Desired working capital			
TOTAL			
- Production materials			
- Other input materials			
- Finished products			
- Wages & salaries			
- Other special items			

* Current level and structure of actual working capital is considered close to the desirable one.

III. MANNING TABLE

(number of persons)

A = Machine operators
 B = Other operatives

(1966 average)

	Total	1st shift	2nd shift	3rd shift
		A	B	A+B
ALL SHOPS & UNITS:	1,018	730	144	144
1. Primary operative shops	841	79	108	58+54
- Brine and elaboration of salt	117	18	63	9 9 9 9
- Steam generation and electric energy	69	27	4	15 4 15 4
- Bicarbonation	45	6	9	6 9 6 9
- Soda ash	60	12	8	12 8 12 8
- Caustification	75	11	14	11 14 11 14
- Caustification and packing	45	5	10	5 10 5 10
* exclude lime quarry workers (418 persons)				
2. Auxiliary operative units	487	423	32	32
- Repair and maintenance	51	17	17	17
- Mechanical shop	152	152	-	-
- Utilities control	181	169	6	6
- Product & material storage	39	37	1	1
- Off-site transport	4	4	-	-
- Guards, cleaners, etc.	39	23	8	8
- Others (land extension workers)	21	21	-	-
3. Auxiliary non-operative units	120	120	-	-
- Production management				
- Research & development				
- Sales unit				
- General administration				

WORKING TIME PER OPERATIVE WORKER:

Normal hours/day: 8 hours Normal days/year: 290 days
 Actual hours/year: 2,320 hours

CAPACITY OF OPERATIVE SHOPS:

The capacities of different departments are in equilibrium; fully automated.

IV. ANNUAL PRODUCTION

(1965)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price at factory (US \$)	Total production value (1000 US \$)
		Unit	Output			
- Sodium carbonate	1948	t	131,880	135,000	52	6,858
- Caustic soda	1948	"	48,940	50,000	108	5,286
- Salt (sodium chloride)	1961	"	14,160	15,000	17.6	249
TOTAL VALUE OF PRODUCTION:						12,393

COMPETITIVE IMPORTS:	C.i.f. price without tariff	Tariff rate
Sodium carbonate	US \$ 45/t	7% ad valorem
Caustic soda	US \$100/t	8% " "
Salt (sodium chloride)	varying	25% " "

EXPORTS: None.

CAPACITY UTILIZATION:

The existing facilities are fully utilized. No serious bottlenecks are envisaged.

VI. VALUE ADDED

(1965)	Value (1000 US \$)
1. Wages & salaries	
- Employee in direct production (1316 persons)	2,005
- Other employees (120 persons)	716
2. Other payments for employees	640
3. Annual depreciation	1,118
4. Rentals paid	-
5. Interest & royalties	601
6. Sales tax (not incl. in TOTAL)	(210)
7. Other ind. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	1,875
TOTAL	6,955

VII. MONTHLY EARNING RATES

(End of 1965)	Nbr. of pers. empl.	Average earning rate (US \$)
1. Local non-operative		
TOTAL:	76	..
- Managers	3	1,600
- Engineers	17	1,280
- Technicians	15	240
- Accountants	10	320
- Sales officers	7	800
- Other professional staff	20	320
- Clerks & typists	11	144
2. Local operatives		
TOTAL:	1,418	159
- Supervisors	13	520
- Foremen	20	288
- Machine operators	180	160
- Craftsmen	181	256
- Truck drivers	4	120
(*) Other full-time operatives	100	116
- Unskilled & part-time operatives	..	..
3. Foreign employees		
TOTAL	-	-
(*) Includes quarry workers		

V. ANNUAL CONSUMPTION

(1965)	Quantity consumed			Total consumption value (1000 US \$)
	Unit	Purchases	% imported	
1. Energy and water				
TOTAL:				2,710
- Electricity *	000 KwH	2,400	-	320
- Lubricants	000 l	200	-	56
- Gas	000 m ³	120,000	-	1,120
- Steam **	"	1,300	-	1,200
- Water	"	3,600	-	14
2. Production materials				
TOTAL				1,200
- Limestone	t	54,542	-	141
- Coke	"	5,484	-	200
- Sodium nitrate	"	1,195	100	86
- Lime (purchased) ***	"	39,914	-	373
- Other production materials				400

* Additional 2,500,000 Kw of electricity is internally supplied and not counted in the total.
 ** Steam fully internally supplied and the consumption value represents the operating costs of the steam plant other than labour costs.
 *** In addition about 40,000 t of lime is internally produced.

3. Other materials & supplies	Total consumption value (1000 US \$)
TOTAL:	1,384
- Packaging	40
- Repair & maintenance	1,200
- Re-ester service inputs	144
4. Business services purchased	
TOTAL:	32
- Transport, storage & insurance	32
- Communication, advertisement, etc.	
5. Work performed by sub-contractors	
TOTAL:	112
TOTAL	5,438

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)
 Industry group: Basic industrial chemicals including fertilizers (NIC: 311)

1. Size groups by number of persons employed	Number of units	Number of empl.	Av. W. & S. per unit (US \$)	Av. gross prod. val. per unit (1000 US \$)	Av. emp. gross prod. value* (US \$)
up to 25	249	21,242	1,894	15,117	113
over 25					
TOTAL	249	21,242	1,894	15,117	113
2. Size groups by value of annual production (1000 US \$)	Number of units	Number of empl.	Av. W. & S. per unit (US \$)	Av. gross prod. val. per unit (1000 US \$)	Av. emp. gross prod. value* (US \$)
up to 2	385	21,457	1,875	14,970	113
over 2					
TOTAL	385	21,457	1,875	14,970	113

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

CONTRIBUTION WORK:
 For transport only. No formal contract but occasional use of the services of individuals owning private trucks.

GOVERNMENT POLICIES:
 Excellent general government policies. However, measures to increase the mobility of labour force are desired.

FOUR YEAR PLAN:
 During 1968 - 1973 approximately US \$ 5 billion will be invested for general expansion. No additional labour will be employed, however.

Major Products:

Acetone, ketone and acetate. Annual capacity output is 7,000 to 8,000 tons of these products; three-shift operation.

Reporting Unit:

A branch of a private corporation with 40% participation of foreign capital. The plant was purchased in 1961 from another corporation which had already operated it for several years.

I. FIXED CAPITAL ASSETS

(End of 1965)

	Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
1. Primary process equipment			
TOTAL:		1,411.0	2,779
- Process equipment		1,372.6	2,677
- Hand tools & apparatuses	1955-65	3.2	6
- Cost of installation		35.3	96
2. Primary industrial building			
TOTAL:	1955	133.2	216
(total floor space: m ²)		133.2	216
3. Auxiliary facilities			
TOTAL:		552.2	..
- Water, steam, electricity, cooling & storing	1955-65	451.4	719
- Transportation facilities (total load: 10t)	1955-65	17.3	35
- Administrative facilities	1955	20.6	28
- Laboratory facilities		3.0	..
- Others (equip. out of use)		59.0	..
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		2,096.5	..
4. Other fixed capital assets			
TOTAL:		154.2	300
- Land (total acreage: m ²)		139.7	280
- Others (land improvement)		14.6	20

DETAIL OF PROCESS EQUIPMENT (incl):	Supplier country	Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
- Metallic tanks	(57) Mexico	1955	116.5	272.0
- Distillation columns	(24) France	1955	290.2	576.0
- Heat exchangers	(60) "	1955	221.6	440.0
- Pipeline	(Mexico, U.S.A.)	1955	385.0	688.0
- Instrumentation	(France)	1955	101.8	152.0
- Pumps and motors	(Mexico, France)	1955	71.0	210.0
- Condensators	(3) France	1955	6.8	16.8
- Evaporators	(4) "	1955	15.0	36.8
- Reactors	(2) Mexico	1955	14.6	36.8
- Oxidation stove	(1) France	1955	26.2	66.0
- Miscellaneous			99.4	176.0

HISTORY OF INVESTMENT:

The first commercial production, under the present management, started in 1961. The first profits accrued in the same year. Since 1961, investments ranging from US \$ 16,000 to 24,000 were made annually to introduce new products and to renovate the existing equipment.

CAPACITY POWER:

Process equipment: 200 kW
 Electric motors: 975
 -Other prime movers

Generating equipment:

Installed capacity: - kVA

EXTERNAL CONDITIONS:

Transport: Long distances and local area, fair.

Utilities: Electricity, water, gas, fair.

Community: Residential, health and recreational, educational, poor.

II. INVENTORIES AND WORKING CAPITAL

(in 1000 US \$)

(End of 1965)

1. Inventories	Actual value	2. Liquid assets	Actual value
TOTAL:	188	TOTAL:	
- Production materials	96	- Cash (hand/bank)	
- Other input materials	-	- Market. sec. & bonds	
- Work-in-process	10	- Short-term investment (No Branch Account)	
- Finished products	82	- Prepaid expenses	
		- Accounts receivable	
3. Desired working capital	Number of months	Value	
TOTAL:			
- Production materials			
- Other input materials			
- Finished products			
- Wages & salaries			
- Other special items			

III. MANNING TABLE

(number of persons)

A - Boiler operators
 B - Other operators

(1965 average)

ALL SHOPS & UNITS:

	Total	1st shift A	2nd shift B	3rd shift A+B
83	52	22	9	
24	5	5	4	
4	1	1	1	
20	4	4	3	
48	33	13	2	
15	13	2	-	
-	-	-	-	
-	-	-	-	
2	1	1	-	
15	8	7	-	
5	2	2	-	
6	4	1	1	
5	5	-	1	
11	9	2	-	
2	2	-	-	
-	-	-	-	
-	-	-	-	
5	5	-	-	
4	2	2	-	

WORKING TIME PER OPERATIVE WORKER:

Normal hours/day: 8 hours - Normal days/year: 285 days
 Actual hours/year: 2,280 hours

CAPACITY OF OPERATIVE SHOPS:

The capacities of different departments are considered as mutually balanced.

V. ANNUAL PRODUCTION

(1967) Products (or group of products)	Yr. of first prod.	Quantity produced		Av. unit price on factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Tyres	- 1900	t	36,000	1,270	45,600
Bicyclic tyres	1900	t	2,600	1,355	3,520
V-belts	1948	t	350	2,453	735
Conveyor belts	1949	t	860	1,408	1,208
TOTAL VALUE OF PRODUCTION:					51,063

VI. VALUE ADDED

(1967)	Total value (000 US \$)
1. Annual wages & salaries	9,063
- Operative workers (2,680 persons)	5,967
- Non-operative workers (451 persons)	3,096
2. Other payments for employees	2,107
3. Annual depreciation	3,800
- Machinery & equipment	
- Buildings & other facilities	
- Non-physical capital assets	
4. Rentals paid	360
5. Interests & royalties	1,430
6. Sales tax	1,890
7. Other indirect business taxes	30
8. (-) Subsidies	-
9. Corporate income before tax	2,458
(*) Item 2.-8. see page 4/XII. Supplements	
TOTAL VALUE ADDED:	21,138

DESCRIPTION OF MAJOR PRODUCTS:

Tyres of all kinds for: Cars, trucks, heavy trucks, buses, coaches, military vehicles, earth moving equipment, farm tractors, agricultural machinery, farm trailers, fork-lift trucks, hand carts, wheel harrows, battery-electric vehicles, motorcycles, scooters, mopeds and bicycles.

Accessories and repair materials for: Motor vehicles, bicycles, etc.

Materials for the vulcanizing and reconditioning trade.

Mechanical products: Conveyor belts, elevator belts, flat belting, high-speed belts, fan belts, escalator handrails, flexible rubber doors.

All products are manufactured in series and correspond to international standards. Prompt delivery.

MARKET ASPECTS:

Re-sales:

Insignificant.

Consumers of products:

Automobile industry, service stations, mining industry, building trade, etc.

Sales organization:

Regional depots and branch offices supply domestic retail trade. Subsidiary companies at home and abroad. Representatives in more than 100 countries throughout the world.

Sales areas:

114 countries throughout the world. Largest part of exports is shipped to European countries, North America, and Africa.

Durability of products: 1 1/2 - 2 years.

Share in the domestic market:

Tyres: 45%. Bicyclic tyres: 90%. Conveyor belts: 55%.

EXPORT:

Total annual export: US \$ 18,400,000.

Major products	To Western countries	To Eastern countries	To Developing countries
Tyres	75%	15%	10%

Export price policy:

Depending on market situation.

Competition in the market:

Imported goods are frequently sold below market prices. Company meets foreign competition with higher quality of products and better service.

Governmental policies:

The government subsidizes exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under VI.6. has been adjusted accordingly.

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import duties (000 US \$)	Total consumption value (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity				
1. Energy and water						
TOTAL:						998
- Electricity	000 kWh	35,832 (*)	-	-	592	
- Fuel oil (heavy)	t	3,093	-	-	66	
- Natural gas	000 m ³	12,286	-	-	314	
- Water	000 m ³	5,135 (**)	-	-	26	
- Steam	t	181 (***)	-	-	-	
2. Production materials						
TOTAL:						22,204
- Natural rubber	t	8,437	100	-	3,797	
- Synthetic rubber	t	11,777	100	-	3,977	
- Textiles	t	4,285	17	89	6,589	
- Chemicals	t	17,398	80	248	4,211	
- Reclaimed rubber	t	2,264	- 25	-	165	
- Other materials		..			3,585	
3. Other materials & supplies						
TOTAL:						623
- Packaging material						249
- Parts, supplies & services						362
- Other materials & supplies						12
4. Business services purchased						
TOTAL:						6,100 (*)
- Transportation, storage & insurance						..
- Communication, advertising & other business services						..
5. Work performed by subcontractors						
TOTAL:						-
TOTAL VALUE OF CONSUMPTION:						29,925

(*) Not including internal supply of 11,903,000 kWh.

(**) Not including internal supply of 9,523,000 m³ of water.

(***) Internally supplied.

(*) See page 4/XII. Supplements.

IV. ANNUAL PRODUCTION

(1965)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price at factory (US \$)	Total production value (000 US \$)
		Unit	Output			
- Acetone	1962	t	1,243	2,000	0.28/kg	348
- Methyl ethyl ketone	1963	"	812	..	0.42/"	341
- Ethyl acetate	1961	"	1,494	2,800	0.47/"	702
- Butyl acetate	1964	"	213	1,000	0.46/"	98
- Isopropyl acetate	1965	"	190	..	0.41/"	77
TOTAL VALUE OF PRODUCTION:						1,566

* Assuming a three-shift 285 days/year operation

PRICES OF COMPETING IMPORTS:

	Price c.i.f. without tariff	Tariff rate
Acetone	US \$ 0.14/kg	45%
Methyl ethyl ketone	" " 0.28/"	52%
Ethyl acetate	" " 0.28/"	40%
Butyl acetate	" " 0.28/"	71%
Isopropyl acetate	" " 0.25/"	69%

EXPORTS: None.

CAPACITY UTILIZATION:

50 -60%. The nominal capacity output has not been achieved yet. Reasons unspecified.

VI. VALUE ADDED

(1965)	Value (000 US \$)
1. Wages & salaries	
- Employee in direct production (72 persons)	70
- Other employees (11 persons)	66
2. Other payments for employees	24
3. Annual depreciation	202
4. Rentals paid	-
5. Interest & royalties	-
6. Sales tax (not incl. in TOTAL)	(3)
7. Other ind. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	51
	412

VII. MONTHLY EARNING RATES

(End of 1965)	No. of emp.	Average earning rates (US \$)
1. Local non-operative		
TOTAL:	19	9.6
- Managers	1	100
- Engineers	4	90
- Technicians	4	240
- Accountants	-	-
- Sales officers	-	-
- Other professional staff	-	-
- Clerks & typists	3	14.0
2. Local operatives		
TOTAL:	105	86
- Supervisors	7	200
- Foremen	-	60
- Machine operators	17	91
- Craftsmen	5	100
- Truck drivers	1	91
- Other full-time operatives	19	51
- Unskilled & part-time operatives	-	-
- Others (guards)	5	72
3. Foreign employees		
TOTAL:	-	-
3. Other materials & supplies		
TOTAL:		61
- Packaging		-
- Repair & maintenance		99
- Non-factor service inputs		-
4. Business services purchased		
TOTAL:		32
- Transport, storage & insurance		10
- Communication, advertisements, etc.		22
5. Work performed by sub-contractors		
TOTAL:		-
		1,154

V. ANNUAL CONSUMPTION

(1965)	Quantity consumed		% imported	Tariff rate	Total consumption value (000 US \$)
	Unit	Purchase			
1. Energy and water					
TOTAL:					64
- Electricity	000 Kwh	1,640	-	-	29
- Liquid fuels and lubricants (including gas and gasoline)	..	-	-	-	35
2. Production materials					
TOTAL:					990
- Isopropyl alcohol	t	1,490	100	149	181
- Ethylene alcohol	"	967	-	-	255
- Methylene alcohol	"	160	100	58	42
- Sec. " "	"	878	100	120	159
- Acetic acid	"	1,332	-	-	309 *
- Others					44

* Accounting price for internal transactions within the parent company

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)					
Industry group: Industrial chemicals, including fertilizers (NIC:311)					
1. Size group by number of persons employed	Number of estab.	Number of emp.	Avg. W. & S. per emp. (US \$)	Avg. gross prod. val. per emp. (US \$)	Avg. emp. gross prod. value* (US \$)
up to 25	249	21,242	1,894	15,117	113
over 25					
TOTAL	249	21,242	1,894	15,117	113
2. Size group by value of annual production (000 US \$)	Number of estab.	Number of emp.	Avg. W. & S. per emp. (US \$)	Avg. gross prod. val. per emp. (US \$)	Avg. emp. gross prod. value* (US \$)
up to 2	385	21,457	1,875	14,970	113
over 2					
TOTAL	385	21,457	1,875	14,970	113

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

GOVERNMENTAL POLICIES:

The survival of this plant is protected by the tariff barrier on competitive imports.

FUTURE PLAN:

None.

Major Products: Rayon filament, short rayon fiber, cellophane, rayon rope for tyres.

Capable of producing annually about 15,000 t on 3-shift operation.

Reporting Unit:

A branch-establishment of a fairly decentralized multi-establishment enterprise; founded in 1948; privately owned; foreign capital participation 44-45%.

I. FIXED CAPITAL ASSETS

(End of 1966)	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
1. Primary process equipment			
TOTAL		18,149	..
- Process equipment		18,149	..
- Hand tools & apparatuses			
- Cost of installation (incl. in process equipment)			
2. Primary industrial building			
TOTAL		2,343	..
(total floor space: 54,615 m ²)		2,343	
3. Auxiliary facilities			
TOTAL		1,064	..
- Water, steam, electricity, cooling & storing		334	
- Transportation facilities			..
- Administrative facilities		730	
- Laboratory facilities			
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		21,556	..
4. Other fixed capital assets			
TOTAL		free	..
- Land (total acreage: 150,000 m ²)		free	..

DETAIL OF PROCESS EQUIPMENT (incl.)	Supplier country	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
Crushers and cellulose presses				
Reactors		40-50% of the value in 1948.	..	..
Maturation tanks		The rest in 1954 to 1958.		
Extruders				
Recovering tower				
Extracte recovery plant				
Storing tanks				

HISTORY OF INVESTMENT:

The factory construction started in 1947. Both the trial production and first commercial production took place in the next year. The following major investments have since been made:

Year	(000 US \$)	Description
1954	2,200	for initiation of a new process for short viscose rayon fibre production
1955	1,300	for initiation of rayon ropes for tyres
1957	1,100	for initiation of cellophane production
1958	6,300	for expansion of the continuous preparation process
1963	1,000	for expansion of cellophane production
1968	(1,800)	(for further expansion of cellophane production)

CAPACITY POWER:

Process equipment:	Generating equipment: installed capacity	- kVA
- Electric motors: 6,100 kW		
- Other prime movers: 11,000		

INTERNAL CONDITIONS:

Transport:	Long distance, excellent; local area, fair.
Utilities:	Electricity and water, excellent.
Community:	Residential, excellent; health and recreational, educational, fair.

II. INVENTORIES AND WORKING CAPITAL

in 000 US \$

(End of 1966)	Actual value	2. Liquid assets	Actual value
1. Inventories	2,172	TOTAL:	90
- Production materials	785	- Cash (hand/bank)	90
- Other input materials	216	- Market, sec. & bonds	-
- Work-in-process	166	- Short-term investment	-
- Finished products	1,005	- Prepaid expenses	-
		- Accounts receivable	-
3. Decried working capital	Number of months	Value	
TOTAL:		751	
- Production materials	2	131	
- Other input materials	2	36	
- Finished products	1,5	130	
- Wages & salaries	2	454	
- Other special items	-	-	

III. MANNING TABLE

(number of persons)

A - Regular operative
B - Other operative

(1966 average)	Total	1st shift A	2nd shift B	3rd shift A+B
ALL SHOPS & UNITS:	(*) 1,080	518	281	281
1. Primary operative shops	691	231	230	230
- Rayon filament department	390	130	-	130
- Short rayon fibres department	105	35	-	35
- Cellophane department	84	28	-	28
- Rayon rope for tyres	112	38	-	37
(*) Excludes the 350 extra hands used during the year on an emergency basis.				
2. Auxiliary operative units	333	231	51	51
- Repair and maintenance	92	92	-	-
- Mechanical shop	88	88	-	-
- Utilities control	99	33	33	33
- Product & material storage	-	-	-	-
- Off-site transport	-	-	-	-
- Guards, cleaners, etc.	54	18	18	18
- Others (yard)				
3. Auxiliary non-operative units	56	56	-	-
- Production management	-	-	-	-
- Research & development	-	-	-	-
- Sales unit	-	-	-	-
- General administration	-	-	-	-
- Others (engineering and projects)	56	56	-	-

WORKING TIME PER OPERATIVE WORKER:

- Normal hours/day:	8 hours	- Normal days/year:	303 days
- Actual hours/year:	2,424 hours		

CAPACITY OF OPERATIVE SHOPS:

All processes are considered to be well balanced.

Technical advantages connected with the participation of foreign capital:

- Training of personnel
- Patents and "know-how" involved in the basic production materials supplied from abroad
- Marketing of products

Other establishments in the same parent company:

Type of activities	Total No. of employees
Nylon, acetate, polyester	1,925
Nylon	470
Cellulose	220
Central office	382

There are no particular advantages of having these sister branches for the operation of this branch.

Total wages and salaries and other annual operating costs of the central office: US \$ 2 million.

IV. ANNUAL PRODUCTION

(1966) Product (or group of products)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit (*) price on factory (US \$)	Total production value (1000 US \$)
		Unit	Output			
Rayon filament	1948	t	4,747	4,400	1.62/kg	7,690
Short rayon fibre	1951	t	4,910	6,000	0.81/kg	3,977
Cellophane	1957	t	3,316	3,200	1.20/kg	3,979
Rayon rope for tyres	1955	t	1,250	1,300	1.57/kg	1,962
TOTAL VALUE OF PRODUCTION						17,608

(*) Unit prices exclude sales tax charges but are averaged including discounts.

TARIFF RATES FOR COMPETING IMPORTS ARE:

Rayon filament	US \$ 0.16/kg + 45% ad valorem
Short rayon fibre	" " 0.04/kg + 50% " "
Cellophane	" " 0.80/kg + 100% " "
Rayon rope for tyres	" " 0.08/kg + 7% " "

EXPORTS:

Part of rayon filament is exported at a unit price of US \$ 1.40/kg.

CAPACITY UTILIZATION:

Practically 100%. Nominal capacity output is based on continual 3-shift operation for 360 days per year.

VI. VALUE ADDED

(1966)	Value (1000 US \$)
1. Wages & salaries	
- Employees in all shops (*) (1,080 persons)	2,471
- Other employees (*) (350 persons)	251
2. Other payments for employees	616
3. Annual depreciation	1,216
4. Rentals paid	-
5. Interest & royalties	18
6. Sales tax (not incl. in TOTAL)	(158)
7. Other ind. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	2,172
	6,744

(*) See note in IX.

VII. MONTHLY EARNING RATES

(End of 1966)	No. of emp.	Average earning rate (US \$)
1. Least non-operative		
TOTAL:	154	260
- Managers	3	320
- Engineers	28	480
- Technicians	48	320
- Accountants	3	360
- Sales officers	-	-
- Other professional staff	-	-
- Clerks & typists	72	128
2. Least operative		
TOTAL:	955	154
- Supervisors	-	-
- Foremen	43	176
- Machine operators	579	152
- Craftsmen	279	168
- Truck drivers	-	-
- Other full-time operatives	54	84
- Unskilled & part-time operatives	-	-
3. Foreign employees		
TOTAL:	1	400
- Engineers, trainers and other technical control staff	1	400

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed			Total consumption value (1000 US \$)
	Unit	Purchase	% imported	
1. Energy and water				
TOTAL:				2,086
- Electricity	000 Kwh	400	-	10
- Petroleum	000 l	64,452	-	833
- Steam	000 m3	1,480	-	1,152
- Water	000 m3	13,882	-	91
2. Production materials				
TOTAL:				7,245 (*)
- Wood pulp	t	11,003	100 US \$ 8/4 + 5%	2,573
- Caustic soda	"	9,078	-	1,265
- Carbon bisulphure	"	3,966	-	626
- Sulphuric acid	"	15,290	-	475
- Cotton shoddy	"	2,561	-	578
- Nitrocellulose	"	122	100 US \$ 1.6/t	140
- Glycerine	"	267	- + 4%	199
- Others	"	1,672	-	887
(Net decumulation of inventories)				(+ 501)(*)

(*) Annual purchases; the total annual consumption was larger by US \$ 0.5 million.

3. Other materials & supplies	% imp.	Total consumption value (1000 US \$)
TOTAL:		1,432
- Packaging	100	348
- Repair & maintenance	-	971
- Non-factor service inputs	-	114
4. Business services purchased		
TOTAL:		102
- Transport, storage & insurance		102
- Communication, advertisements, etc.		-
5. Work performed by sub-contractors		
TOTAL:		-

10,504

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)					
Industry group: Basic industrial chemicals, including fertilizers (NIC: 311)					
1. Size groups by number of persons employed	Number of estab.	Number of emp.	Avg. no. of pers. per estab.	Avg. gross prod. val. per emp.	Avg. cap. gross prod. value (M)
			(US \$)	(US \$)	
up to 25	249	21,242	1,894	15,117	113
over 25					
TOTAL	249	21,242	1,894	15,117	113
2. Size groups by value of annual production (1000 US \$)	Number of estab.	Number of emp.	Avg. no. of pers. per estab.	Avg. gross prod. val. per emp.	Avg. cap. gross prod. value (M)
			(US \$)	(US \$)	
up to 2	385	21,457	1,875	14,970	113
over 2					
TOTAL	385	21,457	1,875	14,970	113

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

Wages and salaries:

The US \$ 2.47 million for 1,080 persons are those on the branch's normal payroll. The remaining 350 are assistants called in from other branches of the parent company on a temporary basis.

Future plan:

Within the next 3 years approx. US \$ 12 million will be invested for renovation of rayon process equipment as well as for expansion of cellophane production.

Government policies:

Import licenses for production materials must be obtained through the Ministry of Industry and Commerce. For nitrocellulose import authorization must be obtained through the Ministry of National Defense.

Major Products:
Reporting Unit:

Organometallic antidetonant compounds based on tetraethyl lead. Ethylation capacity is 14,756 t; 3 shift operation.
A one-establishment enterprise, founded in 1960. Mixed private foreign and public national ownership; foreign capital participation 49%. The rest is all public (national capital).

I. FIXED CAPITAL ASSETS

(End of 1966)	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
1. Primary process equipment			
TOTAL:		3,726	3,912
- Process equipment	1964	2,225	2,336
- Hand tools & apparatuses		108	114
- Cost of installation		1,393	1,462
2. Primary industrial building			
TOTAL:		2,024	2,125
(total floor space: .. m ²)	1964	2,024	2,125
3. Auxiliary facilities			
TOTAL:		2,512	2,637
- Water, steam, electricity, cooling & storing	1964	1,927	2,023
- Transportation facilities	1964	124	130
- Administrative facilities	1964	93	98
- Laboratory facilities	1964	110	115
- Others	1964	258	274
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		8,262	8,674
4. Other fixed capital assets			
TOTAL:		69	73
- Land (total acreage: .. m ²)		-	-
- Others (construction)		69	73

DETAIL OF PROCESS EQUIPMENT (no.):	Supplier country	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
- Lead melting pot (1)	Mexico	1964	18.0	18.9
- Lead recovery furnace (1)	Mexico	1964	63.0	66.2
- Melting pot for alloy fabrication (1)	Mexico	1964	11.0	11.5
- Alloy packing equipment(1)	Mexico U.S.A.	1964	48.6	51.0
- Ethylation autoclaves	"	1964	187.1	196.5
- Crude TEP distillers	Mexico	1964	52.7	55.5
- TEP purifiers	Mexico	1964	4.2	4.5
- Compound mixers	Mexico	1964	6.4	6.7
- Storage tanks	Mexico	1964	95.4	100.2
- Others	Mexico U.S.A.	1964	1,737.8	1,824.7

HISTORY OF INVESTMENT:

The factory was constructed in 1962. The trial production started in 1964 and the first commercial production in 1965. The factory made its first profits in March 1966, when 67.5% of the installed capacity was utilized.
No significant expansion investment has been undertaken since.

CAPACITY POWER:

Process equipment:
- Electric motors: 1,904 kW

Generating equipment:
- Installed capacity: - LVA

EXTERNAL CONDITIONS:

Transport: Long distance, fair; local area, poor.
Utilities: Electricity, water and gas, fair.

Community: Residential, health and recreational, educational, all poor; Transport facilities for operatives and employees have to be provided (annual costs US \$ 700,000), also contribution for costs of living.

II. INVENTORIES AND WORKING CAPITAL

(in 000 US \$)

(End of 1966)	Actual value	2. Liquid assets	Actual value
1. Inventories	1,744	TOTAL:	1,211
TOTAL:	1,744	- Cash (hand/bank)	325
- Production materials	747	- Market. sec. & bonds	146
- Other input materials	431	- Short-term investments	-
- Work-in-process	107	- Prepaid expenses	13
- Finished products	459	- Accounts receivable	529
3. Desired working capital			
	Number of months	Value	
TOTAL:		2,028	
- Production materials	1.5	474	
- Other input materials	1.5	355	
- Finished products	1	614	
- Wages & salaries	1	65	
- Other special items	1	520	

III. MANNING TABLE

(number of persons)

A - Machine operators
B - Other operatives

(1966 average)	Total	1st shift A B	2nd shift A+B	3rd shift A+B
ALL SHOPS & UNITS:	236	136	53	47
1. Primary operative shops	52	13 5	13 4	13 4
- Alloy department	24	6 2	6 2	6 2
- Ethylation department	28	7 3	7 2	7 2
2. Auxiliary operative units	66	41	15	10
- Repair and maintenance	35	17	9	9
- Mechanical shop	8	8	-	-
- Utilities control	8	4	4	-
- Product & material storage	7	4	2	1
- Off-site transport	-	-	-	-
- Guards, cleaners, etc.	8	8	-	-
3. Auxiliary non-operative units	118	77	21	20
- Production management	32	26	3	3
- Research & development	-	-	-	-
- Sales unit	3	3	3	3
- General administration	21	21	-	-
- Indirect supervision	46	29	13	13
- Laboratory	11	4	4	3
- Medical services	5	3	1	1

WORKING TIME PER OPERATIVE WORKER:

- Normal hours/day: 8 hours - Normal days/year: 297 days
- Actual hours/year: 2,376 hours

CAPACITY OF OPERATIVE SHOPS:

Nominal capacity output of ethylation department is 14,756 t; 75.5% of capacity is utilized. Full automation and mechanisation.

TECHNICAL ADVANTAGES CONNECTED WITH THE PARTICIPATION OF FOREIGN CAPITAL

- 24 technicians were trained for 5 months in the foreign enterprise which takes a partnership.
- Supply of machinery designs and supervision of construction.
- Supply of production techniques and security norms.

IV. ANNUAL PRODUCTION

(1966)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price in factory (US \$)	Total production value (1966 US \$)
		Unit	Output			
Products for group of products						
Organometallic antidetonant compounds (tetraethyl lead based)	1965	t	10,840	14,756	806.56	8,743
TOTAL VALUE OF PRODUCTION:						8,743

COMPETITIVE IMPORTS:

C.i.f. price without tariff US \$ 778.32/ton. Tariff rate US \$ 16.32.

EXPORTS:

Exports are made at a unit price of US \$ 784.64/ton.

CAPACITY UTILIZATION:

Under utilization due to lack of demand.

Nominal capacity is calculated on a three-shift basis, 357 working days/year; average operability of equipment 89.7% and a chemical yield (based on sodium) 87.34%.

VI. VALUE ADDED

(1966)	Value (1966 US \$)
1. Wages & salaries	
- Employees in direct production (118 persons)	221
- Other employees (118 persons)	557
2. Other payments for employees (See IX)	310
3. Annual depreciation	914
4. Rentals paid	219
5. Interests & royalties	734
6. Sales tax (not incl. in TOTAL)	(4)
7. Other ind. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	655
	3,610

VII. MONTHLY EARNING RATES

(End of 1966)	No. of emp.	Average earning rate (US \$)
1. Local non-operative		
TOTAL:	23	389
- Managers	1	560
- Engineers	-	-
- Technicians	2	400
- Accountants	5	640
- Sales officers	-	-
- Other professional staff	-	-
- Clerks & typists	15	240
2. Local operatives		
TOTAL:	212	206
- Supervisors	1	1,200
- Foremen	19	560
- Machine operators	52	180
- Craftsmen	66	160
- Truck drivers	1	160
- Other full-time operatives	73	160
- Unskilled & part-time operatives	-	-
3. Foreign employees		
TOTAL:	1	2,400
- Managerial staff	1	2,400

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed				Total consumption value (1966 US \$)
	Unit	Purchased	% Imported	Tariff rate	
1. Energy and water					132.0
TOTAL:					132.0
- Electricity	000 KwH	9,148			156.5
- Petroleum	000 l	58.4			4.6
- Fuel oil	"	25.1			0.2
- Diesel oil	"	2.8			0.1
- Gas	000 m ³	8,586.0			70.6
2. Production materials					4,200
TOTAL:					4,200
- Lead	t	4,389.1	-		1,017
- Metallic sodium	"	2,226.3	100 % 61.6 /t		894
- Ethyl chloride	"	6,791.2	" " 84.64/"		1,228
- Ethylene dichloride	"	2,037.3	" " 16.64/"		259
- Ethylene dibromide	"	2,003.7	" " 32.56/"		741
- Others	..				61
3. Other materials & supplies					235
TOTAL:					235
- Packaging					17
- Repair & maintenance	50				179
- Non-factor service inputs					56
4. Business services purchased					466
TOTAL:					466
- Transport, storage & insurance					78
- Communication, advertisements, etc.					387
5. Work performed by sub-contractors					-
TOTAL:					-

5,133

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1966)

Industry group: Basic industrial chemicals including fertilizers (ISIC: 311)

1. Size groups by number of persons employed	Number of units	Number of emp.	Avg. W. & A. per unit (US \$)	Avg. gross prod. val. per unit (US \$)	Avg. emp. gross prod. value* (US \$)
up to 25	249	21,242	1,894	15,117	113
over 25					
TOTAL	249	21,242	1,894	15,117	113
2. Size groups by value of annual production (1966 US \$)	Number of units	Number of emp.	Avg. W. & A. per unit (US \$)	Avg. gross prod. val. per unit (US \$)	Avg. emp. gross prod. value* (US \$)
up to 2	385	21,457	1,875	14,970	113
over 2					
TOTAL	385	21,457	1,875	14,970	113

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

"Other payments for employees"

Due to the poor infrastructural facilities in the area, the enterprise purchases transport services for the commuting of both operatives and non-operative up to US \$ 56,000 annually. Also past adjustments for the local cost of living amount to US \$ 100,000 annually.

FUTURE PLAN:

From 1970 to 1971, approximately US \$ 4 million will be invested.

Additional labour to be employed:

1st shift	10 persons
2nd shift	8 "
3rd shift	6 "

GOVERNMENT POLICIES:

Public investment in educational, medical, recreational and transport facilities in the locality of this enterprise is strongly desired.

Major Products:

Various adhesives and related chemicals (modifications and synthesis of formaldehyde; adhesives, etc.)

Reporting Unit:

The actual annual output in 1967 was 12,695 t.
A centralized multi-factory enterprise; founded originally in 1941 and expanded gradually over the last decade.
Privately owned; no participation of foreign capital.

I. FIXED CAPITAL ASSETS

(End of 1967)

	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
1. Primary process equipment			
TOTAL		2,414.7	..
- Process equipment		1,526.0	..
- Hand tools & apparatuses		-	..
- Cost of installation		888.7	..
2. Primary industrial building			
TOTAL		442.5	..
(total floor space: 22,000 m ²)		442.5	..
3. Auxiliary facilities			
TOTAL		619.8	..
- Water, steam, electricity, cooling & storing		246.8	..
- Transportation facilities		48.0	..
- Administrative facilities		116.6	..
- Laboratory facilities and investigation fac.		174.6	..
- Others (barrels and containers)		33.8	..
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		3,477.0	..
4. Other fixed capital assets			
TOTAL		360.3	..
- Land (total acreage: 310,000 m ²)		360.3	..

DETAIL OF PROCESS EQUIPMENT (no.):

	Supplier country	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
Crushers and mills			32.9	..
Pumps			176.5	..
Dryers			233.0	..
Centrifuges and separators			57.2	..
Tanks and pans		Mostly	206.8	..
Compressors		1955	104.0	..
Reactors		- 1966	151.4	..
Mixers			76.6	..
Motors			84.3	..
Pipeline and attachments			389.3	..
Others			16.2	..

HISTORY OF INVESTMENT:

The construction of the factory started in 1952. The first trial production started in 1952, the first commercial production in 1953. The first profits were also made in 1953. Following investments for the expansion of the whole enterprise were made:

1954	approx. US \$	96,000
1956	"	56,000
1957	"	120,000
1961	"	400,000
1962	"	200,000
1963	"	840,000
1964	"	400,000
1966	"	800,000
1967	"	640,000

CAPACITY POWER:

Process equipment: 705 kW

Generating equipment:

Installed capacity: - kVA

EXTERNAL CONDITIONS:

Transport: -
Utilities: - all fair
Community: -

II. INVENTORIES AND WORKING CAPITAL

(in 000 US \$)

(End of 1957)

	Actual value	2. Liquid assets	Actual value
1. Inventories	1,725	TOTAL	5,293
TOTAL	1,725	- Cash (hand/bank)	336
- Production materials	747	- Market. sec. & bonds	2,122
- Other input materials	-	- Short-term investment	1,072
- Work-in-process	178	- Prepaid expenses	626
- Finished products	800	- Accounts receivable	1,137
3. Desired working capital			
TOTAL	8,185		
- Production materials	665		
- Other input materials	-		
- Finished products	772		
- Wages & salaries	1,042		
- Other special items	5,706		

III. MANNING TABLE

(number of persons)

A - Number operators
B - Other operative

	Total	1st shift		2nd shift A+B	3rd shift A+B
		A	B		
(1967 average)					
ALL SHOPS & UNITS:	577	385		115	77
1. Primary operative shops	229	51	38	43 31	40 26
- Plant I	132	28	22	25 20	22 15
- Plant II	58	10	10	10 9	10 9
- Plant III	39	13	6	8 2	8 2
2. Auxiliary operative units	129	96		25	8
- Repair and maintenance	39	33		6	-
- Mechanical shop	-	-		-	-
- Utilities control	9	9		-	-
- Product & material storage	52	30		14	8
- Off-site transport	21	21		-	-
- Guards, cleaners, etc.	8	3		5	-
3. Auxiliary non-operative units	219	200		16	3
- Production management	24	16		5	3
- Research & development	51	40		11	-
- Sales unit	34	34		-	-
- General administration	110	110		-	-

WORKING TIME PER OPERATIVE WORKER:

- Normal hours/day: 8 hours - Normal days/year: 300 days
- Actual hours/year: 2,400 hours

CAPACITY OF OPERATIVE SHOPS:

IV. ANNUAL PRODUCTION

(1967) Products for group of products	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price ex factory (US \$)	Total production value (000 US \$)
		Unit	Output			
- Natural resins, modifications and synthesis of formaldehyde, starchings, adhesives, etc.	(*)	t	12,695	..	..	7,781
TOTAL VALUE OF PRODUCTION						7,781

(*) The enterprise has a great variety of products. The products shown above have to be taken as examples only.

EXPORTS: None.

CAPACITY UTILIZATION:

The plants are almost continually being modified, renovated or expanded. Due to the complexity of product-mix and process-mix, which require flexible adjustments to changing patterns of demand and new production possibilities, the enterprise is not particular about any fixed notion of "nominal capacity output".

V. ANNUAL CONSUMPTION

(1967)	Quantity consumed			Total consumption value (000 US \$)
	Unit	Purchase	% imported	
1. Energy and water				
TOTAL				29
- Electricity	000 KwH	1,088		22.6
- Liquid fuels and lubricants	000 l	19		4.8
- Gas	000 m3	31		0.4
- Water	000 m3	65		0.8
2. Production materials (*)				
TOTAL				3,656
- Methanol				
- Monomers of resins (of vinyl and others)		..		
- Asphalt				3,656
- Wax, Latex				
- Starch, etc.				

(*) Approx. 800 different kinds of production materials are used. These shown above have to be taken as examples only.

VI. VALUE ADDED

(1967)	Value (000 US \$)
1. Wages & salaries	
- Employees in direct production (330 persons)	294
- Other employees (247 persons)	1,164
2. Other payments for employees	210
3. Annual depreciation	295
4. Rentals paid	38
5. Interests & royalties	348
6. Sales tax (not incl. in output)	(213)
7. Other ind. bus. taxes	-
8. (-) Subsidies	(-)
9. Corporate income before tax	748
TOTAL	3,067

VII. MONTHLY EARNING RATES

(End of 1967)	No. of emp.	Average earning rate (US \$)
1. Local non-operatives		
TOTAL	220	327
- Managers	3	920
- Engineers	40	400
- Technicians	7	160
- Accountants	12	480
- Sales officers	34	432
- Other professional staff	34	420
- Clerks & typists	84	208
2. Local operatives		
TOTAL	256	102
- Supervisors	3	624
- Foreman	14	420
- Machine operators	134	80
- Craftsmen	48	72
- Truck drivers	8	144
- Other full-time operatives	49	88
- Unskilled & part-time operatives	-	-
3. Foreign employees		
TOTAL	-	-

	Total consumption value (000 US \$)
3. Other materials & supplies	
TOTAL	84
- Packaging	7
- Repair & maintenance	60
- Non-factor service inputs	17
4. Business services purchased	
TOTAL	945
- Transport, storage & insurance	307
- Communication, advertisements, etc.	638
5. Work performed by sub-contractors	
TOTAL	-
TOTAL	4,714

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965) Industry group: Basic industrial chemicals, including fertilizers (ISIC: 311)						
1. Size groups by number of persons employed:		Number of establ.	Number of empl.	Avg. W. & E. per pers. (US \$)	Avg. gross prod. val. per pers. (US \$)	Avg. cap. gross prod. ratio* (%)
up to	25	249	21,242	1,894	15,117	113
over	25					
TOTAL		249	21,242	1,894	15,117	113
2. Size groups by value of annual production (000 US \$):		Number of establ.	Number of empl.	Avg. W. & E. per pers. (US \$)	Avg. gross prod. val. per pers. (US \$)	Avg. cap. gross prod. ratio* (%)
up to	2	385	21,457	1,875	14,970	113
over	2					
TOTAL		385	21,457	1,875	14,970	113

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

Future plan:

Continual research and investment for new products and new processes.

Government policies:

No account has been given of the US \$ 20,000 subsidies received by the enterprise. But it is likely that some of the products, competing with imports, are being sold at subsidized prices.

Major Products: Phthalic anhydride. Capable of producing annually 1,400 t on 3-shift operation.

Reporting Unit: A one-establishment enterprise, founded in 1956; private corporation.

I. FIXED CAPITAL ASSETS

	Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
(End of 1965)			
1. Primary process equipment			
TOTAL		960	1,224
- Process equipment		480	664
- Hand tools & apparatuses		-	-
- Cost of installation		480	560
2. Primary industrial building	1958	48	64
TOTAL		48	64
(total floor space: 600 m ²)		48	64
3. Auxiliary facilities			
TOTAL			
- Water, steam, electricity, cooling & storing			
- Transportation facilities			
- Administrative facilities			
- Laboratory facilities			
		included in installation costs	
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		1,008	1,288
4. Other fixed capital assets		6	19
TOTAL		6	19
- Land (total acreage: 2,000 m ²)		6	19

DETAIL OF PROCESS EQUIPMENT (no.)	Supplier country	Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
Compressors	6 USA	1958-61	112	160
Coverters	3 USA	1958-61	24	32
Distiller	1 USA	1958	2	32
Condensers	3 Mexico	1965	96	120
Other equipment	.. USA	1958-61	223	320

HISTORY OF INVESTMENT:

The factory was constructed in 1956. The first trial as well as commercial production started in 1956. The factory became profitable after utilizing 60% of the capacity. The following investments were made in subsequent years:

Year	approx. amount invested (US \$ 000)	Main purposes
1959	120	Starting production of plasticizers
1961	480	Expansion of production of phthalic anhydride
1965	2,800	Construction of a new plant for phthalic anhydride production

CAPACITY POWER:

Process equipment:	600 kW	Generating equipment: installed capacity:	- tVA
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EXTERNAL CONDITIONS:

Transport: Long distance, fair; local area, excellent.
Utilities: Electricity, fair; water and gas, excellent.
Community: Residential, fair; health and recreational, educational, poor; Subsidies for sport, equipment and education grant.

II. INVENTORIES AND WORKING CAPITAL

In 000 US \$

	Actual value	2. Liquid assets	Actual value
(End of 1965)			
1. Inventories	29	TOTAL	616
TOTAL:			
- Production materials	14	- Cash (hand/bank)	120
- Other input materials	-	- Market, sec. & bonds	-
- Work-in-process	9	- Short-term investment	-
- Finished products	6	- Prepaid expenses	-
		- Accounts receivable	496
3. Desired working capital			
TOTAL:			
- Production materials	1.3	28	
- Other input materials	-	-	
- Finished products	1	56	
- Wages & salaries	3	30	
- Other special items	7	208	

III. MANNING TABLE

(number of persons)

A - Machine operators
B - Other operatives

	Total	1st shift		2nd shift	3rd shift
		A	B	A+B	A+B
(1965 average)					
ALL SHOPS & UNITS:	68	29	13	13	13
1. Primary operative shops	40	6	4	6	4
- Production	30	6	4	6	4
- Substitutes	10	(distributed as required)			
2. Auxiliary operative units	9	3	2	2	2
- Repair and maintenance	3	1	1	1	1
- Mechanical shop	-	1	1	1	1
- Utilities control	3	1	-	-	-
- Product & material storage	2	1	-	-	-
- Off-site transport	-	-	-	-	-
- Guards, cleaners, etc.	-	-	-	-	-
- Substitute	1	-	-	-	-
3. Auxiliary non-operative units	19	16	1	1	1
- Production management (1 sub.)	4	1	1	1	1
- Research & development	2	2	-	-	-
- Sales unit	-	-	-	-	-
- General administration	13	13	-	-	-

WORKING TIME PER OPERATIVE WORKER:

- Normal hours/day:	8 hours	- Normal days/year:	273 days
- Actual hours/year:	2,184 hours		

CAPACITY OF OPERATIVE SHOPS:

The capacity of oxidation department is 1,400 tons per year. Utilization rate is 90%. High automation and mechanisation.

10 substitutes and 1 substitute in the primary and auxiliary operative shops, respectively, work on varying shifts, in order to make possible 333 days/year operation.

IV. ANNUAL PRODUCTION

(1965) Product for group of products	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price in factory (US \$)	Total production value (1000 US \$)
		Unit	Output			
Phthalic anhydride	1958	t	1,370	1,400	0.6/kg	798
TOTAL VALUE OF PRODUCTION						798

COMPETING IMPORTS:

C.I.F. price of competing imports of phthalic anhydride amounts to US \$ 0.4 per kg.
Tariff rate is US \$ 0.4 per gross kg and 4% ad valorem.

EXPORTS:

None.

CAPACITY UTILIZATION:

The installed capacity is being fully utilized and an additional plant of 5,000 t is being constructed as of the year of reference. (This new plant, not covered in this profile data, started operation in 1967).

VI. VALUE ADDED

(1965)	Value (1000 US \$)
1. Wages & salaries	
- Employees in direct production (44 persons)	49
- Other employees (24 persons)	72
2. Other payments for employees	32
3. Annual depreciation	155
4. Rentals paid	-
5. Interests & royalties	36
6. Sales tax (not incl. in TOTAL)	(15)
7. Other ind. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	121
TOTAL	465

VII. MONTHLY EARNING RATES

(End of 1965)	No. of pers. emp.	Average earning rates (US \$)
1. Local non-operatives		
TOTAL:	28	375
- Managers	1	1,200
- Engineers	6	600
- Technicians	-	-
- Accountants	1	640
- Sales officers	-	-
- Other professional staff	-	-
- Clerks & typists	18	240
2. Local operatives		
TOTAL:	42	124
- Supervisors	4	144
- Foremen	-	-
- Machine operators	15	120
- Craftsmen	3	144
- Truck drivers	-	-
- Other full-time operatives	-	-
- Unskilled & part-time operatives	-	-
3. Foreign employees		
TOTAL:	-	-

V. ANNUAL CONSUMPTION

(1965)	Quantity consumed				Total consumption value (1000 US \$)
	Unit	Purchase	% imported	Tariff rate	
1. Energy and water					
TOTAL:					59
- Electricity	000 KwH	2,520	-	-	40
- Gas	000 m ³	1,799	-	-	17
- Water	000 m ³	97	-	-	2
2. Production materials					
TOTAL:					229
- Naphthalene	t	1,640	30	US \$ 0.04 + 12%	229

3. Other materials & supplies

	Total consumption value (1000 US \$)
TOTAL:	17
- Packagings	5
- Repair & maintenance	8
- Non-factor service inputs	4
4. Business services purchased	
TOTAL:	2
- Transport, storage & insurance	2
- Communication, advertisements, etc.	-
5. Work performed by sub-contractors	
TOTAL:	26

333

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)
Industry group: Basic industrial chemicals, including fertilizers (NIC: 311)

1. Size groups by number of persons employed	Number of estab.	Number of emp.	Avg. W. & B. (US \$)	Avg. gross prod. val. per pers. (US \$)	Avg. cap. gross prod. ratio* (%)
up to 25	249	21,242	1,894	15,117	113
over 25					
TOTAL	249	21,242	1,894	15,117	113
2. Size groups by value of annual production (1000 US \$)					
up to 2	385	21,457	1,875	14,970	113
over 2					
TOTAL	385	21,457	1,875	14,970	113

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

Commission work:

Transport of production materials and finished products is done by sub-contractors.

Government policies:

Electricity and freight tariffs are very high compared with those in other countries. Also import tariffs for capital goods are high. The prices of imported parts for maintenance are thus 100% higher than the factory delivery prices of the suppliers.

Future plan:

Within the period 1968-1970, approx. US \$ 2 million will be invested for the installation of a new plant. Additional 40 operatives (10 substitutes) will be employed. In the new plant orthoxylene, instead of naphthalene, will be used. Capacity will be 5,000 t per year.

Major Products: Synthetic resins, moulded plastic compounds, saccharines.
In 1967 the total output amounted to 12,400 t of synthetic resins and to 16 t of saccharines based on 3-shift and 1-shift operation, respectively. Full-capacity output amounts to US \$ 4.6 million.

Reporting Unit: A one-establishment enterprise; founded in 1910 (production of saccharines was started in 1919, of synthetic resins in 1947); privately owned; approximately 300 employees; dominant position in the domestic market for saccharines and moulded plastic compounds; high rate of exports (30% of total value of annual production); own research activities; active balance of licences.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (1000 US \$)	Replacement value (1000 US \$)	Average age (Yrs.)
1. Primary process equipment (including installation cost)			
TOTAL	2,205	3,243	
- Process equipment *	2,183	3,189	9
- Hand tools & apparatuses	42	54	-
2. Buildings			
TOTAL	814	1,235	
- Primary industrial buildings (total floor space: 7,800 m ²)	438	1,045	20
- Auxiliary buildings	192	457	15
- Warehouses	108	255	25
- Office administration buildings	46	108	25
- Housing	30	70	30
3. Auxiliary facilities (excl. buildings)			
TOTAL	642	855	
- Internal power equipment	395	580	8
- Laboratory facilities	58	85	6
- Means of transportation	89	47	2
- Office equipment	97	143	8
TOTAL PHYSICAL FIXED ASSETS (excluding land)	3,661	6,033	
4. Other fixed capital assets			
TOTAL	158	422	
- Land (total acreage: 35,900 m ²)	28	182	-
- Land improvements (t.e. 19,500 ")	35	97	-
- Others (incl. intangible assets)	95	143	-

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII).

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1967 monthly average)	up to 100 100 US\$	100 - 140 140 US\$	140 - 160 160 US\$	160 - 240 240 US\$	240 - 360 360 US\$	over 360 US\$
1. Local non-operatives						
- Managers	-	-	-	-	7	4
- Engineers	-	-	-	4	24	-
- Technicians	-	-	-	-	4	1
- Accountants	-	-	-	-	10	-
- Sales officers	-	-	-	12	6	-
- Clerks and typists	-	-	-	-	7	-
- Supervisors	-	-	-	-	-	-
2. Local operatives						
- Supervisors (*)	-	-	-	3	-	-
- Foremen	-	-	-	37	-	-
- Skilled operatives	-	-	-	49	-	-
- Machine operators	-	-	-	23	7	-
- Craftsmen	-	-	-	8	-	-
- Truck drivers	-	-	-	12	-	-
- Unskilled operatives	-	-	-	54	-	-
- Other full-time operatives	-	-	-	-	-	-
- Part-time operative	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

(*) Company considers supervisors as local non-operatives.

EXTERNAL CONDITIONS:

Transport:	external long distance	fair
	internal long distance	"
	local and city	"
Utilities:	electricity	fair
	water	"
	gas	"
Community:	residence	fair
	health and recreation	excellent
	education	"
Own Welfare Facilities:		-

III. INVENTORIES

(End of 1967)	Actual value (1000 US \$)	Number of months
Inventories		
TOTAL	712	
- Production materials	310	1
- Other input materials	15	1
- Work-in-process	-	-
- Finished products	387	1

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
- Shift hours/day:	8.6	8.6	8.6	hours
- Actual hours/year:	1,952	1,952	1,952	hours
- Actual days/year:	228	228	228	days

IV. MANNING TABLE

(Number of personnel)

Shift categories: A: Supervisory staff and foremen (for all shifts)
B: Skilled operatives
C: Semi-skilled operatives (machine operators)
D: Unskilled operatives

(31 October 1967)	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	B-B	B-D
ALL SHOPS & UNITS:	265	80	156			20	9
1. Primary operative shops	124	19	44	33	3	18	7
- Synthetic resins	101	15	35	29	3	15	4
- Saccharines	9	1	4	4	-	-	-
- Other products	14	3	5	-	-	3	3
2. Auxiliary operative units	85	17	64			2	2
- Repair & maintenance	44	4	20			-	-
- Mechanical shop	-	-	-			-	-
- Tooling shop	-	-	-			-	-
- Utilities control	10	8	2			-	-
- Product & material storage	9	5	4			-	-
- Off-site transport	6	-	6			-	-
- Guards, cleaners, etc.	13	-	11			1	1
- Others	3	-	1			1	1
3. Auxiliary non-operative units	56	44	12			-	-
- Production management	6	5	1			-	-
- Research & development	9	7	2			-	-
- Sales unit	14	14	-			-	-
- Accounting	9	9	-			-	-
- General administration	18	9	9			-	-

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (U.I.):	Number	Original Purchase Value (000 US \$)	Replacement value (000 US \$)	Av. Age (yrs)	Remarks	Year of installation	Daily running time
Mixing plants	4					Germany, F.R.	24 hrs
Calenders and impregnating machines	10	No details available.				Germany, F.R.	20 hrs
Rolling mills and strainers	20					Germany, F.R. France, UK	24 hrs
Cutting machines	7					Germany, F.R.	24 hrs
Trimming machines	122					Germany, F.R. USA, CSSR	24 hrs
Tread casting plants	3					Germany, F.R.	24 hrs
Heaters	224					Germany, F.R.	24 hrs
V-belt heaters	11					..	..
Stirrer	1					Austria	24 hrs
Extruding presses	3					Germany, F.R.	24 hrs
Small spraying machines	5					Germany, F.R.	20 hrs
Lathes	15						
Planing machines	3	Lifts and elevating platforms		16			
Milling machines	5	Stacker trucks		69			
Welding sets	6	Other common type machines		6			
Cranes	16	Hand tools and apparatuses		23			
Drilling benches	4						

CAPACITY POWER:

Process equipment:
- electric motors kW 6,040
- other 800

Generating equipment:
installed capacity kVA 2,400

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization		Further details
		Mechan.	Autom.	
Raw material processing department		B	II	The establishment puts strong emphasis on systematic research and development as well as on most modern - highly automated - manufacturing machinery and testing equipment in order to secure quality, reliability and long-life of its products.
Calendering department		B	II	
Tyre trimming department		A	II	
Tyre vulcanizing department		A	II	
Tyre tubes department		C	III	
Bicycle tyres and tubes department		C	III	
V-belts, conveyor belts department		C	II	
Radial tyres		A	II	

CAPACITY UTILIZATION:

Full capacity output: US \$ 58,000,000.

Current utilization: based on 2 and 3-shift operation.

Major products (or processes)	Approximate %						
	up to 20	20-40	40-60	60-70	70-80	80-90	100

All departments are operating at almost full-capacity.

IX. HISTORY & PLAN

Year	Total sales (000 US \$)	No. of persons employed	Total exports (000 US \$)
1963	..	8,113	..
1964	74,536	8,315	20,627
1965	80,457	8,872	23,297
1966	85,101	8,374	24,458
1967	89,900	8,220	31,773
1968	96,750	8,985	38,700

(*) of the whole enterprise.

2. Investments in the past:

From 1956 to 1958 :	Approximate amount (000 US \$)	Type of investment
" 1959 " 1964 :	5,510	Expansion and rationalization of product-mix, process equipment, production processes and primary operative shops, etc.
" 1965 " 1967 :	15,470	
in 1967 :	18,620	
	6,830	

3. Future Plan:

From 1968 to 1970 : 14,470 See IX.2 above.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C = confidential; figures of these size groups are included in those underlined.

(1964)

Industry Manufacture of rubber products (ISIC Code: 30)

1. Size groups by number of persons employed:	No. of estab.	No. of emp.	Av. W. & B. per pers. (RUB \$)	Av. gross prod. val. per pers. (RUB \$)	Av. value added/gross prod. ratio (%)	2. Size groups by annual rate of production (000 US \$):	No. of estab.	No. of emp.	Av. W. & B. per pers. (RUB \$)	Av. gross prod. val. per pers. (RUB \$)	Av. value added/gross prod. ratio (%)
up to 19	37	142	1,405	6,444	65	up to 20	22	28	984	4,753	69
20 - 99	5	235	1,487	16,631	18	20 - 40	8	42	1,112	5,900	62
100 - 499	3	8,286	1,860	8,856	57	40 - 200	9	131	1,524	5,661	67
500 - 999	-	-	-	-	-	200 - 400	2	C	C	C	C
over 1,000	2	C	C	C	C	400 - 2,000	2	C	C	C	C
						over 2,000	4	8,462	1,854	2,109	55
TOTAL:	47	8,663	1,842	9,027	55	TOTAL:	47	8,663	1,842	9,027	55

V. ANNUAL PRODUCTION

(1967)	Yr. of first prod.	Quantity produced		Av. unit price as factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Synthetic resins	1947	t	12,364	0.24/kg	2,935
Saccharines	1919	t	16	45.85/kg	735
Others	-	t	722	0.34/kg	240
TOTAL VALUE OF PRODUCTION:					3,910 *****

VI. VALUE ADDED

(1967)	Total value (000 US \$)
1. Annual wages & salaries	653
- Operative workers	
1 195 (personal)	367
- Non-operative workers	
1 82 (personal)	286
2. Other payments for employees	178
3. Annual depreciation	175
- Machinery & equipment	94
- Buildings & other facilities	79
- Non-physical capital assets	2
4. Rentals paid	1
5. Interests & royalties	54
6. Sales tax	143
7. Other indirect business taxes (land tax)	9
8. (-) Subsidies	-
9. Corporate income before tax	445
TOTAL VALUE ADDED:	1,658 *****

DESCRIPTION OF MAJOR PRODUCTS:

Besides glue and binding agents for wood industry (chip boards, panel boards) the production programme comprises also binding agents for production of coating materials and grinding devices, resins for foundries moulded plastic compounds, special chemical compounds based on phenol, urea, and melamin, etc.

Synthetic resins: Packed in barrels of 200 kg, high quality. Terms of delivery: 14 days.

Saccharines: Packed in tubes of 7,6 g; cheaper than competitors' products; prompt delivery.

All products: Serial production.

MARKET ASPECTS:

Consumers of products:

Synthetic resins: wood working industry, plastic processing industry, foundries.

Sales organization:

Synthetic resins are directly sold to final consumers, saccharines are distributed through whole-salers. Subsidiary company takes care of distribution of firm's products in a neighbouring country.

Share in the domestic market:

Saccharines and moulded plastic compounds: over 80%.

Synthetic resins: 30 - 50%.

Competition in the market:

Saccharines: only minor competition from abroad, imports are more expensive.

Synthetic resins: keen domestic and foreign competition which the company, however, is able to meet due to high specialisation.

EXPORT:

Total annual export US \$ 1,100,000.

Major products	To Western countries	To Eastern countries	To Developing countries
Synthetic resins	40%	30%	30%
Miscellaneous	40%	30%	30%

Export price policy:

Export prices depend on market situation.

Company reports satisfactory revenues from exports.

Governmental policies:

The government subsidises exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under VI.6. has been adjusted accordingly.

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import duties	Total consumption value (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity				
1. Energy and water						
TOTAL:						126
- Electricity	000 kWh	3,059				61
- Heavy oil	t	1,995				97
- Gas	000 m ³	9			0.3	
- Steam (*)	t	22.5				
- Water	000 m ³	158			8	
2. Production materials						
TOTAL:						1,665
- Methanol	t	5,215				473
- Melamin	"	700				304
- Phenol	"	1,191				219
- Cellulose	"	724				150
- Urea	"	1,607				149
- Miscell. production materials	"	591				115
- Pulp	"	102				100
- Cresol	"	373				81
- Manganese slime	"	539				74
3. Other materials & supplies						
TOTAL:						170
- Packaging material						89
- Parts, supplies & services						59
- Other materials & supplies						22
4. Business services purchased						
TOTAL:						291
- Transportation, storage & insurance						128
- Communication, advertising & other business services						149
5. Work performed by subcontractors						
TOTAL:						-
TOTAL VALUE OF CONSUMPTION:					2,252 *****	

(*) Internally supplied

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (U.I.):

	Number	Original Purchase Value (000 US \$)	Replacement value (000 US \$)	Avg. Age (yrs)	Remarks	Supplier country	Daily running time	(*) Output
Saccharin manufacturing plant	1	108	159	20	SH/Ob	various	16 hrs	1,000 t/year
Permanox manufacturing plant	1	90	74	5	SC	-	-	-
Condensation kettles (2,000 l)	6	81	120	15	..	Germany, F.R.	24 "	..
" " (5,000 l)	2	85	124	8	..	Austria		
" " (10,000 l)	2	186	275	7	..	-	8 "	-
Wiro-drying plant	1	124	182	7	Ob	Denmark	24 "	1,000 t/year
Powdered resin plant	1	46	70	1	..	Germany, F.R.	24 "	2,500 t/year
Amino-moulded plastic compounds plant	1	558	820	8	..	Germany, F.R.	24 "	1,000 t/year
Phenol-moulded plastic compounds plant	1	66	97	12	..	Austria, Switzerland	16 "	12,000 t/year
Formaldehyde plants	2	352	519	12	Ob	Germany, F.R.	24 "	-
incl. various storage tanks	..	46	70	12	..	-	-	-
Paper impregnating plant	1	113	166	8	Ob	Germany, F.R.	16 "	-
Electrical motors	1,200	259	383	10	-	-	-	-
Pumps	300	89	132	10	-	-	-	-

(*) It is impossible to indicate the exact utilization rate of each single plant due to great variety of product-mix

CAPACITY POWER:
 Process equipment:
 - electric motors approx 4,000
 Generating equipment:
 - installed capacity kVA -

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization	Automation	Further details
Synthetic resins		A	II	
Saccharines		A	III	
Miscellaneous		A	III	

CAPACITY UTILIZATION:

Full-capacity output: Approximately 4,600,000 US \$
 Some 30 persons would be needed for full-capacity utilization.
 Current utilization:
 Major products (as processes) up to 100%
 Approximately 80 - 90% of the existing capacity is utilized.
 Presently the synthetic resin department operates on 3 shifts, whereas the saccharine department operates on 1 shift only.

IX. HISTORY & PLAN

	Total output (000 US \$)	No. of persons employed	Total exports (000 US \$)
1. Performance in the past:			
Year: 1963	3,410	296	580
1964	3,980	322	930
1965	4,250	300	940
1966	4,170	292	1,110
1967	3,910	275	1,110
1968	4,060	270	1,120
2. Investments in the past:			
From 1955 to 1967:	2,520	Synthetic resin plant, internal power equipment, workshops	
3. Future Plan:			
From 1969 to 1970:	540	Synthetic resins plant (expansion of machinery, introduction of new processing methods).	
No additional operatives will be required.			

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C = confidential; figures of this size group are included in the underlined figures.

(1964)

Industry: Basic industrial chemicals (ISIC-Code: 311)

t. Size groups by number of persons employed:	No. of estab.	No. of empl.	Avg. W. & S. per pers. (US \$)	Avg. gross prod. val. per pers. (US \$)	Avg. value added/gross prod. ratio (%)
up to 19	39	318	1,623	12,076	41
20 - 99	39	1,802	2,057	12,755	48
100 - 499	15	3,285	2,196	12,279	48
500 - 999	3	11,680	2,321	12,166	44
over 1,000	3†	c	c	c	c
TOTAL:	119	16,885	2,256	12,249	45

2. Size groups by annual sale of production (000 US \$):	No. of estab.	No. of empl.	Avg. W. & S. per pers. (US \$)	Avg. gross prod. val. per pers. (US \$)	Avg. value added/gross prod. ratio (%)
up to 20	21	78	1,553	9,687	39
20 - 40	8	45	1,336	5,002	64
40 - 200	30	289	1,739	8,732	56
200 - 400	14	433	1,713	9,785	48
400 - 2,000	30	2,241	2,176	11,167	47
over 2,000	16	13,861	2,300	12,601	45
TOTAL:	119	16,885	2,256	12,249	45

XII. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|---|---------------------------------------|-----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export transactions |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES: Not applicable.

Type of service	Country or region	No. of projects	Field of industry	Description of projects
-----------------	-------------------	-----------------	-------------------	-------------------------

No information available.

XIII. SUPPLEMENTS & NOTES

Inventory policy:

On the average, the value of the finished products' inventory amounts to 18% of the total value of production.

Water bottlenecks in the next years:

Short-term bottlenecks occurred in synthetic resins production because of great increase in demand. Therefore, a very extensive expansion of the synthetic resins plant has become necessary.

Production policy:

Both the straight-line as well as accelerated methods were applied.

Governmental policy:

Export promotion law: companies are granted loans at favourable terms in order to be able to increase exports. The establishment took advantage of this law.

Major Products: Detergents, naphthemic acid, naphthenates, distillation products, fine chemicals.
In 1966, the annual production amounted to US \$ 760,000 based on 1-shift operation. The full-capacity output is about US \$ 1.16 million.

Reporting Unit: Branch of a 2-establishment enterprise; founded in 1948; privately owned; 73 employees; emphasis on research work; 15-20% exports.

I. FIXED CAPITAL ASSETS

(End of 1966)	Original purchase value (000 US \$)	Replacement value (000 US \$)	Avg. age (Yrs.)
1 Primary process equipment (including installation cost)			
TOTAL	..	134	7.5
- Process equipment *	102	131	-
- Hand tools & apparatuses	..	3	-
2 Buildings *	142	323	
TOTAL			
- Primary industrial buildings (total floor space: 1,140 m ²)	142	279	..
- Auxiliary buildings	-	44	..
- Warehouses	-	-	-
- Office administration buildings	-	-	-
- Housing	-	-	-
3 Auxiliary facilities (excl buildings)	73	114	
TOTAL			
- Internal power equipment	10	21	11
- Laboratory facilities	19	24	..
- Means of transportation	28	45	..
- Office equipment	16	24	..
TOTAL PHYSICAL FIXED ASSETS (including land)	..	571	
4 Other fixed capital assets	..	499	
TOTAL			
- Land (total acreage: 1,900 m ²)	..	35	-
- Land improvements	-	-	-
- Others (incl. intangible assets)	-	464	-

*NB Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII.)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1966 monthly average)	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1. Local non-operatives						
- Managers	-	-	-	-	4	2
- Engineers	-	-	-	2	6	-
- Technicians	-	-	-	-	5	-
- Accountants	-	-	-	-	12	1
- Sales officers	-	-	-	2	7	1
- Clerks and typists	-	-	-	-	-	-
2. Local operatives						
- Supervisors	-	-	-	-	7	-
- Foremen	-	-	-	-	2	-
- Skilled operatives	-	-	-	-	2	-
- Machine operators	-	-	-	-	2	-
- Craftsmen	-	-	-	-	3	-
- Truck drivers	-	-	-	5	2	-
- Unskilled operatives	-	-	-	-	3	-
- Other full-time operatives	-	1	-	-	-	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	1	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

EXTERNAL CONDITIONS

Transport:	external long distance	fair
	internal long distance	fair
	local and city	fair
Utilities:	electricity	fair
	water	fair
	gas	insignificant
Community:	residence	insignificant
	health and recreation	fair
	education	insignificant
Own Welfare Facilities:	-	-

III. INVENTORIES

(End of 1966)	Actual value (000 US \$)	Number of months
Inventories	210 (*)	
TOTAL:		
- Production materials	51	..
- Other input materials	-	-
- Work-in-process	159	2
- Finished products	-	-

(*) Includes establishments 1 and 2 because of common storage.

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	
Shift hours/day	9	-	-	hours
Actual hours/year	1,910	-	-	hours
Actual days/year	213	-	-	days

IV. MANNING TABLE

(Number of persons)

Shift Legenda: A. Supervisory staff and foremen (for all shifts)
B. Skilled operatives
C. Semi-skilled operatives (machine operators)
D. Unskilled operatives

(1966 average)	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	B-C	B-D
ALL SHOPS & UNITS:	73	44	22		-	-	
1. Primary operative shops	15	8	-	5	2	-	-
Total plant	15	8	-	5	2	-	-
2. Auxiliary operative units	20	3	17		-	-	
- Repair & maintenance	8	2	6		-	-	
- Mechanical shop	-	-	-		-	-	
- Tooling shop	-	-	-		-	-	
- Utilities control	-	-	-		-	-	
- Product & material storage	5	1	4		-	-	
- Off-site transport	5	-	5		-	-	
- Guards, cleaners, etc.	-	-	-		-	-	
- Others (boiler house)	2	-	2		-	-	
3. Auxiliary non-operative units	38	33	5		-	-	
- Production management	1	3	-		-	-	
- Research & development	5	4	1		-	-	
- Sales unit	20	16	4		-	-	
- Accounting	10	10	-		-	-	
- General administration	-	-	-		-	-	

V. ANNUAL PRODUCTION

(1966)	Yr. of inv. prod.	Quantity produced		Av. unit price or factory (US \$)	Total output value (1000 US \$)
		Unit	Quantity		
Naphtenic acid	1951	t	1,753	57.2	100
Detergents (heavy duty and fine, powders or liquids)	1951	t	920	437.1	402
Naphtenates	1952	t	129	450.4	58
Fine chemicals	1951	..	..	..	33
Distillation products	1951	t	160	165.4	27
Revenue from research work					21
Self-constructed apparatuses	..	..	..	..	41
Others					31
TOTAL VALUE OF PRODUCTION:					713

VI. VALUE ADDED

(1966)	Total value (1000 US \$)
1. Annual wages & salaries	191
- Operative workers	
1 - 29 persons	63
- Non-operative workers	
1 - 44 persons	128
2. Other payments for employees	42
3. Annual depreciation	38
- Machinery & equipment	32
- Buildings & other facilities	3
- Non-physical capital assets	3
4. Rentals paid	2
5. Interests & royalties	17
6. Sales tax	26
7. Other indirect business taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	34
TOTAL VALUE ADDED: 350	

DESCRIPTION OF MAJOR PRODUCTS:

Universal detergents: For industry and home; heavy duty and fine, powders or liquids.

Naphtenic acid and naphtenates: Wood preservatives against dry rot, non-poisonous.

Industrial cleaners and special industrial agents: Fat solvents, antifreeze compounds, pickling agents, anticorrosive agents, etc.

Car-underbody coating: Permanent protection against rust and salt.

Car cleaners: Shampoo, preservatives, polishers, etc.

Research activities of a rather wide range. Batch production. Mainly packed in barrels and drums (industrial packages), underbody coating usually packed in small units.

MARKET ASPECTS:

Re-sales:

In order to complete product-mix company sells various goods which do not require any substantial processing. A trend can be noticed in the chemical industry to specialize on very few products in order to avoid the high capital investments which would occur if too many specialized machinery and equipment were needed.

Consumers of products:

Motor vehicle repair shops, industrial plants (for cleaning purposes), households.

Sales organization:

Domestic market: 10 representatives under central management.
Export: Specialized wholesalers and export representatives.

Share in the domestic market:

Motor cleaners: 40 - 50%; products for maintenance of car about 25%; other cleaners: 10 - 20%; naphtenic acid: 85% (processed on commission basis).

Competition in the market:

Company has difficulties to compete with products manufactured in large series by big chemical concerns. Management, therefore, tries to find gaps in the market and to specialize product-mix accordingly. Immediate industrial application of results of research activities is aimed at.

EXPORT:

Total annual export:

Major products	To Western countries	To Eastern countries	To Developing countries
Chemotechnical products	50%	50%	-

Governmental policies:

The government subsidizes exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under VI.6, has been adjusted accordingly.

VII. ANNUAL CONSUMPTION

(1966)	Quantity consumed		% Import	Average import duties	Total consumption value (1000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL:					14
- Electricity	000 kWh	158 (*)			5
- Fuel oil	t	165			5
- Gas oil and petrol	t	29			4
(*) Not including 75 t internally supplied.					
2. Production materials					
TOTAL:					208
Mineral oil fractions (gas oil, white spirit, kerosene, etc), naphtenic acid, naphtenic lye, concentrated sulphuric acid, decyl benzene, non ionic surfactants, other solvents, sodium hydroxide, copper sulfate, fine chemicals, organic intermediates, etc.	..	-	-	-	208

3. Other materials & supplies		
TOTAL:		80
- Packaging material (plastic containers, barrels, bottles)		54
- Parts, supplies & services		15
- Other materials & supplies		11
4. Business services purchased		
TOTAL:		61
- Transportation, storage & insurance		21
- Communication, advertising & (*) other business services		40
5. Work performed by subcontractors		
TOTAL:		-
TOTAL VALUE OF CONSUMPTION: 363		

(*) Not including US \$ 56,000 which have been cleared with the sister establishment.

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT #.1:	Number	Original Purchase Value (000 US \$)	Replacement value (000 US \$)	Av. Age (yrs)	Remarks:		Supplier country	Year of installation	Daily running time	Capacity output
					21. Purchased second-hand	22. Obsolete				
Vacuum distillation plant	1	18.8	23.2	10	Ob		Austria	1953	..	1.5 t/shift
Boiler	1	8.1	10.1	3	Ob		..	..	..	..
Stirring autoclave (500 l)	1	3.2	4.3	10	Ob		Hungary	1958	8 hrs	2 t/day
Steel tanks for naphthene	3	2.1	2.3	7	Ob		..	..	..	..
Others	..	69.8	..	..	..		..	..	..	..
Separator	1	..	..	..	..		Austria	1958	1 hr/week	5 t/hour

Glass and enamel apparatuses were supplied by UK, Federal Republic of Germany, and Hungary.
For further details see page 4/XII. Supplements.

CAPACITY POWER:

Process equipment:
- electric motors kW 180

Generating equipment:
- installed capacity kVA 110

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanisation:		Further details:
		Mechan.	Autom.	
The whole plant is moderately mechanised but not automated.				

CAPACITY UTILIZATION:

Full-capacity output: US \$ 1,160,000.

Current utilization: based on 2-shift operation.

Major products (in process)	Approximate %										
	up to 20	20-40	40-60	60-70	70-80	80-90	90-100				
Naphtenic acid											X
Naphtenates and temporary protective coatings											X
Industrial detergents										X	
Underbody coating											X
Laundry detergents										X	
Research orders											X

IX. HISTORY & PLAN

1. Performance in the past:	Total output (000 US \$)		Average No. of persons employed		Total output (000 US \$)
	Year	1963	1964	1965		1966
Year: 1963	730	122	800	123	190
1964	800	123	940	121	290
1965	1,010	117	1,020	116	270
1966	(1,030)	(116)	(1,030)	(116)	(270)

2. Investments in the past:	Approximate amount (000 US \$)	Type of investment
From 1962 to 19 68:	190	Expansion of production capacity, rationalisation of product-mix.
of which in 1967 :	58	

3. Future Plan:	From 19 68 to 1970 :	120	Rationalisation of production processes, specialisation of product-mix and machinery, introduction of new products and new fabrication processes. Expansion of capacity for production of anti-corrosives. No additional operatives to be employed.
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X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C = confidential; figures of that size group are included in the one underlined.

(1964)

Industry Basic industrial chemicals (NHC-Code: 311)

1. Size groups by number of persons employed	No. of estab.	No. of empl.	Av. W. & B. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)	2. Size groups by annual sale of production (000 US \$):		Av. W. & B. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)	
						No. of estab.	No. of empl.				
up to 19	49	378	1,823	12,076	41	up to 20	21	1,353	9,697	39	
20 - 99	39	1,802	2,057	12,755	48	20 - 40	8	1,336	5,002	64	
100 - 499	15	3,285	2,196	12,279	48	40 - 200	30	289	8,732	56	
500 - 999	3	11,480	2,321	12,166	44	200 - 400	14	433	9,785	48	
over 1,000	3 ↑	0	C	C	C	400 - 2,000	30	2,241	11,167	47	
						over 2,000	16	13,861	2,300	12,601	45
TOTAL:	119	16,885	2,256	12,249	45	TOTAL:	119	16,885	2,256	12,249	45

XII. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|-------------------------|---|----------------------------------|
| 1. Engineering study | 3. Technical and managerial personnel | 6. Import and export transaction |
| 2. Financial assistance | 4. Industrial training | 7. Admission of foreign labor |
| 3. Industrial services | 5. Equipment supply, installation & maintenance | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of services	Country or region	No. of projects	Field of industry	Description of projects
				<p>The enterprise is interested in co-operating in many different ways wherever its own processes, and experiences in manufacturing and/or marketing are applicable:</p> <p>Anti-corrosives: Fully effective even on wet metal surfaces; easily applicable, resistant to tropical conditions; cheap.</p> <p>Detergents for households and industry: Universal detergents, motor car shampoo, industrial detergents, decarbonizing fluids, full range of "cosmetics" for motor cars.</p> <p>Release agents: Special mould releasing agents for lifting prefabricated concrete parts (hot or cold hardened) from steel moulds. Simultaneous protection against corrosion.</p> <p>Manufacture of pharmaceuticals belonging to the group of nicotinic acid and isonicotinic acid, nicotinamide (niacinamide) and isonicotinic acid hydrazide (isoniazid).</p> <p>Both export of products and licensing are possible; know-how contracts can be signed as well. In many cases it may be advisable to begin with exports in order to establish a market in a developing country for the products in question and to continue with the production at a later stage on a mutually agreeable basis.</p>

XIII. SUPPLEMENTS & NOTES

Contract and commission work:

The enterprise manufactured naphthionic acid on commission basis. Production is based on waste of mineral oil. Company also engaged in research work for industrial enterprises in the field of detergents.

Bottlenecks in the past and current problems:

Bottlenecks in the production of anti-corrosives the company encountered due to lacking apparatuses, could be abolished to some extent.

Technological features:

Besides the distillation plant the establishment comprises interchangeable apparatuses and a series of heated containers with a holding capacity of 50 - 500 l. The containers are lined with material resistant to chemical influences, mainly consisting of glass, enamel or ceramic. The enterprise can be considered as a huge laboratory with a rather fast commercial application of its own research work. Predominantly batch-production (exception: continuous distillation).

Financing policy:

The enterprise applies the straight-line method of depreciation only.

Major Products: Solvents, inorganic reagents, organic reagents, etc.
The full-capacity output amounts to US \$ 580,000 based on 1-shift operation.

Reporting Unit: Branch of a 2-establishment enterprise founded in 1956. Privately owned; 43 employees. Large manufacturer of fine chemicals and reagents. Approximately 20% exports. Not profitable yet.

I. FIXED CAPITAL ASSETS

(End of 1966)	Original purchase value (1000 US \$)	Replacement value (1000 US \$)	Avg. age (Yrs.)
1. Primary process equipment (including installation cost)			
TOTAL	96	197	
- Process equipment *	94	194	4.5
- Hand tools & apparatuses	2	3	-
2. Buildings			
TOTAL	259	306	
- Primary industrial buildings (total floor space: 3,000 m ²)	215	306	10
- Auxiliary buildings	44		
- Warehouses			
- Office administration buildings			
- Housing			
3. Auxiliary facilities (excl. buildings)			
TOTAL	..	45	
- Internal power equipment	..	19	..
- Laboratory facilities	5	8	9
- Means of transportation	7	10	2
- Office equipment	7	8	8
TOTAL PHYSICAL FIXED ASSETS (excluding land):	..	548	
4. Other fixed capital assets			
TOTAL	..	31	
- Land (total acreage: 8,000 m ²)	..	31	-
- Land improvements	-	-	-
- Others	-	-	-

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII.)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1966 mostly average)	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1. Local non-operatives						
- Managers	-	-	-	-	-	2
- Engineers	-	-	-	-	4	-
- Technicians	-	-	-	1	6	-
- Accountants	-	-	-	-	-	-
- Sales officers	-	-	-	-	1	-
- Clerks and typists	-	-	-	-	5	-
2. Local operatives						
- Supervisors	-	-	-	-	-	-
- Foremen	-	-	-	-	6	-
- Skilled operatives	-	-	-	-	-	-
- Machine operators	-	-	-	-	4	-
- Craftsmen	-	-	-	-	4	-
- Truck drivers	-	-	-	-	1	-
- Unskilled operatives	-	-	-	6	-	-
- Other full-time operatives	-	-	-	3	-	-
- Part-time operatives	-	2	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	1	-	-

EXTERNAL CONDITIONS:

Transport:	external long distance: fair	internal long distance: fair	local and city: insignificant
Utilities:	electricity: fair	water: excellent	gas: insignificant
Community:	residence: insignificant	health and recreation: fair	education: insignificant
Own Welfare Facilities:	-		

IV. MANNING TABLE

(number of persons)

Skill categories: A. Supervisory staff and foremen (for all shifts)
B. Skilled operatives
C. Semi-skilled operatives (machine operators)
D. Unskilled operatives

(1966 average)	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D		
ALL SHOPS & UNITS:	41	15	28			-	-
1. Primary operative shops	21	4	1	5	11	-	-
- Total plant	21	4	1	5	11	-	-
2. Auxiliary operative units	13	3	10			-	-
- Repair & maintenance	6	2	4			-	-
- Mechanical shop	-	-	-			-	-
- Tooling shop	-	-	-			-	-
- Utilities control	-	-	-			-	-
- Product & material storage	5	1	4			-	-
- Off-site transport	1	-	1			-	-
- Guards, cleaners, etc.	1	-	1			-	-
3. Auxiliary non-operative units	9	8	1			-	-
- Production management	3	3	-			-	-
- Research & development	2	1	1			-	-
- Sales unit	2	2	-			-	-
- Accounting	2	2	-			-	-
- General administration	-	-	-			-	-

III. INVENTORIES

(End of 1966)	Actual value (1000 US \$)	Number of months
Inventories		
TOTAL:		
- Production materials		
- Other input materials	Included in	
- Work-in-process		
- Finished products	MIDDLE EUROPE: 311-(2 a)	

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift hours/day:	9	-	-	hours
Actual hours/year:	1,980	-	-	hours
Actual days/year:	221	-	-	days

V. ANNUAL PRODUCTION

(1966)	Yr. of first prod.	Quantity produced		Av. unit price ex factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Products for group of products					
Solvents	1960	t	74	400	29
Inorganic reagents	1960	..	..	..	23
Organic reagents	1960	..	..	..	59
Others	..	..	..	..	12
Commission received					20
Revenue from research work					50
TOTAL VALUE OF PRODUCTION:					193

VI. VALUE ADDED

(1966)	Total value (000 US \$)
1. Annual wages & salaries	88
- Operative workers	49
(28 personnel)	
- Non-operative workers	39
(15 personnel)	
2. Other payments for employees	23
3. Annual depreciation	29
- Machinery & equipment	22
- Buildings & other facilities	5
- Non-physical capital assets	2
4. Rentals paid	-
5. Interests & royalties	-
6. Sales tax	16
7. Other indirect business taxes	3
8. (-) Subsidies	-
9. Corporate income before tax (loss)	(-)20
TOTAL VALUE ADDED:	139

DESCRIPTION OF MAJOR PRODUCTS:

The enterprise specializes in organic reagents for medical diagnosis, including also reagents for automatic titration and reagents for qualitative analysis, especially for spot test analysis.

Research chemicals (fine chemicals) and reagents are manufactured in small-batch production.

Packings, qualities and terms of delivery depend on the individual essences which are used for the production.

MARKET ASPECTS:

Re-sales:

Various chemicals to complete own product-mix.

Consumers of products:

Research institutes (especially institutes for medical diagnosis).

Sales organization:

Products are usually sold through specialized wholesalers.

Share in the domestic market:

About 30%.

Competition in the market:

Enterprise is facing keen competition from large national and international chemical concerns.

EXPORT:

Total annual export: approx. US \$ 40,000.

Major products	To Western countries	To Eastern countries	To Developing countries
Fine chemicals	45%	50%	-

Export price policy:

See MIDDLE EUROPE : 311 - (2 a).

VII. ANNUAL CONSUMPTION

(1966)	Quantity consumed		% input	Average input prices	Total consumption value (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity				
1. Energy and water						
TOTAL:					13	
- Electricity	000 kWh	175			6	
- Gas oil and petrol	t	30			3	
- Natural gas	000 m ³	207			4	
2. Production materials						
TOTAL:					28	
- Inorganic salts and acids, organic intermediates, solvents					28	
3. Other materials & supplies						
TOTAL:					11	
- Packaging material (glass and plastic containers, barrels)					7	
- Parts, supplies & services					4	
- Other materials & supplies					-	
4. Business services purchased						
TOTAL:					2	
- Transportation, storage & insurance					1	
- Communication, advertising & other business services					1	
5. Work performed by subcontractors						
TOTAL:					-	
TOTAL VALUE OF CONSUMPTION:					54	

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (1):	Number	Original Purchase Value (000 US \$)	Replacement value (000 US \$)	Av. Age (yrs)	Remarks	Supplier country	Year of installation	
Stainless steel reactors	2	3.6	4.2	3	Ob	Austria	1961	
Centrifuges	2	4.0	4.4	2	Ob			
Distillation plant	1	14.9	26.3	3	Ob			
Stainless steel dryer	1	3.3	4.1	4	Ob	Germany, F.R.	..	Holding capacity 50 kg Running time: 6 hrs/day Capacity output: 1,000 kg/day
Refrigerating plant	1	1.3	1.7	9	Ob	UK	1965	
25 - 500 gallon autoclaves and boiling pans of glass, enamelled	16	11.9	15.5	6	Ob	Hungary, Germany, F.R.	1958-1965	
Others	..	55.2	138.1	..	..	

CAPACITY POWER:

Process equipment:
 - electric motors kW 150
 - others " 340 (*)
 Generating equipment:
 installed capacity kVA 250 (*)
 (*) considered as spare plant capacity.

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechan.	Autom.	Further details
The total plant is moderately mechanized but not automated.				

CAPACITY UTILIZATION:

Full-capacity output: US \$ 580,000.

Current utilization: based on 1-shift operation.

Major products (by process)	Approximate %									
	up to 20	20-40	40-60	60-70	70-80	80-90	90-95	95-99	100	
Reagents organic										x
Reagents inorganic										x
Filling and re-packing of chemicals										x
Research orders										x

The installed capacity is far too large.

IX. HISTORY & PLAN

1. Performance in the past:

Year:	Total output (000 US \$)	No. of persons employed	Total output (000 US \$)
1963			
1964			
1965			
1966			see establishment No. 1
1967			(MIDDLE EUROPE : 311 - (2 e))
1968			

2. Investments in the past:

From 1957 to 1960 :	Approximate amount (000 US \$)	Type of investment
1957 to 1960 :	190	Construction of plant
in 1966 :	20	

3. Future Plan.

By 1975:	Approximate amount (000 US \$)	Details
By 1975:	390	Specialisation of product-mix reorganisation of machinery, introduction of new fabrication processes.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C = confidential; figures of this size group are included in that underlined.

Industry (1964) Basic industrial chemicals (ISIC-Code: 311)						2. Size groups by annual output of production (000 US \$):					
1. Size groups by number of persons employed:	No. of estab.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. gross prod. vol./per pers. (US \$)	Av. value added/gross prod. ratio (%)	No. of estab.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. gross prod. vol./per pers. (US \$)	Av. value added/gross prod. ratio (%)	
up to 19	59	318	1,623	12,076	41	up to 20	21	16	1,553	9,687	59
20 - 99	39	1,802	2,057	12,755	48	20 - 40	8	45	1,336	5,002	64
100 - 499	15	3,285	2,196	12,279	48	40 - 200	30	289	1,739	6,732	56
500 - 999	3	11,480	2,321	12,166	44	200 - 400	14	433	1,713	9,785	48
over 1,000	3	C	C	C	C	400 - 2,000	30	2,241	2,176	11,167	47
						over 2,000	16	13,861	2,300	12,601	45
TOTAL	119	16,885	2,256	12,249	45	TOTAL	119	16,885	2,256	12,249	45

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|---|---------------------------------------|----------------------------------|
| 1. Engineering study | 3. Technical and managerial personnel | 8. Import and export transaction |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
				<p>The establishment is interested in importing natural rubber from developing countries (e.g. from Indonesia and Malaysia).</p> <p>Foreign operatives could receive in-plant training provided language requirements can be met.</p> <p>Company is prepared to admit a limited number of workers from neighbouring European countries.</p> <p>Know-how contracts could be signed, however, difficulties arising from lacking convertibility and free transferability of royalties frequently prevent the company from doing so.</p>

XII. SUPPLEMENTS & NOTES

A4 VI. VALUE ADDED - Items 2. - 8.1

Items 2. - 8. do not correspond with reality but have been computed based

- (a) on the value added table given for the whole enterprise, summarising all value added items of the 4 establishments and
(h) on the given distribution of wages and salaries among these establishments.

Total corporate income before tax of the company amounts to US \$ 3 - 3.5 billion. Overall profits of this branch have been calculated as a residual still including a few unknown cost items due to which the amount shown might appear to be fairly high, although this branch is responsible for the overall profitability of the company.

A4 VII.4. ANNUAL CONSUMPTION - Business services purchased:

This item includes various overhead costs of the branch considered as well as of the whole company. The amount was calculated as a residual.

Technological features:

The establishment's process equipment is comparable to the one utilised in similar rubber processing plants with particular emphasis on tyres.

Inventories policy:

On the average, the value of the stock of finished products amounts to 12.5% of the total value of production.

Research and development:

The company maintains centralised laboratories for all divisions, employing some 40 - 50 full-time staff members. These facilities are located on the premises of the reporting unit.

Training:

The company has a diversified training programme for technical and commercial employees and apprentices.

NOTES ON THE WHOLE ENTERPRISE:

The two establishments not presented in detail are producing mechanical rubber products (shoes, rubber and plastic boats, rubber hoses and tubings, insulated tapes, household and operating gloves, sponges, sporting goods, etc.) and asbestos products.

Expansion and rationalisation of

- general rubber products plant
- tyre plant
- industrial products plant
- asbestos products plant

Investment in the past (US \$)

- from 1956-1967: 18,210,000
- from 1956-1967: 40,000,000
- from 1956-1967: 4,320,000
- from 1956-1967: 500,000
- in 1967: 8,000,000

Future plans

- from 1968-1970: 4,640,000
- from 1968-1970: 14,470,000
- from 1968-1970: 1,620,000
- from 1968-1970: 350,000

Depreciation policy:

The company applies both the straight-line and the accelerated methods of depreciation.

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services:

- | | | |
|---|---------------------------------------|----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export transaction |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
-----------------	-------------------	-----------------	-------------------	-------------------------

No data available.

XII. SUPPLEMENTS & NOTES

Commission work:

A special solvent based on petroleum derivatives is processed on commission basis.
Total commission received in 1966 amounted to US \$ 20,000.

Technological features:

The equipment consists of large-scale laboratory apparatuses. The most important one is a self-constructed plant for the production of a special solvent based on petroleum derivatives.

Utilisation rate: 40%.

In the filling and packing shop self-produced chemicals as well as re-sales are packed.

Current problems:

Although this establishment could increase its revenue from research work performed for other companies, the over-all balance of accounts is still negative.

Depreciation policy:

The straight-line method of depreciation is applied.

Major Products: Viscose staple fibre, viscose film (cellophane), sodium sulphate (Tlauber's salt); plants and equipment for viscose staple fibre and viscose film production. Capable of producing annually 60,000 t of fibre, 10,000 t of sodium sulphate, 5,000 t of viscose film (cellophane). In 1967 plants and equipment were manufactured for the first time. Sales amounted to approx. US \$ 500,000.

Reporting Unit: One-establishment enterprise; joint stock company, partly owned by the public; founded in 1938; about 2,300 employees; favourably located to sources of raw material, water and energy supply; intensive research work (basic research, industrial processing and mechanical engineering); company is the largest employer and important contractor of many feeder industries in this area. Enterprise shares interest in a synthetic fibre manufacturing firm. 70% exports.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (1000 US \$)	Replacement value (1000 US \$)	Average (Yrs.)
1. Primary process equipment (including installation cost)			
TOTAL	22,141	34,131	10
- Process equipment *	21,747	33,167	-
- Hand tools & apparatuses	-	-	-
2. Buildings			
TOTAL	9,404	10,248	30
- Primary industrial buildings (total floor space: 516,201 m ²)	7,344	8,000	31
- Auxiliary buildings	1,121	1,248	20
- Warehouse	40	1,000	10
- Office administration buildings	2	1,000	10
- Housing	1,169	1,000	10
3. Auxiliary facilities (excl. buildings)			
TOTAL	4,721	9,114	10
- Internal power equipment	3,933	7,537	10
- Laboratory facilities	67	401	6
- Means of transportation	11	21	4
- Office equipment	40	115	6
TOTAL PHYSICAL FIXED ASSETS (excluding land)	36,267	52,507	
4. Other fixed capital assets			
TOTAL	371	1,111	10
- Land (total acreage: 264,814 m ²)	371	1,111	10
- Land improvements (t. acc. 279,331 m ²)	100	1,111	10
- Others	60	60	10

(**) taxable value

*NB Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(1967 monthly average)	Number of persons					
	up to 100 US\$	100-140 US\$	140-160 US\$	160-240 US\$	240-560 US\$	over 560 US\$
1. Local non-operatives						
- Managers	-	-	-	-	-	18
- Engineers and chemists	-	-	-	-	34	14
- Technicians	-	11	3	17	78	-
- Accountants	-	-	-	62	44	6
- Sales officers	-	-	-	22	-	-
- Clerks and typists	-	2	5	22	-	-
- Supervisors	-	-	-	24	59	-
2. Local operatives						
- Supervisors (*)	-	-	-	4	-	-
- Foremen	-	-	-	542	-	-
- Skilled operatives	-	-	240	-	-	-
- Machine operators	-	-	-	436	-	-
- Craftsmen	-	-	-	8	-	-
- Truck drivers	-	-	-	-	-	-
- Unskilled operative	-	97	147	-	-	-
- Other full-time operatives	-	-	354	-	-	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff (**)	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

(*) Company considers supervisors as local non-operatives.
(**) Included in local non-operatives and operatives.

EXTERNAL CONDITIONS:

Transport:	external long distance	fair
	internal long distance	excellent
	local and city	insufficient
Utilities:	electricity	excellent
	water	"
	gas	insufficient
Community:	residence	fair
	health and recreation	excellent
	education	"
Own Welfare Facilities:	-	-

III. INVENTORIES

(End of 1967)	Actual value (1000 US \$)	Number of months
Inventories		
TOTAL	3,560	-
- Production materials	1,587	1
- Other input materials (*)	851	13
- Work-in-process	387	0.5
- Finished products	735	0.5

(*) Including spare-parts (US \$ 425,000). Not imputing spare-parts stocks would last for 6 months.

WORKING TIME PER OPERATIVE WORKER: See also page 4/XII

	1st shift	2nd shift	3rd shift	hours
Shift hours/day (*)	7.7	7.3	7.1	hours
Actual hours/year	2,025	1,933	1,933	hours
Actual days/year	263	263	263	days

(*) Actual hrs. Normal working time per week (5 days) 1st shift: 44 hrs, 2nd and 3rd shift: 42 hrs.

IV. MANNING TABLE

(1967 average)

ALL SHOPS & UNITS:	Total	Shift categories: A: Supervisory staff and foremen (for all shifts) B: Skilled operatives C: Semi-skilled operatives (machine operators) D: Unskilled operatives					
		A	B	C	D		
	2,272	452	-	1,210	329	288	
1. Primary operative shops	931	65	57	136	187	243	243
- Viscose department	210	12	-	34	48	58	58
- Staple fibre department	409	23	17	66	87	138	138
- Viscose film (cellophane) d.	160	15	-	25	44	38	38
- Sulphuric acid dept.	11	1	4	-	-	3	3
- Calcining dept.	11	-	-	-	5	3	3
- Plants and equipment dept.	48	10	30	8	-	-	-
- Split weaving dept.	22	4	6	3	3	3	3
2. Auxiliary operative units	1,128	218	-	779	86	45	
- Repair & maintenance	524	54	-	424	24	22	
- Mechanical shop	-	-	-	-	-	-	
- Tooling shop	-	-	-	-	-	-	
- Utilitiss control	161	46	-	73	33	9	
- Product & material storage	69	21	-	43	5	-	
- Off-site transport	48	11	-	27	10	-	
- Guards, cleaners, etc.	82	3	-	51	14	14	
- Other auxili. units	244	83	-	161	-	-	
3. Auxiliary non-operative units	220	169	-	51	-	-	
- Production managers	15	15	-	-	-	-	
- Research & development	90	41	-	42	-	-	
- Sales unit	49	49	-	-	-	-	
- Accounting	41	39	-	2	-	-	
- General administration	25	25	-	-	-	-	

V. ANNUAL PRODUCTION

Products (or group of products)	Yr. of first prod.	Quantity produced		Av. unit price ex factory (US \$)	Total output value (1000 US\$)
		Unit	Quantity		
Viscose staple fibre	1939	t	60,140	433	26,061
Viscose film (cellophane)	1952	"	3,202	350	1,121
Calcium sodium sulphate	1951	"	14,107	30	425
Sulphuric acid	1966	"	504 (*)	36	18
Yarns and fabrics	1951	"	27	848	23
Synthetic foils	1967	"	70	29	2
Plants and equipment	1967	various	-	-	499
Steam and electricity supplied	1939	-	-	-	319
Revenue from services rendered	-	-	-	-	114
TOTAL VALUE OF PRODUCTION:					31,500

(*) Not including internal consumption of 6,000 t.

VI. VALUE ADDED

(1967)	Total value (1000 US \$)
1 Annual wages & salaries	5,393
- Operative workers (1,937 persons)	4,085
- Non-operative workers (452 persons)	1,308
2 Other payments for employees	1,100
3 Annual depreciation	1,770
- Machinery & equipment	1,410
- Buildings & other facilities	4 "
- Non-physical capital assets	1 "
4 Rentals paid	173
5 Interests & royalties	160
6 Sales tax	300
7 Other indirect business taxes	9
8 (-) Subsidies	-
9 Corporate income before tax	301
TOTAL VALUE ADDED:	10,400

DESCRIPTION OF MAJOR PRODUCTS:

Viscose staple fibre: serial production; packed in bales of 170 kg; cheap fibre; suitable for versatile applications; terms of delivery: 7 weeks.
Cellophane: serial production; packed in containers of 150 kg; transparent material; time of delivery: 4 weeks.
Calc. sodium sulphate (Glauber's salt): coupled product; packed in sacks of 40 kg; delivery on long-term contracts.
Sulphuric acid: serial production; packed in containers; insignificant exports.
Synthetic foils: serial production; intermediary product; potential licensee.
Yarns and weavings: serial production; packed in cases; test product.
Plants and equipment: single production, reporting year was the first year of production.
Production plants for viscose staple fibres and viscose foils: Equipment for viscose production such as fluidized bed type heating or cooling units for alkali cellulose; soda recovery plants for the regeneration of press liquor; high-vacuum viscose deaerator, viscose aging tanks and filter presses.
High capacity spinning machines, stretching units, cutters, washing machines, Viscose film (cellophane) casting machines, viscose film coater, unwind and rewind units for viscose or plastic films and paper.
Installations and apparatus for research and development: testing equipment for the examination of pulp, of spinning processes, pilot plants for production of 100 kg/day. Automation and plant control equipment.

MARKET ASPECTS:

Market and competition:

The enterprise is capable to fully satisfy the domestic demand for viscose staple fibre; it produces about 30% of the world production and holds a share of 13% of the world export of this commodity.

Between 40 - 50% of the domestic market for cellophane are supplied by the company which manufactures about 1.5% of the world production of cellophane.

Products are mainly sold to European countries but to other countries as well.

Export price policy:

Prices for viscose staple fibre are fluctuating very strongly. In 1967 the company's profitability decreased considerably, however, not only due to lower export prices but also caused by the beginning of the production and equipment division. The interests of Europe's leading viscose staple fibre producers could be co-ordinated in 1967 in order to stabilize prices. Some non-European producers joined this agreement as well.

EXPORT:

Total annual export: US \$ 20,461,000.

Major products	To Western countries	To Eastern countries	To Developing countries
Viscose staple fibre	35%	40%	25%
Viscose film (cellophane)	90%	5%	5%

Governmental policies:

The government subsidizes exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under VI.6. has been adjusted accordingly.

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import duties (1000 US\$)	Total consumption value (1000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL:					
- Electricity	000 kWh	22,051 (*)	-	-	215
- Lignite	t	70,794	-	-	421
- Fuel oil	t	69,169	-	-	1,495
- Additives	t	19	-	-	11
- Steam	000 m3	869 (internally supplied)	-	-	-
- Water	000 m3	70,739 (" "	-	-	-
2. Production materials					
TOTAL:					
- Pulp	t	60,226	16%	(**)	16,656
- Caustic soda	t	40,062	-	-	8,866
- Carbon disulfide	100%	12,972	-	-	2,529
- Sulphuric acid	100%	56,007 (internally supplied)	-	-	1,730
- Sulphur	t	19,645	100%	-	1,333
- Zinc sulphate	t	2,792	-	-	270
- Titanium dioxide	t	353	100%	-	171
- Colours	t	776	100%	12	83
- Soaps	..	..	-	-	..
- Glycerol	t	746	50%	-	324
3. Other materials & supplies					
TOTAL:					
- Packaging material (canvas, synthetic foils and fabrics, band iron, paper, containers, sacks)					522
- Parts, supplies & services					666
- Other materials & supplies					391
4. Business services purchased					
TOTAL:					
- Transportation, storage & insurance					145
- Communication, advertising & other business services					581
5. Work performed by subcontractors					
TOTAL:					
					158
TOTAL VALUE OF CONSUMPTION:					21,261

(*) Not including 11,635,000 kWh internally supplied.
(**) Mostly non-dutiable due to transempment bond.

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (N.I.):

Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Avg. Age (years)	Remarks		Year of installation	Daily running time	Output capacity
				SC: Self-constructed	OB: Purchased second-hand			
..	3,818	6,037	25	SC (*)	D, A	1939	continuously	200 t/day
..	1,703	2,129	10	SC (*)	D, A	1960	"	"
14	2,080	3,290	6	SC	D, A, CH	1958-62	"	190 t/day
12	1,487	2,980	20	SC (*)	D, A	1939-67	"	180 t/day
12	1,772	3,493	16	SC (*)	D, A	1939-67	"	180 "
13	652	1,064	10	-	D	1939-67	"	"
2	1,311	1,509	10	SC (*)	D	1957-58	"	"
1	201	252	15	SC	-	1956	"	"
1	116	348	30	SC (*)	D	..	..	..
1	292	387	12	SC (*)	D, A	1952	continuously	50 t/day
1	1,802	2,167	10	OB, SC (*)	Italy, CH	1952-62	"	10 "
2	480	697	10	-	D	1952-67	16 hrs	10 "
..	1,134	1,277	1	SC (*)	D, A	1966	continuously	200 "
1	87	104	1	SC (*)	CH	..	..	..
..	3,323	5,728	..	..	..	..	..	..
1	16	18	2	-	Sweden	..	..	..
5	58	213	25	OB	D	..	..	..
25	33	174	25	-	..	..	..	..
16	15	19	5	-	..	..	..	..
17	111	135	5	-	..	..	..	..
10, 5, 3	45	48	3	-	..	..	..	..
2	14	24	5	-	..	..	..	..
1	..	..	..	-	..	..	..	..
..	1,000	1,084	10	-	..	..	..	..

(**) D=Germany, F.R.; CH=Switzerland; A=Austria.

CAPACITY POWER:
 Process equipment:
 - electric motors kW 55,600

Generating equipment:
 - installed capacity kVA 43,000

(*) Partially self-constructed.

CAPACITY OF PRIMARY OPERATIVE SHOPS.

Major primary operative shops	Kind of process involved	Mechanization	Automation	Further details
Viscose department	-	A	II	
Viscose staple fibre department	-	A	II	
Viscose film (cellophane) dept.	-	C	II	
Sulphuric acid department	-	A	I	
Coloring department	-	A	II	
Plants and equipment department	-	C	II	
Split weaving department	-	A	I	

CAPACITY UTILIZATION:

Full-capacity output: US \$ 38 million, i.e. after expanding the output of production plants and equipment for viscose staple fibres and viscose foils. No additional operatives seem to be necessary.

Current utilization: Based on 3-shift operation.

Major products for processing	Approximate %						
	up to 20	40	60	80	70	80	100
Viscose staple fibre							X
Viscose film (cellophane)							X
Sodium sulphate (calcined)							X
Sulphuric acid							X
Plants and equipment				X			
Yarns and weavings (test production)				X			
Synthetic foils				X			

Although the demand for viscose staple fibres did not increase significantly in 1967 on the world market, and although prices deteriorated considerably, the company was able to run its facilities at full-capacity.

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output (1000 US \$)	No. of persons employed	Total exports (1000 US \$)
1963	29,280	2,724	18,770
1964	33,370	2,679	24,100
1965	34,420	2,593	23,300
1966	30,900	2,464	20,620
1967	31,290	2,279	20,560
1968	31,730	2,240	21,280

2. Investments in the past:

From	To	Approximate amount (1000 US \$)	Type of investment
1955	1967	9,090	Diversification of product-mix
"	"	5,340	Expansion and replacement of machinery and equipment
"	"	6,540	Rationalisation of processing methods

3. Future Plan:

From	To	Approximate amount (1000 US \$)	Type of investment
1969	1974	13,540	Rationalization and automation of production processes, increase of internal production of raw material, diversification of product-mix, expansion of factory premises.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C = confidential; figures of this size group are included in the underlined figures.

(1964)

Industry: Basic industrial chemicals (ISIC Code: 311)

1. Size groups by number of persons employed	No. of estab.	No. of empl.	Avg. W. & S. per pers. (US \$)	Avg. gross prod. val./per pers. (US \$)	Avg. value added/gross prod. ratio (%)	2. Size groups by annual output		Avg. W. & S. per pers. (US \$)	Avg. gross prod. val./per pers. (US \$)	Avg. value added/gross prod. ratio (%)	
						No. of estab.	No. of empl.				
up to 19	59	318	1,673	12,076	41	up to 20	21	1,553	9,697	59	
20 - 99	39	1,802	2,087	12,755	48	20 - 40	8	1,336	5,002	64	
100 - 499	15	3,985	2,196	12,272	48	40 - 200	30	1,139	8,732	56	
500 - 999	3	11,450	2,321	12,166	44	200 - 400	14	433	9,785	48	
over 1,000	3	6	0	0	0	400 - 2,000	30	2,241	11,167	47	
						over 2,000	16	13,861	2,300	45	
TOTAL:	119	16,885	2,256	12,249	45	TOTAL:	119	16,885	2,256	12,249	45

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service

- | | | |
|---|---------------------------------------|-----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export transactions |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
1,2				The company is capable of rendering advice on any kind of financial and technical problem that might occur in connexion with the installation of a fibre production plant, of carrying out feasibility studies; of giving advice on choice of location, etc.
3				Industrial services could be provided in the form of know-how and licence agreements for the manufacture of special fibre, synthetic foils (particularly split-weaving), viscose staple fibre, and viscose film.
4				The establishment is experienced in designing machinery for the manufacture of the above mentioned products and could supply related equipment, even entire plants.
5,6				The company is willing to train personnel and to delegate to developing countries.
8				The establishment is interested in importing sulphur.

XII. SUPPLEMENTS & NOTES

History of production and investment:

Construction of the company was started in 1938, production started one year later. The break-even point was surpassed for the first time in 1963 with an output of 55,000 t of viscose staple fibre.

Contract and commission work:

5 subcontractors performed commission work amounting to US \$ 158,000.

Current problems:

The company is eager to diversify its production programme, since synthetic fibres are more and more substituted for viscose staple fibre. Therefore, the company started the production of plants and equipment in 1967.

Furthermore, the company aims at fully automated production processes.

Joint ventures:

The company founded a synthetic fibre production plant together with an international concern. Production has already started.

Off-plant training:

The company sends selected personnel to off-plant training courses.

Working time:

Additional leave is granted to that agreed upon in the collective contract. Normal working time per week (5 days) amounts to 42 hrs only in order to compensate for possible health damages.

MAJOR PRODUCTS: Soap, detergents and edible oils.
 Capable of producing annually 4,000 t of soap, 600 t of detergents, 450 t of cooking oils based on partly 2-shift operation.
REPORTING UNIT: A one-establishment enterprise founded in 1924. Private limited company. 100% local capital.

I. FIXED CAPITAL ASSETS (in 000 US \$)

(End of 1966)	Year of constr.	Orig. purchase value	Replacement value
1. Primary process equipment		64	70
total:			
- Process equipment		57	63
- Hand tools and apparatuses		1	1
- Cost of installation		6	6
2. Primary industrial building		46	56
total:			
(total floor space: 1,394 m ²)			
3. Auxiliary facilities		2	2
total:			
- Water, steam, electricity, cooling and storing		-	-
- Transportation facilities (1 pick-up t)		2	2
(total load: .. t)			
- Administrative facilities		-	-
- Laboratory facilities		-	-
TOTAL PHYSICAL FIXED CAPITAL ASSETS (incl. land):		112	128

4. Other fixed capital assets

total:			
- Land (total acreage: .. m ²)		leasehold	

DETAIL OF I.I. (supplier):

	Year of inst.	Orig. purchase value	Replacement value
Automatic soap plant (Italy)	1964	42	42
Expellers (South Africa)	1941/43	11	21
Maize mill (Grinder) (UK)	1955	2	
Maize mill (Polisher) (F.R. of Germany)	1955	2	
Seedcleaner (UK)	1955	0.3	

HISTORY OF INVESTMENT:
 Construction of the factory as well as production started in 1924.
 In 1963 US \$ 42,000 were invested for the automation of the soap-making process.

CAPACITY FORM:

Process equipment:		
- electric drive: (22)	134 kW	Generating equipment: - installed capacity: - kVA

UTILIZATION: Electricity, water, gas, fair.
COMMUNITY: Residential, health and recreational, educational, fair.

II. INVENTORIES AND WORKING CAPITAL (in 000 US \$)

(End of 1966)	Actual value	Actual value	
1. Inventories	27	26	
total:			
- Production materials	27	- Cash (hand/bank)	1
- Other input materials	-	- Market. sec. & bonds	-
- Work-in-process	-	- Short-term investment	-
- Finished products	-	- Prepaid expenses	12
		- Accounts receivable	13

3. Desired working capital

	No. of months	Value
total:		133
- Production materials	3	84
- Other input materials	-	-
- Other special items	3	49
- Finished products	-	-
- Wages and salaries	-	-

* B - Machine operators
 * C - Other operatives

III. MANNING TABLE

(1966 average)	Total	1st shift	2nd shift	3rd shift
		B ^a	C ^a	B ^a
TOTAL EMPLOYED:	35	27	8	-

1. Primary operative shops

	Total	1st shift	2nd shift	3rd shift
		B ^a	C ^a	B ^a
total:	28	6	14	8
Soap department	20	2	10	8
Detergent mixing department	5	1	4	-
Maize and oil milling department	3	3	-	-

2. Auxiliary operative units

	Total	1st shift	2nd shift	3rd shift
		B ^a	C ^a	B ^a
total:	2	2	-	-
- Repair and maintenance	-	-	-	-
- Tooling shop	-	-	-	-
- Mechanical shop	-	-	-	-
- Utilities control	-	-	-	-
- Product and material storage	-	-	-	-
- Off-site transport	1	1	-	-
- Guards, cleaners, etc.	1	1	-	-

3. Auxiliary non-operative units

	Total	1st shift	2nd shift	3rd shift
		B ^a	C ^a	B ^a
total:	5	5	-	-
- Production management	2	2	-	-
- Research and development	-	-	-	-
- Sales unit	-	-	-	-
- Accounting	-	-	-	-
- General administration	3	3	-	-

CAPACITY OF OPERATIVE SHOPS:

Shops	Processing capacity	Utilization rate - %	Automation	Mechaniz.
Soaps	0.5 t/hour *	25	fully	fully
Detergents	600 t/year	10	no	fully
Oil (expellers)	1.5 t/hour	15	no	fully
Maize (grinder polishers)	4 bags x 100 kg/hour	..	no	fully

WORKING TIME FOR OPERATIVE WORKER:

- Normal hours/day:	7.5 hours
- Normal days/year:	298 days
- Actual hours/year:	- hours

* Machine is modified to produce 0.75 t/hour. 2-shift operation.
 The low capacity utilization is due to lacking demand for non-brand soaps.

IV. ANNUAL PRODUCTION (in 000 US \$)

Products (or group of products)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price ex factory (US \$)	Total production value
		Unit	Output			
Soaps	1955	t	1,000	4,300	461.4	461
Detergents	1963	t	60	600	390.6	23
Cooking oils	1924	t	76	..	504.7	38
Maize flour	1955	t	160	..	72.7	12
Others (sheepskin, etc.)	..	..	..	..	..	6
TOTAL VALUE OF PRODUCTION						540

COMPETITIVE IMPORTS:

The tariff rate for soap and detergents is US \$ 0.12/lb and for cooking oil 25% ad valorem.

VI. VALUE ADDED (in 000 US \$)

(1966)	Value
1. Wages & salaries	
- Employees in direct production (30 persons)	11
- Other employees (5 persons)	19
2. Other payments for employees	0.3
3. Annual depreciation	7
4. Rentals paid	3
5. Interests and royalties	5
6. Sales tax	-
7. Other ind. bus. tax (Excise duty, (-) subsidies June-Dec. 1966)	47
8. Corporate income before tax	4
TOTAL VALUE ADDED:	96

VII. MONTHLY EARNING RATES (in US \$)

(End of 1966)	No. of emp.	Average earning rates
1. Local non-operatives total:	5	302
- Managers	1	560
- Engineers	1	308
- Technicians	1	420
- Accountants	-	-
- Sales officers	-	-
- Clerks and typists	2	112
2. Local operatives total:	30	28
- Supervisors	-	-
- Foremen	-	-
- Machine operators	-	-
- Craftsmen	1	28
- Truck drivers	1	30
- Other full-time operat.	28	28
- Unskilled operat.	-	-
- Part-time operat.	-	-
3. Foreign employees total:	-	-

V. ANNUAL CONSUMPTION (in 000 US \$)

(1966)	Quantity consumed	%	Tariff rate	Total consumption value
1. Energy and water total:				6
- Electricity	000 kWh	93.09	-	4
- Fuel oil	gallons	15,800	-	2
- Water	gallons	394	-	0.1
2. Production materials total:				323
- Copra	4-gallon drums	1,030	-	4
- Groundnuts	t	26	-	4
- Paddy	t	120	-	14
- Maize	t	175	-	12
- Salad oil	t	106	100	40
- Perfume	lbs	6,580	100	9
- Fatty acids	t	1,500	100	231
- Textol	t	40	100	8
- Caustic soda silicate	t	16	100	1

	Total consumption value
3. Other materials and supplies total:	51
- Packaging (metal tins, cardboard boxes) *	50
- Parts for equipment maintenance	1
4. Business services purchased total:	64
- Transport, storage and insurance	14
- Communications, advertising etc.	50
5. Work performed by sub-contractors total:	-
TOTAL VALUE OF CONSUMPTION:	444

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY (in US \$)

(1965)	No. of establs.	No. of empl.	Avr. M & S. per emp.	ISIC-code : 31	
				Avr. gross prod. val. per emp.	Avr. emp. / gross prod. ratio *
1. Size groups by employing employees:					
10 - 19	9	120	..	..	..
20 - 49	5	172	..	..	..
50 - 99	2	155	..	..	..
100 - 499	2	262	..	..	..
over 500	-	-	-	-	-
total	18	709	682	3,842	..
2. Size groups by scale of production of establishment:					
up to 2	2				
2 - 9	8				
9 - 40					
40 - 180					
180 - 240					
240 - 400					
400 - 1,600					
1,600 - 4,000					
over 4,000					
total					

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

GOVERNMENTAL POLICIES:

Maize, groundnuts, sis-sis, copra and paddy production is controlled by the government. Production quotas are allocated to firms according to capacity.

Major Products: Vegetable oils, fats and margarines. Capable of producing about 55,000 - 60,000 tons of processed oil products based on three-shift operation.

Reporting Unit: A branch-establishment founded in 1950 of a fairly decentralized multi-establishment enterprise. Mixed private and public corporation. Business year from 1 August to 31 July, participation of foreign capital 67.8%; the national share is all in public capital.

I. FIXED CAPITAL ASSETS

(End of 1966)		Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
1. Primary process equipment				
TOTAL:				
- Process equipment			2,288	5,491
- Hand tools & apparatus			1,891	4,726
- Cost of installation			1,119	297
			279	468
2. Primary industrial building				
TOTAL:				
(total floor space: 6,800 m ²)		1950	564	1,659
			664	1,659
3. Auxiliary facilities				
TOTAL:				
			634	1,585
- Water, steam, electricity, cooling & storing		1950	111	277
- Transportation facilities		1950-55	400	1,000
- Administrative facilities		1955	123	307
- Laboratory facilities			-	-
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):				
			3,586	8,735
4. Other fixed capital assets				
TOTAL:				
- Land (total acreage: 120,000 m ²)			15	6
			15	6

DETAIL OF PROCESS EQUIPMENT (cont.):

Supplier country	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
U.S.A.	1950	425.9	1,064.7
"	"	204.9	512.3
"	"	97.0	242.5
"	"	142.5	356.4
"	"	296.8	741.9
"	"	76.0	189.9
"	"	129.3	323.2
"	1966	40.7	101.8
"	"	178.3	445.8
"	1950	174.1	435.2
"	"	125.0	312.5

HISTORY OF INVESTMENT:

The factory was constructed in 1948. The first trial production started in 1949 and the first commercial production in 1950. The first profits were made when 80.5% of capacity were utilized. Following expansion investments were made: (in U.S. \$000)

1955	appr.	610	Hydrogenation department
1956	"	625	Deodorisation department
1957	"	280	Pumping station
1959	"	146	Deodorisation department
1960	"	250	Filling department
1962	"	497	Hydrogenation department

CAPACITY POWER:

Process equipment: 4,600 kW
Generating equipment: installed capacity - 6VA

EXTERNAL CONDITIONS:

Transport: Long distance, fair; local area, excellent.
Utilities: Electricity, water, excellent; gas, fair.
Community: Residential, health and recreational, educational, all fair.

II. INVENTORIES AND WORKING CAPITAL

(in 000 US \$)

(End of 1966)		Actual value	Actual value
1. Inventories		6,291	4,914
TOTAL:			
- Production materials	2,959	- Cash (hand/bank)	79
- Other input materials	583	- Market. sec. & bonds	-
- Work-in-process	944	- Short-term investment	-
- Finished products	1,805	- Prepaid expenses	157
		- Accounts receivable	4,678
2. Liquid assets			
TOTAL:			
3. Desired working capital		11,200	
TOTAL:			
- Production materials	1.5	2,880	
- Other input materials	2	640	
- Finished products	1.5	1,600	
- Wages & salaries	1	80	
- Other special items	..	6,000	

III. MANNING TABLE

(number of persons)

A - Machine operators
B - Other operatives

(1966 average)	Total	1st shift		2nd shift		3rd shift	
		A	B	A+B	A+B	A+B	A+B
ALL SHOPS & UNITS:							
	631	362	149	170			
1. Primary operative shops							
	396	102	49	92	43	70	40
Packing	234	60	35	50	30	39	20
Processing	157	42	12	42	12	31	18
Laboratory	5	..	2	1		2	
2. Auxiliary operative units							
	145	121	14	10			
- Repair and maintenance	104	99	2	3			
- Mechanical shop	-	-	-	-			
- Utilities control	-	-	-	-			
- Product & material storage	18	8	6	4			
- Off-site transport	5	2	2	1			
- Guards, cleaners, etc.	18	12	4	2			
3. Auxiliary non-operative units							
	90	90	-	-			
- Production management	3	3					
- Research & development	12	12					
- Sales unit	25	25					
- General administration	50	50					

WORKING TIME PER OPERATIVE WORKER:

shift	1	2	3
Normal hours/day:	8	7.5	7
Normal days/year:	306	306	306
Actual hours/year:	2448	2295	2142

CAPACITY OF OPERATIVE SHOPS:

Shops	Capacity	Utilisation rate	Automation and Mechanisation
Deodorisation	22 tons/day	90%	full
Hydrogenation	160 tons/day	90%	full
Gas plant	450,000 cu. ft.	60%	full

The Parent Enterprise

- Two of the sister branches which are functionally closely related to this branch, are: one dealing with raw cotton cultivation, purchase and sale (with 350 employees) and a food processing branch (with 500 employees).
- The foreign participant supplies patents and know-how.
- Total number of persons involved in the entire enterprise is a little over 1,500. The central offices is located separately with 330 employees and annual operating costs of approx. US \$ 1.7 million.

IV. ANNUAL PRODUCTION

(1966) Products (or group of products)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price or factory (US \$)*	Total production value (1000 US \$)
		Unit	Output			
Refined vegetable oils	1950	ton	13,728	13,832	488	6,699
Vegetable fats and compounds	"	"	35,954	37,856	492	17,689
Margarines and shortenings	"	"	3,640	4,732	440	1,602
Peanut butter	"	"	120	120	440	53
Other products	"	"	..	..	..	597
TOTAL VALUE OF PRODUCTION:						26,640

* Unit price does not include sales tax

EXPORTS: None.

MARKET:

A significant part of the output is sold to one of the sister branches dealing with food manufactures

CAPACITY UTILIZATION:

The existing capacity is considered as fully utilized. The figures given above for nominal capacity outputs are based on the assumption of full three shifts (8hrs on all shifts) and 52 weeks/year.

VI. VALUE ADDED

(1966)	Value (1000 US \$)
1. Wages & salaries	
- Employees in direct production (541 persons)	5,200
- Other employees (90 persons)	340
2. Other payments for employees	120
3. Annual depreciation	240
4. Rentals paid	3
5. Interests on working capital	459
6. Sales tax (not incl. in TOTAL)	(358)
7. Other ind. bus. taxes	-
8. (-) Subsidies	(-) 11
9. Corporate income before tax	822
TOTAL	2,493

VII. MONTHLY EARNING RATES

(End of 1966)	No. of emp.	Average earning rate (US \$)
1. Local non-operatives		
TOTAL:	97	220
- Managers	2	800
- Engineers	3	520
- Technicians	13	256
- Accountants	2	400
- Sales officers	25	264
- Other professional staff	14	184
- Clerks & typists	18	128
2. Local operatives		
TOTAL:	532	115
- Supervisors	14	520
- Foremen	9	168
- Machine operators	45	112
- Craftsmen	81	136
- Truck drivers	5	108
- Other full-time operatives	154	112
- Unskilled & part-time operatives	213	80
- Other specific categories	9	112
3. Foreign employees		
TOTAL:	2	2,020
- Managerial staff	1	2,040
- Engineers, trainers and other tech. control staff	1	2,000

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed			Total consumption value (1000 US \$)
	Unit	Purchased	% imported	
1. Energy and water				
TOTAL:				326
- Electricity	000kwh	9,206		145
- Liquid fuels and lubricants (incl in mats. and sup. for non-manuf. activities)				
- Gas	000 m ³	64.6		89
- Steam	000 m ³	274.3		90
- Water	000 m ³	474		2
2. Production materials				
TOTAL				20,800
- Crude cotton oil	ton	25,000	-	10,800
- Crude soya oil	"	5,000		1,840
- Crude saffron oil	"	10,000		4,080
- Crude sesame oil	"	5,000		2,000
- Crude coconut oil	"	5,000		2,080

3. Other materials & supplies	% imp.	Tariff rate	Total consumption value (1000 US \$)
TOTAL			2,448
- Packaging	-	-	2,080
- Repair & maintenance	57	20	240
- Non-factor service inputs	-	-	128
4. Business services purchased			
TOTAL:			573
- Transport, storage & insurance			36
- Communication, advertisements, etc.			537
5. Work performed by sub-contractors			
TOTAL:			-
			24,147

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)
Industry group: Vegetable and animal oils and fats (HSIC: 312)

1. Size groups by number of persons employed:	Number of estab.	Number of emp.	W. & S. per pers. (US \$)	Average gross prod. value per pers. (US \$)	Average employment rate* (%)
up to 5	25	81	448	13,876	41
6 - 15	16	164	1,303	12,960	57
16 - 75	10	374	1,397	12,797	59
101 - 500	(Data for this size class not reported in the national census)				
TOTAL	51	619	1,248	12,981	56
2. Size groups by value of annual production (1000 US \$):	Number of estab.	Number of emp.	W. & S. per pers. (US \$)	Average gross prod. value per pers. (US \$)	Average employment rate* (%)
up to 8	7	17	112	1,449	136
8 - 40	15	63	410	5,475	43
40 - 240	23	182	931	11,646	61
240 - 400	4	58	1,977	22,984	53
400 - 800	7	313	1,472	13,537	55
1,600 - 4,000	(Data for this size class not reported in the national census)				
TOTAL	56	633	1,220	12,732	56

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

GOVERNMENTAL POLICIES:

Purchase prices of seeds and sales prices (upper boundaries) of finished products are fixed by the government. Abolition of these pricing restrictions is desired.

Major Products: Milk margarine, other margarines, shortenings, compound fat, margarine lard and edible oils.
In 1967, the total output amounted to approximately 2,000 t of milk margarines, 1,200 t of other margarines, 780 t of shortenings and 500 t of edible oils on 1-shift operation.

Reporting Unit: One-establishment enterprise; founded in 1951; privately owned; medium-sized; 76 employees; no exports; no license and research activities.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (000 US \$)	Replacement value (000 US \$)	Avg. age (Yrs.)
1. Primary process equipment (including installation cost)			
TOTAL:	216	240	
- Process equipment *	214	238	
- Hand tools & apparatuses	2	2	
2. Buildings			
TOTAL:	297	391	
- Primary industrial buildings (total floor space: 1,028 m ²)	134	174	4-16
- Auxiliary buildings	63	77	15
- Warehouses	32	39	15-50
- Office administration buildings	68	101	50
- Housing	-	-	-
3. Auxiliary facilities (excl. buildings)			
TOTAL:	135	145	
- Internal power equipment	45	50	4
- Laboratory facilities	2	3	10
- Means of transportation	55	56	5
- Office equipment	33	36	5
TOTAL PHYSICAL FIXED ASSETS (excluding land):	648	776	
4. Other fixed capital assets			
TOTAL:	55	361	
- Land (total acreage: 11,512 m ²)	32	266	
- Land improvements (t.acr. 3,562 ")	10	82	
- Others (incl. intangible assets)	13	13	

*NB. Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII.)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1967 monthly average)	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1. Local non-operatives						
- Managers	-	-	-	-	-	5
- Engineers	-	-	-	-	2	-
- Technicians	-	-	-	1	-	-
- Accountants	-	-	-	-	1	-
- Sales officers	-	-	-	-	12	-
- Clerks and typists	-	-	-	1	11	-
2. Local operatives						
- Supervisors }					included in 1.	
- Foremen }						
- Skilled operatives	-	-	-	15	-	-
- Machine operators	-	-	7	7	-	-
- Craftsmen	-	-	-	-	-	-
- Truck drivers	-	-	-	-	-	-
- Unskilled operatives	-	7	7	-	-	-
- Other full-time operatives	-	-	-	-	-	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	included in 1. and 2.
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

EXTERNAL CONDITIONS:

Transport:	- external long distance:	fair
	- internal long distance:	insignificant
	- local and city:	fair
Utilities:	- electricity:	excellent
	- water:	"
	- gas:	"
Community:	- residence:	fair
	- health and recreation:	"
	- education:	"
Own Welfare Facilities:		-

III. INVENTORIES

(End of 1967)	Actual value (000 US \$)	Number of months
Inventories		
TOTAL:	162	
- Production materials	116	1
- Other input materials	-	-
- Work-in-process	-	-
- Finished products	46	1/3

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
- Shift hours/day:	9	-	-	hours
- Actual hours/year:	1,509	-	-	hours
- Actual days/year:	221	-	-	days

IV. MANNING TABLE

(number of persons)

Skill categories: A: Supervisor staff and foremen (for all shifts)
B: Skilled operatives
C: Semi-skilled operatives (machine operators)
D: Unskilled operatives

(1967 average)	Total	1st Shift				2nd Shift		3rd Shift	
		A	B	C	D	B-C	B-D	B-D	
ALL SHOPS & UNITS:	76	35	41						
1. Primary operative shops	24	4	20						
- Margarine manufacturing shop	22	4	18						
- Oil bottling shop	2	-	2						
2. Auxiliary operative units	25	4	21						
- Repair & maintenance	4	1	3						
- Mechanical shop	-	-	-						
- Tooling shop	-	-	-						
- Utilities control	1	1	-						
- Product & material storage	4	1	3						
- Off-site transport	10	1	9						
- Guards, cleaners, etc.	6	-	6						
3. Auxiliary non-operative units	27	27	-						
- Production management	1	1	-						
- Research & development	-	-	-						
- Sales unit	16	16	-						
- Accounting	8	8	-						
- General administration	2	2	-						

Major Products: Plastic foam, battery cases, rubber liners and synthetics.
Capable of producing annually approximately 3,300 t of plastic foam, 4,200 t of battery cases and 60 t of synthetics based on 2- and 3-shift operation. Full-capacity output amounts to 6,500, 000 US \$.

Reporting Unit: A branch of a 4-establishment joint stock company; privately owned; founded in 1947; 480 employees. Process equipment meets modern standards. Licensed production of plastic foams; research and development conducted by centralised laboratories (see MIDDLE EUROPE : 300 - (1 a)). 45% exports.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (000 US \$)	Fire insurance value (000 US \$)	Average age (Yrs.)
1. Primary process equipment (including installation cost)			
TOTAL	..	2,239	..
- Process equipment *	..	{ 2,239	..
- Hand tools & apparatus	..		
2. Buildings			
TOTAL	..	1,566	..
- Primary industrial buildings (total floor space: 12,886 m ²)	..	{ 1,566	..
- Auxiliary buildings	..		
- Warehouses	..		
- Office administration buildings	..		
- Housing	..		
3. Auxiliary facilities (excl. buildings)			
TOTAL
- Internal power equipment	..		
- Laboratory facilities	..		
- Means of transportation	..		
- Office equipment	..		
TOTAL PHYSICAL FIXED ASSETS (excluding land):	..	3,805	..
4. Other fixed capital assets			
TOTAL
- Land (total acreage: 53,712 m ²)	..		
- Land improvements (t. mor. 20,208 ")	..		
- Others	..		

(**) Figures are included in both primary process equipment and buildings.

*NB: Details of process equipment and capacity of primary operating shops are given on Page three (Section VIII).

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1967 monthly average)	Number of persons					
	up to 100 US\$	100 -140 US\$	140 -160 US\$	160 -240 US\$	240 -560 US\$	over 560 US\$
1. Local non-operatives						
- Managers	-	-	-	-	21	1
- Engineers	-	-	-	9	2	-
- Technicians	-	-	-	2	8	-
- Accountants	-	-	-	2	2	-
- Sales officers	-	5	3	10	-	-
- Clerks and typists	-	-	-	2	3	-
- Supervisors	-	-	-	3	-	-
- Foremen	-	-	-	-	-	-
2. Local operatives						
- Supervisors (*)	-	-	-	-	-	-
- Foremen	-	-	-	28	-	-
- Skilled operatives	-	-	-	118	-	-
- Machine operators	-	-	-	21	-	-
- Craftsmen	-	-	-	7	-	-
- Truck drivers	-	21	11	57	-	-
- Unskilled operatives	-	-	56	78	-	-
- Other full-time operatives	-	-	-	-	-	-
- Part-time operative	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operative	-	-	-	-	-	-
- Unskilled operative	-	-	-	-	-	-

Figures are included in local non-operatives and operatives.

(*) Company considers supervisors and foremen as local non-operatives.

EXTERNAL CONDITIONS:

Transport:	external long distance internal long distance local and city	excellent excellent ineignificant
Utilities:	electricity water gas	fair fair ineignificant
Community:	residence health and recreation education	excellent excellent excellent
Own Welfare Facilities:	-	-

III. INVENTORIES

(End of 1967)	Actual value (000 US \$)	Number of months
Inventories	1,036	
TOTAL:		
- Production materials	286	1.5
- Other input materials	51	3.2
- Work-in-process	133	0.4
- Finished products	566	1.0

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift hours/day:		8		
Actual hours/year:		1,706		hours
Actual days/year:		213		days

IV. MANNING TABLE

(number of personnel)

Shift categories: A. Supervisory staff and foremen (for all shifts)
B. Skilled operatives
C. Semi-skilled operatives (machine operators)
D. Unskilled operatives

(As per 30 June 1968)	Total	Shift categories					
		A	B	C	D	B-D	B-D
ALL SHOPS & UNITS:	478	70	408 (*)				
1. Primary operative shops	292	15	81	152	44		
- Raw material processing dept.	12	1	3	8	-		
- Battery case department	111	2	10	81	18		
- Synthetics department	16	2	5	3	6		
- Liner department	29	2	10	14	3		
- Single elements department	11	-	1	8	2		
- Plastic foam department	17	3	4	7	3		
- Plastic foam trimming departm.	72	4	47	14	7		
- Brake lining department	24	1	1	17	5		
2. Auxiliary operative units	122	16	106 (*)				
- Repair & maintenance	40	3	37				
- Mechanical shop	-	-	-				
- Tooling shop	-	-	-				
- Utilities control	4	2	2				
- Product & material storage	60	11	49				
- Off-site transport	14	-	14				
- Guards, cleaners, etc.	-	-	-				
- Others	4	-	4				
3. Auxiliary non-operative units	64	39	25 (*)				
- Production management	5	3	2				
- Research & development	11	11	-				
- Sales unit	-	-	-				
- Accounting	9	9	-				
- General administration	39	16	23				

(*) 2- and 3-shift operation.

V. ANNUAL PRODUCTION

(1967)	Yr. of first prod.	Quantity produced		Avg. unit price on factory (US \$)	Total output value (100 US \$)
		Unit	Quantity		
Milk margarine	1952/ 1958	t	2,010	448.2	901
Other margarines	1952	"	1,187	358.0	425
Shortenings	1952	"	781	428.9	335
Compound fats	1952	"	32	406.2	13
Margarine lard	1952	"	28	428.6	12
Edible oils	1952	"	506	387.3	196
TOTAL VALUE OF PRODUCTION:				1,882	*****

VI. VALUE ADDED

(1967)	Total value (100 US \$)
1. Annual wages & salaries	182
- Operative workers	77
1 41 persons	
- Non-operative workers	105
1 35 persons	
2. Other payments for employees	28
3. Annual depreciation	35
- Machinery & equipment	27
- Buildings & other facilities	6
- Non-physical capital assets	2
4. Rentals paid	4
5. Interest & royalties	7
6. Sales tax	32
7. Other indirect business taxes	19
8. (-) Subsidies	-
9. Corporate income before tax	22
TOTAL VALUE ADDED:	329

DESCRIPTION OF MAJOR PRODUCTS:

Units of delivery

Milk margarine	Boxes of	20 pcs / 0.25 kg	and	boxes of	4 pcs / 2.5 kg.
Other margarines	Packages of	2.5 kg	"	barrels of	180 kg.
Shortenings	Packages of	2.5 kg	"	barrels of	180 kg.
Compound fats	Boxes of	20 pcs / 0.25 kg	"	boxes of	4 pcs / 2.5 kg and barrels of 180 kg.
Margarine lard	Packages of	10.25 kg	"	packages of	180 kg.
Edible oils	Cans of	1.3 l	"	barrels of	50 kg
		10 l			180 kg.

Characteristics: manufactured in series, easily digestible, cheap, prompt delivery.

MARKET ASPECTS:

Re-sales:

US \$ 14,300.- in 1967. Hardened fat for candy production.

Customers:

Bakeries, manufacturers of bread and candies.

Sales organization:

Enterprise has own staff of salesmen.

Extent of the market:

Enterprise is capable of supplying 20% of the total domestic market.

Share in the domestic market:

Margarine: 8 - 9%, oil: 2%.

Competition with domestic producers:

One large competitor determines the conditions prevailing in the market. Prices for margarines are subject to regulations. Almost no differences in quality between competing products.

EXPORT:

No exports.

Total annual export:

Major products	To Western countries	To Eastern countries	To Developing countries

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% Import	Average input value	Total consumption value (100 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL:					16
- Electricity	000 kWh	199			7
- Coal	t	4			0.2
- Fuel oil	t	100			2
- Fuels	t	44			5
- Gas	000 m3	10			0.3
- Water	000 m3	28.5 (*)			1
- Steam	000 m3	1 (**)			-
2. Production materials					
TOTAL:					1,168
- Animal fats and oils	t	1,793	89	-	410
- Vegetable fats and oils	t	1,679	100	-	728
- Auxiliary materials (chemicals)	..	..	50	-	30

(*) 18,000 m3 internal supply not included.

(**) Internal supply not included.

3. Other materials & supplies		
TOTAL:		127
- Packaging material		123
- Parts, supplies & services		-
- Other materials & supplies		4
4. Business services purchased		
TOTAL:		249
- Transportation, storage & insurance		45
- Communication, advertising & other business services		193
5. Work performed by subcontractors		
TOTAL:		-
TOTAL VALUE OF CONSUMPTION:		1,553

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (8.1.):	Number	Original Purchase Value (\$00 US \$)	Replacement value (\$00 US \$)	Av. Age (yrs)	Remarks		Year of installation	Daily running time	Capacity output
					SH Purchased second-hand	SC Self-constructed			
Rotary mixers	2	41.8	46.4	3-11		FR.Germ.	1958,1964	5 hrs	15 t/day
Automatic packing machine (for 0.25 kg cubes)	1	28.8	29.0	2		FR.Germ.	1965	5 hrs	10 t/day
Automatic packing machine (for 0.25 kg cubes)	1	27.0	27.1	2		FR.Germ.	1965	5 hrs	10 t/day
Packing machines (for 2.5 kg blocks)	2	23.2	25.2	2-10		FR.Germ.	1961,1964	5 hrs	6 t/day
Packing machine (for 0.25 kg blocks)	1	5.1	7.7	16	SH	FR.Germ.	1961,1964	5 hrs	6 t/day
Kneader	1	2.1	2.3	3					
Cooling drum	1	0.2	0.5	20					
Roller	1	0.6	1.5	20					
Emulsifiers	3	13.2	15.5	7	SC	-	1952,1958,1967	5 hrs	15 t/day
Packing machines for samples	1	0.7	0.8	5					
Lift truck (1,250 kg capacity)	1	5.4	5.8	4					
Lift trucks	2	3.1	3.3	3-5					
Manual lift trucks	2	0.2	0.3	5					
Storage tanks	42	15.1	17.0	8					
Boilers	14	2.7	3.0	6.5					
Conveyor belts	2	1.5	1.5	0					
Cardboard stapling machines	1	2.0	2.3	5					
Pumps	4	3.9	5.0	5-8					
Compressors	5	10.9	13.5	8					
Others	..	26.6	29.8	..					

CAPACITY POWER:
 Process equipment:
 - electric motors (65) 260 kW
 Generating equipment:
 - installed capacity - 1VA

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechan.	Autom.	Further details:
				Both mechanisation and automation can be considered to be considerably high.

CAPACITY UTILIZATION:

Full-capacity output: The plant is likely to produce some 4,000 - 5,000 t of margarine and 500 - 100 t of edible oils annually on 1-shift operation.

Current utilization:

Major products for process	Approximate %				
	up to 30	40	50	60	70

The present rate of utilization is satisfactory. However, the enterprise thinks to reach maximum capacity output only after changing to 3-shift operation. This would necessitate 1 additional non-operative on each of the 3 shifts as well as 3 more operatives on the 1st and 40 more on the 2nd and 3rd shifts each. Furthermore, some US \$ 115,000.- would have to be invested. Due to saturation of the market it is rather doubtful whether this can be achieved at all.

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output (\$00 US \$)	No. of persons employed	Total exports (\$00 US \$)
1963	1,698	90	-
1964	1,927	94	-
1965	2,131	90	-
1966	2,020	86	-
1967	1,882	76	-
1968	2,128	76	-

2. Investments in the past: (*)

From 1963 to 1964	Approximate amount (\$00 US \$)	Type of investment
1963 to 1964	89	Additional buildings
1964 to 1965	135	Machinery and transportation fac.
1965 to 1966	132	New buildings and installations
1966 to 1967	28	Transportation facilities

3. Future Plan:

No plan reported.

From 19 to 19 :

(*) Construction started in 1951, production in 1952; break-even point could not be surpassed until 1960.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

* - Confidential; figures of these size groups are included in those underlined.

(1964)

Industry Vegetable and animal oil and fats (ISIC-Code: 312)

1. Size groups by number of persons employed:	No. of estab.	No. of emp.	Avg. W. & S. per pers. (US \$)	Avg. gross prod. val. per pers. (US \$)	Avg. value added/gross prod. value (%)
up to 19	28	115	1,600	13,896	31
20 - 99	6	1,430	2,379	21,105	30
100 - 499	2	6*	0*	0*	0*
500 - 999	1	0*	0*	0*	0*
over 1,000	-	-	-	-	-
TOTAL:	35	1,545	2,321	26,568	30

2. Size groups by annual value of production (\$00 US \$):	No. of estab.	No. of emp.	Avg. W. & S. per pers. (US \$)	Avg. gross prod. val. per pers. (US \$)	Avg. value added/gross prod. value (%)
up to 20	11	2*	522	17,725	52
20 - 40	4	0*	0*	0*	0*
40 - 200	7	54	1,161	11,184	35
200 - 400	3	0*	0*	0*	0*
400 - 2,000	6	1,489	2,365	27,136	30
over 2,000	4	0*	0*	0*	0*
TOTAL:	35	1,545	2,321	26,568	30

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service

- | | | |
|---|---------------------------------------|--------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export promotion |
| 2. Financial estimates | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultation | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
-----------------	-------------------	-----------------	-------------------	-------------------------

No co-operation possibilities with developing countries reported.

XII. SUPPLEMENTS & NOTES

Current problems: Keen competition; prices for products not covered by price regulations are subject to heavy pressure, very tight calculation required.

Major Products: Paints and synthetic resins. Capable of producing annually 2,400,000 l of paints on a 2-shift operation and 116,100 l of resins on 3-shift operation.

Reporting Unit: A one-establishment enterprise, founded in 1948; private corporation; no participation of foreign capital. The enterprise has 13 sales branches separately located, employing altogether 60 persons. The central office is also located separately.

I. FIXED CAPITAL ASSETS

(End of 1966)

	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
1. Primary process equipment			
TOTAL:		217	..
- Process equipment		212	}
- Hand tools & apparatuses		18	
- Cost of installation		47	
2. Primary industrial building		219	..
TOTAL:		219	..
(total floor space: 10,000 m ²)			
3. Auxiliary facilities		116	..
TOTAL:			
- Water, steam, electricity, cooling & storing		36	}
- Transportation facilities		..	
- Administrative facilities		80	
- Laboratory facilities		..	
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		612	..
4. Other fixed capital assets		20	132
TOTAL:		20	132
- Land (total acreage: 15,000 m ²)		20	132

DETAIL OF PROCESS EQUIPMENT (no.):	Supplier country	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
- Resins plants	FR, Germ. and USA	1961	41	}
- Paints department	"	1952-1958	156	
- Laboratory	"	1952-1958	14	

HISTORY OF INVESTMENT:

Construction of the factory was started in 1952. The first trial as well as commercial production started in 1952. The break-even point was surpassed for the first time, when 80% of capacity was utilized. The following investments in subsequent years:

1952	US \$ 160,000	starting paints production
1958	" " 140,000	expansion " "
1961	" " 111,000	starting resins "

CAPACITY POWER:		Generating equipment:	
Process equipment:	373 kW	Installed capacity:	- kVA
- Electric motor:			

EXTERNAL CONDITIONS:
 Transport: Long distance and local area, fair.
 Utilities: Electricity, excellent; water, self-supply.
 Community: Residential, health, recreational and educational, poor.

II. INVENTORIES AND WORKING CAPITAL

(in 000 US \$)

(End of 1966)

1. Inventories	Actual value	2. Liquid assets	Actual value
TOTAL:	569	TOTAL:	533
- Production materials	281	- Cash (hand/bank)	51
- Other input materials	-	- Market. sec. & bonds	-
- Work-in-process	-	- Short-term investment	-
- Finished products	288	- Prepaid expenses	-
		- Accounts receivable	482

3. Desired working capital	Number of months	Value
TOTAL:		1,096
- Production materials	4	280
- Other input materials	-	-
- Finished products	1.5	288
- Wages & salaries	2	48
- Other special items	3	480

III. MANNING TABLE

(number of persons)

A - Absolute operators
B - Other operators

(1966 average)

ALL SHOPS & UNITS:

	Total	1st shift		2nd shift	
		A	B	A+B	A+B
1. Primary operative shops	211	186		21	
	=====	=====	=====	=====	=====
- Furnaces	4	2	-	2	-
- Reactors	10	4	-	3	3
- Mills	8	5	-	3	-
- Smoothing	6	6	-	-	-
- Packaging	6	2	-	4	-
- General operative and assistants	27	-	20	-	7
2. Auxiliary operative units	26	23		2	
- Repair and maintenance	5	4	-	-	1
- Mechanical shop	-	-	-	-	-
- Utilities control	5	5	-	-	-
- Product & material storage	8	8	-	-	-
- Off-site transport	3	3	-	-	-
- Guards, cleaners, etc.	5	3	-	2	-
3. Auxiliary non-operative units	124	124		-	
- Production management	19	19		-	
- Research & development	-	-		-	
- Sales unit (13 sales branches)	60	60		-	
- General administration	45	45		-	

WORKING TIME PER OPERATIVE WORKER:

- Normal hour/day:	8 hours	- Normal days/year:	302 days
- Actual hours/year:	2,416 hours		

CAPACITY OF OPERATIVE SHOPS:

The capacity of reactors department is 116,200 l of resins. It is highly automated and mechanized, and fully utilized. The management and administration (central office) is located separately, having 27 employees. The wages and salaries and other annual operating costs of the central office amount to US \$ 103,400.

IV. ANNUAL PRODUCTION

(1966) Products (or group of products)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price on factory (US \$)	Total production value (1000 US \$)
		Unit	Output			
- Paints	1952	000 1	1,567	2,400	1,287 ¹	2,006
- Resins	1961	000 1	116.2	116.1		149
TOTAL VALUE OF PRODUCTION						2,155

VI. VALUE ADDED

(1966)	Value (1000 US \$)
1. Wages & salaries	
- Employees in direct production (87 persons)	79
- Other employees (124 persons)	251
2. Other payments for employees	477
3. Annual depreciation	36
4. Rentals paid	20
5. Interests & royalties	106
6. Sales tax (not incl. in TOTAL)	(54)
7. Other ind. bus. taxes	46
8. (-) Subsidies	(-) 8
9. Corporate income before tax	147
	1,156

EXPORTS: None.

CAPACITY UTILIZATION:

The new plant for synthetic resins is operating at full capacity. The demand for paints is subject to seasonal fluctuations. Despite the strong sales effort, using 13 own sales branches, it is difficult to realize the 2,400 t/yr. level (nominal maximum production level estimated for the plant).

VII. MONTHLY EARNING RATES

(End of 1966)	No. of empl.	Average earning rate (US \$)
1. Local non-operatives		
TOTAL:	86	356
- Managers	3	1,600
- Engineers	7	480
- Technicians	5	740
- Accountants	3	320
- Sales officers	10	480
- Other professional staff	-	-
- Clerks & typists	40	160
2. Local operatives		
TOTAL:	134	90
- Supervisors	1	720
- Foremen	3	160
- Machine operators	3	160
- Craftsmen	5	112
- Truck drivers	3	120
- Other full-time operatives	112	80
- Unskilled & part-time operatives	-	-
3. Foreign employees		
TOTAL:	1	1,120
- Managerial staff	1	1,120

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed			Tariff rate	Total consumption value (1000 US \$)
	Unit	Purchase	% Imported		
1. Energy and water					13
TOTAL:					13
- Electricity	000 KwH	..			9
- Liquid fuels and lubricants		..			4
2. Production materials					821
TOTAL:					821
- Flax seed oil	t	78	-		29
- Titanium dioxide	t	52	-		39
- Other pigments	t	43	40		39
- Other oils	t	68	-		31
- Alkyd resins and vinyl resins	t	150	-		82
- Other resins	t	98	80		165
- Crorylic acids	t	140	100		56
- Resorcin	t	40	100		53
- Phthalic anhydride	t	50	80		28
- Naphtic, telvol and other solvents	m3	844	-		94
- Octylphenol	m3	35	100		20
- Others (tar, butylphenol, etc.)		..			185

3. Other materials & supplies

	Total consumption value (1000 US \$)
TOTAL:	90
- Packagings	1
- Repair & maintenance	16
- Non-factor service inputs	73
4. Business services purchased	
TOTAL:	75
- Transport, storage & insurance	20
- Communication, advertisements, etc.	55
5. Work performed by sub-contractors	
TOTAL:	-
	999

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)
Industry group: **Manufacture of paints, varnishes and lacquers** (ISIC: 313)

1. Size groups by number of persons employed	Number of units	Number of empl.	Av. W. & S. per pers.		Av. emp. ratio* (%)
			US \$	US \$	
up to 25	70	743	1,364	22,029	65
26 - 50	25	915	1,938	12,748	59
51 - 100	9	558	2,087	14,294	73
over 100	11	2,187	1,946	15,080	68
TOTAL	115	4,403	1,864	13,812	67

2. Size groups by value of annual production (1000 US \$)	Number of units	Number of empl.	Av. gross prod. val. per pers.		Av. emp. ratio* (%)
			US \$	US \$	
up to 8	9	25	384	1,968	134
8 - 40	19	104	603	3,967	107
40 - 120	20	258	1,035	6,233	66
120 - 240	22	407	1,402	9,359	70
240 - 400	17	391	1,820	13,492	64
400 - 1,600	22	1,167	2,048	14,040	65
1,600 - 4,000	7	1,112	2,171	17,105	77
over 4,000	3	943	1,866	17,483	57
TOTAL	119	4,609	1,861	13,821	67

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

Government policies:

Problems in importing those production materials which are not yet produced in the country. Those non-competitive imports ought to be facilitated.

Future plans:

Within the period from 1966-1969, approx. US \$ 240,000 will be invested for tripling the production of resins. Additional 15 operatives will then be employed.

Major Products: Synthetic resin and oil varnishes, paints, thinners and other related products.
Total annual output amounted to approximately 15,000 t of varnishes, 1,600 t of paints and putties, and 700 t of thinners, based on 1-shift operation.

Reporting Unit: A one-establishment enterprise, privately owned, founded in 1947; 450 employees; largest company in this line of business in the country; favourably located with respect to proximity of market; about 30% of staff is engaged in research activities; high rate of exports; expenditures for research approximately US \$ 1,6 million.
Business year: 1/5/1967 - 30/4/1968.

I. FIXED CAPITAL ASSETS

(30/5/1968)	Original purchase value (1000 US \$)	Replace (*) (1000 US \$)	Average age (Yrs.)
1. Primary process equipment (including installation cost)	920	1,355	6
TOTAL	920	1,355	6
- Process equipment *			
- Hand tools & apparatuses }			
2. Buildings	1,420	1,147	-
TOTAL	542	406	-
- Primary industrial buildings (total floor space: 5,425 m ²)	514	478	-
- Auxiliary buildings	238	201	-
- Warehouses	126	62	-
- Office administration buildings	-	-	-
- Housing	-	-	-
3. Auxiliary facilities (excl. buildings)	477	545	4
TOTAL	-	-	-
- Internal power equipment	116	128	4
- Laboratory facilities	224	266	3
- Means of transportation	137	151	5
- Office equipment	-	-	-
TOTAL PHYSICAL FIXED ASSETS (excluding land):	2,817	3,047	
4. Other fixed capital assets	789	1,358	-
TOTAL	-	337	-
- Land (total acreage: 40,866 m ²)	..	132	-
- Land improvements (t.acr. 16,284 ")	..	132	-
- Others	789	789	-

(*) Fire insurance value

*NB Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1967/68 monthly average)	Number of persons					
	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1. Local non-operatives	-	-	-	-	-	24
- Managers	-	-	-	-	13	2
- Engineers	3	5	4	24	26	-
- Technicians	-	-	-	3	5	-
- Accountants	-	-	-	-	22	6
- Sales officers	-	-	-	-	6	-
- Clerks and typists	4	14	-	20	18	-
- Supervisors	-	-	-	3	-	-
2. Local operatives	-	-	-	-	-	-
- Supervisors (*)	-	-	-	-	4	-
- Foremen	-	-	-	4	17	-
- Skilled operatives	-	-	-	27	-	-
- Machine operators	-	-	-	3	18	-
- Craftsmen	-	-	-	-	4	-
- Truck drivers	-	-	-	-	-	-
- Unskilled operatives	-	28	-	7	-	-
- Other full-time operatives	-	-	18	120	-	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees	-	-	-	-	-	-
- Managerial staff	Included in above figures.					
- Technical staff	Included in above figures.					
- Other skilled operatives	Included in above figures.					
- Unskilled operatives	Included in above figures.					

(*) The company considers supervisors as local non-operatives.

EXTERNAL CONDITIONS:

Transport:	external long distance	excellent
	internal long distance	fair
	local and city	insignificant
Utilities:	electricity	fair
	water	"
	gas	"
Community:	residence	fair
	health and recreation	"
	education	"
Own Welfare Facilities:		

III. INVENTORIES

(30/5/1968)	Annual value (1000 US \$)	Number of months
Inventories	902	
TOTAL	581	1
- Production materials	6	1
- Other input materials	15	1
- Semi-finished products	300	1,5
- Finished products	-	-

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	
- Shift hours/day:	10 (*)	-	-	hours
- Actual hours/year:	2,088	-	-	hours
- Actual days/year:	209	-	-	days

(*) Due to overtime. Normal hours: 9 shift.

IV. MANNING TABLE

(number of persons)

Shift categories: A. Supervisory staff and foremen (for all shifts)
B. Skilled operatives
C. Semi-skilled operatives (machine operators)
D. Unskilled operatives

(as per 31/12/1967)

ALL SHOPS & UNITS:	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	B-C	B-D
ALL SHOPS & UNITS:	459	217	-	242	-	-	-
1. Primary operative shops	93	2	-	72	19	-	-
- Cooking	3	-	-	3	-	-	-
- Grinding	17	1	-	16	-	-	-
- Mixing	23	1	-	13	9	-	-
- Conditioning	4	-	-	4	-	-	-
- Completing	13	-	-	12	1	-	-
- Shading	10	-	-	10	-	-	-
- Filling	23	-	-	14	9	-	-
2. Auxiliary operative units	131	31	-	100	-	-	-
- Repair & maintenance	21	3	-	18	-	-	-
- Mechanical shop	-	-	-	-	-	-	-
- Tooling shop	-	-	-	-	-	-	-
- Utilities control	3	3	-	-	-	-	-
- Product & material storage	33	6	-	27	-	-	-
- Off-site transport	18	7	-	11	-	-	-
- Guards, cleaners, etc.	34	1	-	33	-	-	-
- Others	22	11	-	11	-	-	-
3. Auxiliary non-operative units	235	184	-	51	-	-	-
- Production management	12	12	-	-	-	-	-
- Research & development	119	68	-	51	-	-	-
- Sales unit	63	63	-	-	-	-	-
- Accounting	25	25	-	-	-	-	-
- General administration	16	16	-	-	-	-	-

V. ANNUAL PRODUCTION

(1967/68)	Yr. of first prod.	Quantity produced		Av. unit price on factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
- Oil paints and putties	..	t	637	640	408
- Paints and varnishes based on oil and synthetic resins	..	"	9,038	816	7,377
- Other paints and lacquers	..	"	6,278	814	5,113
- Thinners based on oil and synthetic resins	..	"	451	146	156
- Thinners for other oil paints and varnishes	..	"	261	429	112
- Emulsions and dispersions	..	"	1,011	593	600
- Coating material, auxiliary material	..	"	40	735	29
TOTAL VALUE OF PRODUCTION:					13,795

VI. VALUE ADDED

(1967/68)	Total value (000 US \$)
1. Annual wages & salaries	2,139
- Operative workers (245 persons)	685
- Non-operative workers (207 persons)	1,454
2. Other payments for employees	121
3. Annual depreciation	322
- Machinery & equipment	58
- Buildings & other facilities	158
- Non-physical capital assets	106
4. Rentals paid	27
5. Interests & royalties	186
6. Sales tax	300
7. Other indirect business taxes (fees)	24
8. (-) Subsidies	-
9. Corporate income before tax	1,990
TOTAL VALUE ADDED:	5,109

DESCRIPTION OF MAJOR PRODUCTS:

Quality of products and customer service are superior to those of competitors.

Packings: cans and barrels.

Terms of delivery: 1 - 2 weeks after placement of order by the customer.

MARKET ASPECTS:

Re-sales:

Sales of raw material, mainly thinners, resulting from barter-transactions, amounting to US \$ 515,000.

Consumers of products:

Mainly automobile industry, furniture industry, metalworking industry, building trade.

Sales organization:

Company employs salesmen to cover domestic market. Otherwise direct sales.

Extent of the market:

Sales radius: primarily domestic market. Subsidiary companies in 2 European states and the USA produce under licence agreements.

Share in the domestic market: 34%.

Export price policy:

Adjustment to prevailing market conditions.

Competition:

No comparable qualities in the market.

EXPORT:

Total annual export: US \$ 9 million

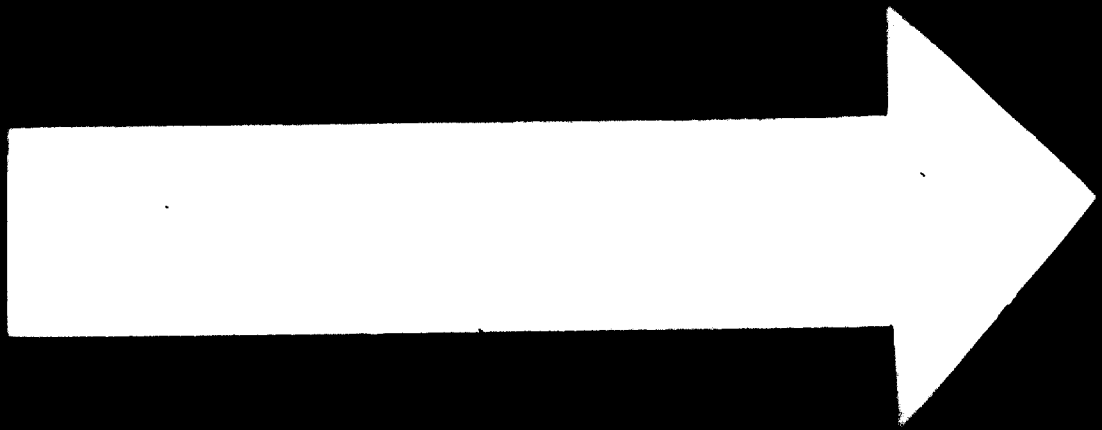
Major products	To Western countries	To Eastern countries	To Developing countries
Varnishes	20%	80%	-
Thinners	20%	80%	-

Governmental policies:

The government subsidizes exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under VI.6. has been adjusted accordingly.

VII. ANNUAL CONSUMPTION

(1967/68)	Quantity consumed		% import	Average import price (000 US \$)	Total consumption value (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity				
1. Energy and water						60
TOTAL:						
- Electricity	000 kWh	1,172				30
- Coke	t	27.5				1
- Fuel oil: light, medium heavy	t	33				2
- Gas oil	t	616				20
- Gas oil	t	27				2
- Water	000 m ³	..				5
2. Production materials						7,199
TOTAL:						
- Binding agents	t	9,200	25	225	4,489	
- Pigments and fillers	t	3,300	70	161	1,277	
- Solvents	t	6,300	50	30	851	
- Others	t	1,200	90	49	542	
3. Other materials & supplies						690
TOTAL:						
- Packaging material						564
- Parts, supplies & services						91
- Other materials & supplies						35
4. Business services purchased						577
TOTAL:						
- Transportation, storage & insurance						295
- Communications, advertising & other business services						282
5. Work performed by subcontractors						-
TOTAL:						
TOTAL VALUE OF CONSUMPTION:						8,486



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V. ANNUAL PRODUCTION

(1967)	Yr. of prod.	Quantity produced		Av. unit price ex factory RUB \$)	Total output value (000 US\$)
		Unit	Quantity		
Battery cases	1950	t	3,333	458.2	1,527
Plastic foam	1964	t	2,650	1,078.4	2,858
Linere	1949	t	12.3	32,298.4	388
Synthetic	1950	t	45	4,504.7	203
Brake linings	1949	t	86	2,349.9	202
TOTAL VALUE OF PRODUCTION:					5,178 *****

VI. VALUE ADDED

(1967)	Total value (000 US \$)
1. Annual wages & salaries	
- Operative workers (408 persons)	799
- Non-operative workers (70 persons)	430
2. Other payments for employees	288
3. Annual depreciation	514
- Machinery & equipment	14
- Buildings & other facilities	
- Non-physical capital assets	
4. Rentals paid	49
5. Interests & royalties	194
6. Sales tax	146
7. Other indirect business taxes	4
8. (-) Subsidies	-
9. Corporate income before tax	162
(*) Items 2.-8. see page 4.XII. Supplements	TOTAL VALUE ADDED: 2,586 *****

DESCRIPTION OF MAJOR PRODUCTS:

Battery cases: high electric strength; plastic foam: homogeneous foamed plastic;

brake linings: standard quality; all serial production; prompt delivery;

synthetic: still in stage of development; production to order;

linere: product meets highest requirements; single production; manufactured to order.

MARKET ASPECTS:

Consumers of products:

Electrical industry, furniture industry, automobile industry.

Sales organization:

See MIDDLE EUROPE : 300 - (1 a).

Sales area:

Plastic foam : Europe.

Share in the domestic market:

Battery cases and plastic foam 70% each.

Competition in the market:

Imported goods are frequently sold below market prices. Company meets foreign competition with higher quality of products and better service.

EXPORT:

Total annual export: US \$ 2,400,000.

Major products	To Western countries	To Eastern countries	To Developing countries
Battery cases	90%	10%	-
Plastic foam	70%	30%	-

Export price policy:

Depending on market situation.

Governmental policies:

The government subsidizes exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under VI.6. has been adjusted accordingly.

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import prices (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL:					145
- Electricity	000 kWh	3,822	-	-	73
- Brown coal	t	5,691	-	-	57
- Water	000 m3	189	-	-	15
- Steam (*)	t	24	-	-	-
(*) Internally supplied.					
2. Production materials					
TOTAL:					2,257
- Natural rubber	t	40	100	-	29
- Synthetic rubber	t	390	100	-	122
- Reclaimed rubber	t	671	-	-	65
- Textiles	t	50	30	10	127
- Chemicals, plastics	t	5,217	90	94	1,748
- Other materials	..	..	..	..	166

3. Other materials & supplies

TOTAL:	115
- Packaging material	90
- Parts, supplies & services	24
- Other materials & supplies	1

4. Business services purchased

TOTAL:	75
- Transportation, storage & insurance	75
- Communication, advertising & other business services	

5. Work performed by subcontractors

TOTAL:	-
--------	---

TOTAL VALUE OF CONSUMPTION: 2,592

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (1.1):	Number	Original Purchase Value (000 US \$)	Replacement value (000 US \$)	Av. Age (yrs)	Remarks	Supplier country	Year of installation	Daily running time
					SH Purchased second-hand OH Obsolete R Rented SC Self-constructed			
Mixing plants	2					Germany, F.R.	1955-1965	16-24 hrs
Plastic foam plants	3					Germany, F.R.	1965	16-24 hrs
Celenders	2					Germany, F.R.	1955-1958	16-24 hrs
Presses (heated)	54					Austria	1955-1967	16-24 hrs
Vulcaniser	1					Germany, F.R.	1955-1968	16-24 hrs
Cutting machines	5		No details available.			Germany, F.R.	1957-1962	16-24 hrs
Automatic spraying machine	1					Germany, F.R.	1955-1967	16-24 hrs
						Austria	1958-1968	16-24 hrs
Flaking mills	2							
Lathes	2							
Cranes	3							
Wagons	4							
Lifts	2							
Stacker trucks	3							
Drilling machines	5							

CAPACITY POWER:
 Process equipment:
 electric motors kW - 2,230
 Generating equipment:
 installed capacity kVA -

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization:		Further details:
		A most advanced B considerably high standard	C moderate standard D appreciably short of today's standard E almost outdated	
Raw material processing dept.			C III	
Battery case department			B I	
Synthetic department			C III	
Liners department			B III	
Single elements department			C III	
Plastic foam department			A I	
Plastic foam trimming department			B II	
Brake linings department			C II	

Automation:
 I fully automated II semi-automated III non-automated

CAPACITY UTILIZATION:
 Full-capacity output: 100 000 000

Current utilization: based on 2- and 3-shift operation.

Major products (or processes)	Approximate %						
	up to 30	40	50	60	70	80	90 100

All departments are operating at 80-90 capacity.

IX. HISTORY & PLAN

	Total sales (000 US \$)	No. of persons employed	Total exports (000 US \$)
1. Performance in the past: (*)			
Year: 1963	..	8,113	..
1964	74,536	8,315	20,627
1965	80,457	8,872	23,297
1966	85,101	8,374	24,458
1967	89,900	8,220	31,773
1968	96,750	8,985	38,700

(*) of the whole enterprise.

2. Investments in the past:	Approximate amount (000 US \$)	Type of investment
From 1956 to 1958:	360	Expansion and rationalisation of product-mix, process equipment, production processes and primary operative shops.
" 1959 " 1964:	2,700	
" 1965 " 1967:	1,260	
in 1967:	260	

3. Future Plan:
 From 1968 to 1970: 1,620 See IX.2. above.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1964)

Industry: Manufacture of rubber products (ISIC-Code: 300)

C = confidential; figures of these size groups are included in those underlined.

1. Size groups by number of persons employed:	No. of estab.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. gross prod. vol./per pers. (US \$)	Av. value added/gross prod. ratio (%)	2. Size groups by annual scale of production (000 US \$):		Av. W. & S. per pers. (US \$)	Av. gross prod. vol./per pers. (US \$)	Av. value added/gross prod. ratio (%)	
						No. of estab.	No. of empl.				
up to 19	37	142	1,405	6,444	65	up to 20	22	984	4,753	69	
20 - 99	5	235	1,437	16,631	18	20 - 40	8	1,112	5,900	62	
100 - 499	1	8,286	1,360	3,356	57	40 - 200	9	1,524	5,661	67	
500 - 999	1	C	C	C	C	200 - 400	2	C	C	C	
over 1,000	2	C	C	C	C	400 - 2,000	2	C	C	C	
						over 2,000	4	8,462	1,854	2,109	55
TOTAL:	47	8,663	1,342	9,027	55	TOTAL:	47	8,663	1,842	9,027	55

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|---|---------------------------------------|---------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export promotion |
| 2. Financial assistance | 6. Industrial training | 9. Attraction of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of services	Country or region	No. of projects	Field of industry	Description of projects
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See MIDDLE EUROPE : 300 - (1 a).

XII. SUPPLEMENTS & NOTES

AD VI. VALUE ADDED:

Items VI.2.-8. do not correspond with reality but have been computed based on

- (a) the value added table given for the whole enterprise summarising all value items of the 4 establishments and
- (b) the given distribution of wages and salaries among those establishments.

Overall profits of this branch have been calculated as a residual still including a few unknown cost items.

Inventorying policy:

On the average the value of the stock of finished products amounts to 9.3% of the total value of production.

Major Products:

Ammonium sulphate and single super phosphate (produces ammonia and sulphuric acid internally). Capable of producing annually 150,000 t ammonium sulphate and 118,000 t single super phosphate on 3-shift operation. The capacity for ammonia and sulphuric acid production is 22,000 t and 135,000 t, respectively. Financially independent branch of a multi-industrial enterprise founded in 1943; public corporation; no participation of foreign capital. This branch was founded in 1949.

Reporting Unit:

I. FIXED CAPITAL ASSETS

(End of 1966)	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
1. Primary process equipment			
TOTAL		5,307	..
- Process equipment		5,251	..
- Hand tools & apparatuses		56	..
- Cost of installation (incl. in primary equipment)			..
2. Primary industrial building		2,144	..
TOTAL		2,144	..
(total floor space: 10,300 m ²)			
3. Auxiliary facilities		1,454	..
TOTAL		1,454	..
- Water, steam, electricity, cooling & storing		1,240	..
- Transportation facilities		114	..
- Administrative facilities		163	..
- Laboratory facilities			..
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		8,945	..
4. Other fixed capital assets		31	..
TOTAL		31	..
- Land (total acreage: 114,300 m ²)		63	..
- Others		12	..

DETAIL OF PROCESS EQUIPMENT (no.)	Supplier country	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
Ammonium equipment	USA		1,298	..
Sulphuric acid equipment		60	661.1	..
Ammonium sulphate equipment		in	698.7	..
Super phosphate equipment		1961	181.3	..
Other equipment			1,475.9	..

HISTORY OF INVESTMENT:

The construction of the factory started in 1949. The first trial as well as commercial production started in 1951. The following investments were made for expansion purposes: (in 000 US \$)

1953 approx.	168	for single super phosphate plant
1958 "	187	" sulphuric plant
1964 "	267	" gas purification plant
1955 "	136	" crystallization of ammonium sulphate
1967 "	174	" mixing equipment.

THE PARENT ENTERPRISE:

The parent enterprise has altogether 6 branches and 1 headquarters. The other 5 branches are functionally not related to this branch. The total employment of the parent company is a little over 2,000, of which the headquarters has 230 employees (annual operating costs some US \$ 1.7 million).

CAPACITY POWER:

Process equipment:	
- Electric motors	3,742 kW
- Other prime movers	5,000 "

Generating equipment:
Installed capacity - kVA

EXTERNAL CONDITIONS:

Transport: Long distance, excellent; local area, fair.
Utilities: Electricity and water internally supplied; gas, excellent.
Community: Residential, health and recreational, educational, fair.

II. INVENTORIES AND WORKING CAPITAL

(in 000 US \$)

(End of 1966)	Actual value	2. Liquid assets	Actual value
1. Inventories	1,474	TOTAL:	5,935
TOTAL	1,474	- Cash (hand/bank)	290
- Production materials	250	- Market. sec. & bonds	75
- Other input materials	1,095	- Short-term investment	2,728
- Work-in-process	-	- Prepaid expenses	246
- Finished products	129	- Accounts receivable	2,656
3. Desired working capital			
	Number of months	Value	
TOTAL		7,472	
- Production materials	1	248	
- Other input materials	12	1,096	
- Finished products (*)		128	
- Wages & salaries			
- Other special items	..	6,000	
(*) see below.			

III. MANNING TABLE

(number of persons)

A - Machine operator
B - Other operators

(1966 average)	Total	1st shift A	2nd shift B	3rd shift A+B
ALL SHOPS & UNITS:	646	360	118	99
1. Primary operative shops	123	34	30	29
- Ammonia department	96	14	-	11
- Sulphuric acid department	18	6	-	6
- Single super phosphate	21	7	-	7
- Ammonium sulphate dept.	9	3	-	3
- Mixing department	9	4	-	3
- Substitute	30	(as required)		
2. Auxiliary operative units	455	268	80	68
- Repair and maintenance	162	140	12	10
- Mechanical shop	-	-	-	-
- Utilities control	7	5	1	1
- Product & material storage	8	8	-	-
- Off-site transport	3	3	-	-
- Guards, cleaners, etc.	28	10	9	9
- Packing and shipment	208	102	58	48
- Substitute	39	(as required)		
3. Auxiliary non-operative units	68	58	8	2
- Production management	10	10	-	-
- Research & development	-	-	-	-
- Sales unit	-	-	-	-
- General administration	25	25	-	-
- Others (waiters, gardeners, messengers)	33	23	8	2

WORKING TIME PER OPERATIVE WORKER:

- Normal hours/day:	8 hours	Normal day/year:	299 days
- Actual hours/year:	2,392 hours		

CAPACITY OF OPERATIVE SHOPS:

The processing of ammonium sulphate is limited by the supply capacity of ammonia and sulphuric acid; the processing of superphosphate is also limited by the supply capacity of sulphuric acid. Production lines are highly automatic.

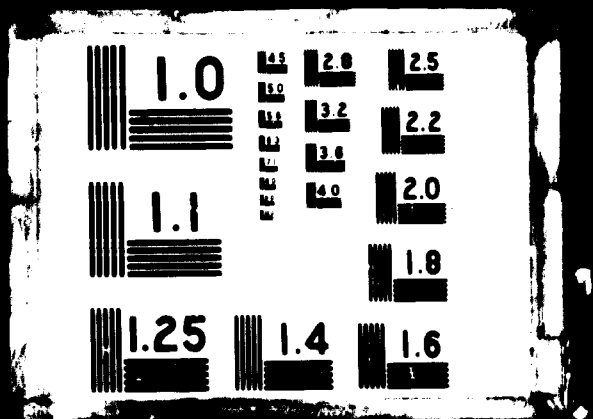
(*) The storage facilities within the enterprise are limited. A large quantity of finished products is stored with the facilities of local storage companies.

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VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (8.1.1):

Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Age (yrs)	Remarks	Supplier country	Daily running time	Capacity output
Roller frames	16	..	..	Ob	Ger., D.R.	12 hrs.	1,200 t/month
Sand mills	6	..	..	3	Ger., F.R. Belgium	12 "	"
Mixers	8	..	..	3	Belgium, USA Ger., F.R.	12 "	"
Ball mills	4	..	..	3	Ger., F.R.	24 "	"
Containers (20 t)	20	..	..	..
Containers (5-10 t)	25	..	..	..
Scales	20	..	..	..
Machines for washing packagings	4	..	..	..
Pumps	30	..	..	..

CAPACITY POWER:
 Process equipment:
 - electric motors kW 1,681
 Generating equipment:
 - installed capacity kVA -

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization		Further details
		Mechan.	Automat.	
Cooking		C	III	
Grinding		C	VII	
Mixing		C	III	
Conditioning		C	III	
Complanting		C	III	
Shading		C	III	
Filling		B	III	

CAPACITY UTILIZATION:

Full-capacity output: US \$ 20 million, based on 1-shift operation, except for a few departments which will have to operate on 3 shifts (a.g. grinding department)

Current utilization:

Major products (or processes)	Approximate %					
	up to 20	20-40	40-60	60-70	70-80	80-100
All products						X

The low rate of capacity utilization of 60 - 70% is due to lack of demand.

Requirements for reaching full-capacity utilization:

additional capital: approx. US \$ 950,000.

additional labour: 1 non-operative and 30 operatives on 2nd and 3rd shifts, each.

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output (1000 US \$)	No. of persons employed	Total output (1000 US \$)
1963/4	5,150	120	2,200
1964/5	7,660	359	3,410
1965/6	9,290	433	5,150
1966/7	12,000	451	7,280
1967/8	13,930	460	9,170
1968/9	15,480	445	10,840

2. Investments in the past:

From 1957 to 1960 :	Approximate amount (1000 US \$)	Type of investment
From 1957 to 1960 :	434	Machinery and primary industrial buildings
" 1961 " 1963 :	491	Machinery and laboratories
" 1964 " 1967 :	1,780	Machinery, warehouses and factory buildings
1967/68 :	400	

3. Future Plan:

From 1968 to 1971 : 968
 Expansion, rationalization, specialisation of product-mix, machine-pool, processing methods and factory premises.
 No additional operatives required.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C - Confidential; figures of this size group are included in those underlined.

(1964) Paints and varnishes manufacturing (ISIC Code. 313)

1. Size groups by number of persons employed	No. of estab.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gram prod. ratio (%)	2. Size groups by annual output of production (1000 US \$):	No. of estab.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gram prod. ratio (%)
up to 19	56	347	1,719	13,390	42	up to 20	18	12	609	14,822	44
20 - 99	29	1,184	2,047	11,649	45	20 - 40	8	17	1,400	13,661	48
100 - 499	10	1,489	2,221	14,629	45	40 - 200	23	251	1,606	9,598	45
500 - 999	-	-	-	-	-	200 - 400	18	477	1,840	9,869	45
over 1,000	-	-	-	-	-	400 - 2,000	24	2,263	2,216	14,474	44
						over 2,000	4	C	C	C	C
TOTAL:	95	3,020	2,095	13,313	45	TOTAL:	95	3,020	2,095	13,313	45

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services:

- | | | |
|---|---------------------------------------|-----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export transactions |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

1. Services performed during the past five years:

Type of services	Country or region	No. of projects	Field of industry	Description of projects
------------------	-------------------	-----------------	-------------------	-------------------------

XII. SUPPLEMENTS & NOTES

Depreciation policy:

The following depreciation rates were applied: Machinery 10%, buildings 10%, office furniture 20%.

Governmental policies:

Import of similar foreign products, customs duty on raw materials and high rate of interest on bank loans affect the profitability of the enterprise.

Labour training:

Training courses are organized together with a national industrial management institute; no foreign lecturers are needed.

Working capital:

<u>Liquid assets (average)</u>	<u>(000 US \$)</u>	<u>Required working capital</u>	<u>(000 US \$)</u>	<u>Equivalent number of em.</u>
- Cash on hand and in bank	20	- Production materials	548	4
- Marketable securities and bonds	-	- Other materials and supplies	56	2
- Accounts receivable from delivery of goods and services	436	- Finished products and work-in-process	232	1
- Other accounts receivable	132	- Wages for primary operative workers	17	2
- Prepaid expenses	92	- Other wages and salaries	9	2
<u>Total liquid assets (average)</u>	<u>680</u>	- Training costs	0.3	2
		- Administrative costs, sales costs and contingencies	20	2
		- Other special items	10	2
		<u>Total desired working capital</u>	<u>893</u>	<u>-</u>

Major Products: Pharmaceuticals.
Capable of producing about 1 million litre of medical liquids and ointments and 600 million tablets, 60 million ampules, etc., based on one-shift operation. Full-capacity output is said to amount to nearly US \$ 8 million.

Reporting Unit: A one-establishment enterprise, privately owned; founded in 1959. No foreign capital participation. Construction of the factory started in 1959, trial and commercial production in 1961. In 1965 the break-even point was surpassed for the first time at an output of US \$ 1,760,000. No exports.

I. FIXED CAPITAL ASSETS

(End of 1968)	Original purchase value (1000 US \$)	Replacement value (1000 US \$)	Avg. age (Yrs.)
1. Primary process equipment (including installation cost)	1,043	..	..
TOTAL:	898	..	5
- Process equipment *	145	..	..
- Hand tools & apparatuses			
2. Buildings	4,120	..	12
TOTAL:	3,750	..	12
- Primary industrial buildings (total floor space: .. m ²)			
- Auxiliary buildings			
- Warehouses			
- Office administration buildings			
- Housing	370	..	12
3. Auxiliary facilities (excl. buildings)	217	..	..
TOTAL:	119	..	..
- Internal power equipment			
- Laboratory facilities	26	..	..
- Means of transportation	26	..	..
- Office equipment	46	..	..
TOTAL PHYSICAL FIXED ASSETS (excluding land):	5,380	..	..
4. Other fixed capital assets	4,714	..	..
TOTAL:	4,714	..	..
- Land (total acreage: 50,000 m ²)			
- Land improvements			
- Others			

*NB Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII.)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1968 monthly average)	US\$	US\$	US\$	US\$	US\$	US\$
1. Local non-operatives						
- Managers	660	-	1,055			
- Engineers			595			
- Technicians						
- Accountants	160	-	200			
- Sales officers						
- Clerks and typists	90	-	130			
2. Local operatives						
- Supervisors	105	-	185			
- Foremen						
- Skilled operatives						
- Machine operators						
- Craftsmen			80			
- Truck drivers			90			
- Unskilled operatives			65			
- Other full-time operatives			40			60
- Part-time operatives						
3. Foreign employees						
- Managerial staff	660	-	790			
- Technical staff						
- Other skilled operatives						
- Unskilled operatives						

EXTERNAL CONDITIONS:

Transport:	external long distance	fair
	internal long distance	fair
	local and city	fair
Utilities:	electricity	excellent
	water	excellent
	gas	excellent
Community:	residence	fair
	health and recreation	excellent
	education	excellent
Own Welfare Facilities:		-

III. INVENTORIES

(End of 1968)	Actual value (1000 US \$)	Number of months
Inventories	1,357	
TOTAL:	805	..
- Production materials	13	..
- Other input materials	156	..
- Work-in-process	383	..
- Finished products		

(See XII. for liquid assets and desired working capital)

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
- Shift hours/day:	8	-	-	hours
- Actual hours/year:	2,368	-	-	hours
- Normal days/year:	290	-	-	days

IV. MANNING TABLE

(number of persons)

Shift categories: A. Supervisory staff and foremen (for all shifts)
B. Machine operators
C. Other operatives
D.

(1968 average)	Total	A	B	C	D	2nd shift B-B	3rd shift B-B
ALL SHOPS & UNITS:	348	72		269			
1. Primary operative shops	197	6	36	155			
- Total primary operations	197	6	36	155			
2. Auxiliary operative units	85	7		78			
- Repair & maintenance	25	1		24			
- Mechanical shop							
- Tooling shop							
- Utilities control	22	2		20			
- Product & material storage	8	3		5			
- Off-site transport	4			4			
- Guards, cleaners, etc.	26	1		25			
3. Auxiliary non-operative units	66	66					
- Production management	36	36					
- Research & development							
- Sales unit							
- Accounting	14	14					
- General administration	16	16					

V. ANNUAL PRODUCTION

(1968)	Yr. of first prod.	Quantity produced		Avr. unit price as factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Liquids	1961	l	200,000	3.0-3.3	638
Ointments	1961	l	20,000	13.2-18.5	357
Tablets	1961	pos.	300 mill.	0.003-0.005	1,276
Ampullas	1961	pos.	40 mill.	0.003-0.005	171
Transfusion solutions	1961	pos.	350,000	0.30-0.33	110
TOTAL VALUE OF PRODUCTION:					2,552

VI. VALUE ADDED

(1968)	Total value (000 US \$)
1 Annual wages & salaries	164
- Operative workers (282 persons)	97
- Non-operative workers (66 persons)	71
2 Other payments for employees	38
3 Annual depreciation	122
- Machinery & equipment	102
- Buildings & other facilities	211
- Non-physical capital assets	9
4 Rentals paid	-
5 Interests & royalties	132
6 Sales tax	-
7 Other indirect business taxes	-
8 () Subsidies	-
9 Corporate income before tax	650
TOTAL VALUE ADDED	
	1,110

DESCRIPTION OF MAJOR PRODUCTS:

N o d e t a i l s a v a i l a b l e .

MARKET ASPECTS:

Sales organization: The enterprise has its own sales department.

Share in the domestic market: 18%.

Competition with other products: Good competitive position in the local market.

EXPORT:

Total annual export None.

Major products	To Western countries	To Eastern countries	To Developing countries

Prospects of exports and export price policy:

Prices will have to be reduced to be able to compete with foreign products; generally good prospects of exports. The enterprise management reports that the current prices are yet too high for export purposes due to the relatively low capacity utilization.

VII. ANNUAL CONSUMPTION

(1968)	Quantity consumed		% import	Average import duties	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL:					34
- Electricity	000 kWh	1,100	-	-	17
- Liquid fuels and lubricants	000 l	1,800	-	-	16
- Gas	000 m3	17	-	-	1
2. Production materials					
TOTAL:					1,122
- 400 different chemicals	..	..	94	..	1,122

3. Other materials & supplies					
TOTAL:					59
- Packaging material (bottles, boxes, etc.)					13
- Parts, supplies & services					20
- Other materials & supplies					26
4. Business services purchased					
TOTAL:					27
- Transportation, storage & insurance					26
- Communication, advertising & other business services					0.5
5. Work performed by subcontractors					
TOTAL:					-

TOTAL VALUE OF CONSUMPTION: **1,242**

VII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (1.1):

Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Avg. Age (yrs)	Remarks
--------	--------------------------------------	--------------------------------	----------------	---------

Remarks:
 SW Purchased second-hand
 OS Obsolete
 R Rented
 SC Self-constructed

Further details:

The main part of the process equipment meets the modern standard; the replacement value (if newly re-purchased) is around \$0.9 million in total.

CAPACITY POWER:

Process equipment:
 electric motors - 110

Generating equipment:
 installed capacity - 1 VA

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Mechanization:
 A most advanced
 B considerably high standard
 C medium standard
 D appreciably short of today's standard
 E almost outdated

Automation:
 I fully automated
 II semi-automated
 III un-automated

Major primary operative shops	Kind of process involved	Mechan.	Autom.	Further details:
-------------------------------	--------------------------	---------	--------	------------------

All shops

..

B

II

CAPACITY UTILIZATION:

Full-capacity output: US \$ 7,900,000.

Current utilization:

Major products (or processes)	Approximate %						
	up to 20	20 to 40	40 to 60	60 to 80	80 to 100	100	100
Liquids		25					
Ointments		11					
Tablets			50				
Ampules				67			
Transfusion solutions		44					

The actual over-all capacity utilization r.a.s is considered to be about 32%. The low utilization is due to lack of demand for domestic medicines; foreign brands are still being preferred to domestic brands. It is expected that the demand will increase.

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output (1000 US \$)	Nb. of persons employed	Total capacity (1000 US \$)
1963	750	260	-
1964	1,630	248	-
1965	1,760	267	-
1966	1,590 *	255	-
1967	1,480 *	249	-
1968	2,550	348	-

* The increase in quantity was accompanied by more than proportional decrease in unit price.

2. Investments in the past:

From 19	to 19	Total amount (1000 US \$)	Type of investment
19	19	-	

3. Future Plan:

From 19 68 to 19 73: 1,390 Replacement of and additions to process equipment and other primary production facilities; new additions also to auxiliary production facilities; technological improvement of other primary production facilities; these investments will be accompanied by new recruitment of 20 primary and 7 auxiliary operatives, as well as 1 man-year for management and administration.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

* Selected 23 establishments representing only part of this industry.

(1967)

Industry: Manufacture of miscellaneous chemical products (SIC-Code: 319*)

1. Size groups by number of persons employed	Nb. of estab.	Nb. of emp.	Avg. W. & S. per pers. (US \$)	Avg. gross prod. ml./per pers. (US \$)	Avg. value added/gross prod. ratio (%)	Capital assets per pers. (US \$)
up to 20	9	106	857	11,330	47	1,882
21 - 50	6	197	469	5,167	59	8,027
over 50	8	1,422	1,000	10,378	39	7,665
TOTAL:	23	1,725	930	9,841	41	7,351

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services:

- | | | |
|---|---------------------------------------|-----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export transactions |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

1. Services performed during the past five years:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
-----------------	-------------------	-----------------	-------------------	-------------------------

XII. SUPPLEMENTS & NOTES

<u>Average liquid assets:</u>	<u>(000 US \$)</u>	<u>Required working capital:</u>	<u>(000 US \$)</u>	<u>Equivalent number of months</u>
Cash on hand and in bank	19	Production materials	92	1
Accounts receivable from delivery of goods and services	185	Other materials and supplies	1	1
Total	204	Finished products and work-in-process	145	1
		Wages for primary operative workers	7	1
		Other wages and salaries	8	1
		Administrative and sales costs and contingencies	2	1
		Total	255	1

Depreciation policy: Machinery 10%
 Building 8%
 Office furniture 20%.

Governmental policies:
 There are indications that the current Government policy in this field of industry is highly protective (despite the high rate of profit?).

Labour training:
 At present there is an on-job training programme in operation.

Major Products: Soap, detergents and glycerine. Capable of producing annually 15,000 t of soap on 1-shift operation; 42,000 t of detergents on 2-shift operation.

Reporting Unit: A one-establishment enterprise originally founded in 1944 and renovated and expanded in early 1960's. Private corporation; no participation of foreign capital.

I. FIXED CAPITAL ASSETS

(End of 1966)

	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
1. Primary process equipment			
TOTAL		3,404	3,560
- Process equipment		3,404	3,560
- Hand tools & apparatuses		-	-
- Cost of installation		included above	included above
2. Primary industrial building		636	..
TOTAL		636	..
(total floor space: 11,000 m ²)			
3. Auxiliary facilities	
TOTAL	
- Water, steam, electricity, cooling & storing		240	..
- Transportation facilities	
- Administrative facilities	
- Laboratory facilities	
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land)		4,040	..
4. Other fixed capital assets		120	..
TOTAL		4,160	..
- Land (total acreage: 14,000 m ²)		120	..

DETAIL OF PROCESS EQUIPMENT (no.)

Supplier country	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
		1,34	most items 2 to 3 times higher than the original purchase values
		264	
		1,34	
		36	
		32	
		168	

HISTORY OF INVESTMENT:

Construction of the factory started in 1944. The first trial as well as commercial production started in 1944.

The following investments have been made since 1944:

Investment period	Approx. amount invested (US \$ 000)	Main purposes
1945-1950	92	Continuous soap making process
1951-1955	457	Expansion of soap department
1956-1960	888	Starting detergents production
1961-1966	3,653	Expansion of soap, detergents and glycerine production

CAPACITY POWER:

Process equipment	1,418 kW	Generating equipment installed capacity	.. kVA
- Electric motors:			

EXTERNAL CONDITIONS:

Transport: Long distance, fair; local area, own vehicle operation.

Utilities: Electricity, excellent; water, gas, fair.

Community: Residential, health and recreational, educational, all fair.

II. INVENTORIES AND WORKING CAPITAL

(in 000 US \$)

(End of 1966)

	Actual value	2 Liquid assets	Actual value
1 Inventories	1,816	TOTAL	4,816
TOTAL			
- Production materials	422	- Cash (hand/bank)	1,912
- Other input materials	..	- Market, sec. & bonds	200
- Work-in-process	180	- Short-term investment	-
- Finished products	214	- Prepaid expenses	1,176
		- Accounts receivable	1,528
3. Desired working capital			
TOTAL		Number of months	Value
			4,592
- Production materials	20 days	220	
- Other input materials	15 "	712	
- Finished products	3 months	320	
- Wages & salaries	2,5 "	2,640	
- Other special items			

III. MANNING TABLE

(number of persons)

A - Machine operators
B - Other operatives

(1966 average)

	Total	1st shift A	1st shift B	2nd shift A+B	2nd shift A+B
ALL SHOPS & UNITS:	726	650	68	8	8
1. Primary operative shops	279	213	-	63	3
- Washing soap	46	46	-	-	-
- Detergents	184	126	-	60	-
- Toilet soap	38	38	-	-	-
- Glycerine	9	3	-	3	3
2. Auxiliary operative units	195	185	5	5	5
- Repair and maintenance	50	50	-	-	-
- Mechanical shop	11	11	-	-	-
- Utilities control	7	7	-	-	-
- Product & material storage	70	70	-	-	-
- Off-site transport	16	6	5	5	5
- Guards, cleaners, etc.	41	41	-	-	-
- Others					
3. Auxiliary non-operative units	252	252	-	-	-
- Production management	7	7	-	-	-
- Research & development	..	..	-	-	-
- Sales unit	52	52	-	-	-
- General administration	150	150	-	-	-
- Others	43	43	-	-	-

WORKING TIME PER OPERATIVE WORKER:

Normal hours/day:	8 hours	Normal days/year:	298 days
Actual hours/year:	2,384 hours		

CAPACITY OF OPERATIVE SHOPS:

High automation and mechanisation.

The capacities of different shops are mutually balanced.

IV. ANNUAL PRODUCTION

(1966) Products (or group of products)	Yr. of first prod.	Quantity produced		(*) Nominal capacity output	Unit price ex factory (US \$)	Total production value (1000 US \$)
		Unit	Output			
- Washing soap	1934	t	13,988	14,000	268	3,720
- Toilet soap	1956	"	1,025	1,200	600	615
- Detergents	1957	"	31,282	40,000	316	11,150
- Glycerine	1945	"	414	400	100	41,400
TOTAL VALUE OF PRODUCTION						57,895

(*) Based on the same number of shifts as the actual 300 days yr. operation. Soap with one shift; detergent two shifts and glycerine three shifts.

EXPORTS: None.

CAPACITY UTILIZATION: Satisfactory.

VI. VALUE ADDED

(1966)	Value (1000 US \$)
1. Wages & salaries	500
- Employees in direct production (133 persons)	443
- Other employees (213 persons)	57
2. Other payments for employees	200
3. Annual depreciation	513
4. Rentals paid	-
5. Interests & royalties	-
6. Sales tax (not included in value added)	11
7. Other ind. bus. taxes	11
8. () Subsidies	1,210
9. Corporate income before tax	1,440
----- 5,944	

VII. MONTHLY EARNING RATES

(End of 1966)	No. of emp.	Average earning rates (US \$)
1. Local non-operatives		
TOTAL	133	335
- Managers	2	1,200
- Engineers	1	400
- Technicians	1	200
- Accountants	1	400
- Sales officers	1	200
- Other professional staff	1	400
- Clerks & typists	128	100
2. Local operatives		
TOTAL	133	131
- Supervisors	1	100
- Foreman	1	100
- Machine operators	3	100
- Craftsmen	3	200
- Truck drivers	3	200
- Other full-time operatives	118	100
- Unskilled & part-time operatives	133	100
3. Foreign employees		
TOTAL	-	-

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed				Year consumption value (1000 US \$)
	Unit	Paraph.	% imported	Tariff rate	
1. Energy and water					137
TOTAL					137
- Electricity	000 Kwh	..			79
- Gas		..			58
2. Production materials					12,275
TOTAL					12,275
- Fats	t	3,153			1,073
- Oils	t	5,106			1,964
- Tar	t	1,530			254
- Sulphate, phosphates, etc.	t	29,364			3,070
- Dodecylbensene	t	7,475			2,252
- Others	t	..			3,622

	Total consumption value (1000 US \$)
3. Other materials & supplies	1,317
TOTAL	1,317
- Packaging	1,000
- Repair & maintenance	200
- Non-factor service inputs	117
4. Business services purchased	202
TOTAL	202
- Transport, storage & insurance	100
- Communication, advertisements, etc.	102
5. Work performed by sub-contractors	-
TOTAL	-
----- 13,949	

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)
Industry group: Manufacture of miscellaneous chemical products (ISIC: 319)

1. Size groups by number of persons employed	Number of shift	Number of emp.	Av. gross prod. val. per emp. (US \$)		Av. emp. gross prod. ratio* (%)
			W. & S. (US \$)	Av. gross prod. val. per emp. (US \$)	
up to 5	478	1,555	658	8,661	65
6 - 15	450	4,302	1,073	7,565	71
16 - 25	222	4,458	1,295	10,868	72
26 - 100	435	22,157	1,386	8,853	79
over 100	175	47,208	2,045	11,170	71
TOTAL	1,760	79,680	1,740	10,265	73
2. Size groups by value of annual production (1000 US \$):					
up to 8	508	1,322	183	1,239	74
8 - 40	466	3,375	573	2,891	94
40 - 120	336	5,423	992	4,554	79
120 - 240	231	7,175	1,127	559	86
240 - 400	153	6,201	1,310	7,636	71
over 400	356	56,739	2,023	12,291	72
TOTAL	2,064	80,235	1,728	5,387	80

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

Future plan:
Within the period from 1966-1970, approx. US \$ 2,400,000 will be invested for general expansion of the factory.

Government policies:
Ceiling on selling price of washing soap, but no ceilings on purchase prices for production materials. This affects the availability of input materials. Abolition of price ceilings is desired.

Major Products:

Human and veterinary medical preparations (antibiotics and other materials). Capable of producing annually 1,700,000 pieces (packs) on 1-shift operation.

Reporting Unit:

A one-establishment enterprise, founded in 1943; privately owned; no participation of foreign capital.

I. FIXED CAPITAL ASSETS

(End of 1966)

	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
1. Primary process equipment			
TOTAL		175.5	350
- Process equipment		115.5	250
- Hand tools & apparatuses		-	-
- Cost of installation		60.0	100
2. Primary industrial building			
TOTAL		56.0	112
(total floor space: 1,100 m ²)		56.0	112
3. Auxiliary facilities			
TOTAL		40.6	81.2
- Water, steam, electricity, cooling & storing		16.1	32.2
- Transportation facilities		6.0	12.0
- Administrative facilities		4.4	8.8
- Laboratory facilities		4.1	8.2
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		272.1	543.4
4. Other fixed capital assets			
TOTAL		4.0	8.0
- Land (total acreage: 4,000 m ²)		4.0	8.0

DETAIL OF PROCESS EQUIPMENT (no.)

	Supplier country	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
- Biophilization equipment			11.2	22.4
- Sterile filling equipment	F.R.Germ.		7.2	14.4
- Granular and tablets department	France	1950	100	100
- Incubation department	Spain	1950	100	100
- Refrigeration "	Mexico		1.2	2.4
- Cleaning and sterilization dept			4.4	8.8
- Other equipment			2.1	4.2

HISTORY OF INVESTMENT:

Construction of the factory started in 1949. The first trial as well as commercial production started in 1951, when the first profits were made. In 1949, approximately US \$ 4,000 were invested for the construction of a new plant. In 1952 approx. US \$ 5,000 were invested for the expansion of machinery and equipment and from 1953 to 1966, approx. US \$ 10,000 were invested for the renovation of machinery and equipment.

CAPACITY POWER:

Process equipment 75 kW
Electric motors

Generating equipment
Installed capacity

LVA

ENVIRONMENTAL CONDITIONS:

Transport: Long distance and local area, fair.
Utilities: Electricity, fair.
Community: Residential, health and recreational, educational, excellent.

II. INVENTORIES AND WORKING CAPITAL

(in 000 US \$)

(End of 1966)

	Actual value	2. Liquid assets	Actual value
1. Inventories	120.3	TOTAL	257.1
TOTAL	120.3	- Cash (hand/bank)	1.7
- Production materials	75.8	- Market. sec. & bonds	-
- Other input materials	24.0	- Short-term investment	-
- Work-in-process	2.9	- Prepaid expenses	5.5
- Finished products	17.6	- Accounts receivable	244.8
3. Desired working capital			
TOTAL			
- Production materials			
- Other input materials			
- Finished products			
- Wages & salaries			
- Other special items			

III. MANNING TABLE

(number of persons)

A = Shift supervisor
B = Other operatives

	Total	1st shift A	2nd shift A+B	3rd shift A+B
ALL SHOPS & UNITS:	108	108	-	-
1. Primary operative shops	51	51	-	-
- Production	20	20	-	-
- Packing	25	25	-	-
- Horse stables	6	6	-	-
2. Auxiliary operative units	9	9	-	-
- Repair and maintenance	2	2	-	-
- Mechanical shop	-	-	-	-
- Utilities control	3	3	-	-
- Product & material storage	2	2	-	-
- Off-site transport	2	2	-	-
- Guards, cleaners, etc.	2	2	-	-
3. Auxiliary non-operative units	48	48	-	-
- Production management	6	6	-	-
- Research & development	-	-	-	-
- Sales unit	10	10	-	-
- General administration	27	27	-	-
- Others (Directors)	5	5	-	-

WORKING TIME PER OPERATIVE MEMBER:

Normal hours/day	8 hours	Normal days/year	245 days
Actual hours/year	1,960 hours		

CAPACITY OF OPERATIVE SHOPS:

The capacity of the biophilization and control department is 1,700,000 pieces. It is moderately automated. Part of the biophilization is performed for a contractor on commission basis. Minor jobs (packing tablets) are performed by a subcontractor.

IV. ANNUAL PRODUCTION

(1966)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price as factory (US \$)	Total production value (1000 US \$)
		Unit	Output			
		(average)				
- Human medical preparations	1939	pieces	1,000,000	1,450,000	0.6	600
- Veterinary medical preparations	1942	"	100,000	155,000	0.6	60
- Revenue from commission work (liophilization)						40
TOTAL VALUE OF PRODUCTION:						700

* Based on a one-shift operation and 245 working days per year.

EXPORTS: None

CAPACITY UTILIZATION:

The liophilization capacity is utilized 65%. Additional 5-10% utilization for the commission work. Under utilization is mainly due to lack of demand. 10% additional man-hours (1st shift) would be required for full utilization of the installed capacity.

VI. VALUE ADDED

(1966)	Value (1000 US \$)
1. Wages & salaries	
- Employees in direct production (60 persons)	18.9
- Other employees (48 persons)	203.3
2. Other payments for employees	19.4
3. Annual depreciation	20.3
4. Rentals paid	2.2
5. Interest & royalties	2.2
6. Sales tax	1,020.0
7. Other ind. bus. taxes	2.0
8. (-) Subsidies (*)	(-)
9. Corporate income before tax	60.6
	386.2

(*) See note under IX, Supplemental.

VII. MONTHLY EARNING RATES

(End of 1966)	No. of empl.	Average earning rate (US \$)
1. Local non-operative		
TOTAL	49	3.54
- Managers	5	640
- Engineers (Chemistry, doctors)	6	640
- Technicians	1	-
- Accountants	3	280
- Sales officers	10	430
- Other professional staff	-	-
- Clerks & typists	14	1.30
2. Local operative		
TOTAL	60	3.33
- Supervisors	-	-
- Foremen	1	160
- Machine operators	1	36
- Craftsmen	-	-
- Truck drivers	1	1.0
- Other full-time operatives	56	3.0
- Unskilled & part-time operatives	-	-
3. Foreign employees		
TOTAL	-	-

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed			YTD consumption value (1000 US \$)
	Unit	Purchased	% Imported	
1. Energy and water				4.6
TOTAL				4.6
- Electricity		..		2.8
- Liquid fuels and lubricants (petrol etc.)		..		1.8
2. Production materials				255.1
TOTAL				255.1
- Laboratory and production animals		..		62.7
- Basic antibiotics		..	100	20.0
- Pharmaceutical intermediates		..	50	12.0
- Other materials (including bottles and containers)		..		160.6

	Total consumption value (1000 US \$)
3. Other materials & supplies	
TOTAL	67.2
- Packaging (for shipping)	4.0
- Repair & maintenance	9.8
- Non-factor service inputs	48.7
4. Business services purchased	
TOTAL	19.6
- Transport, storage & insurance	9.1
- Communication, advertisements, etc.	9.9
5. Work performed by sub-contractors	
TOTAL	2.4
	343.8

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)
Industry group: **Manufacture of miscellaneous chemical products (MNC: 319)**

1. Size group by number of persons employed	Number of units	Number of emp.	No. of units		No. of emp.	
			U.S.	U.S.	U.S.	U.S.
up to 5	5	478	1,555	658	8,661	65
6- 15	15	450	4,302	1,073	7,565	71
16- 25	25	222	4,458	1,295	10,868	72
26- 100	100	435	22,157	1,386	8,851	79
over 100	100	175	47,208	2,045	11,170	71
TOTAL	1,760	79,680	1,740	10,265	73	
2. Size group by value of annual production (1000 US \$)						
up to 8	8	508	1,322	183	1,239	74
8- 40	40	466	3,375	573	2,891	94
40- 120	120	336	5,423	992	4,554	79
120- 240	240	231	7,175	1,127	599	86
240- 400	400	153	6,201	1,310	7,636	71
over 400	400	356	56,739	2,023	12,291	72
TOTAL	2,054	88,235	1,728	5,187	88	

* Capital is defined as physical capital assets.

IX. SUPPLEMENTAL

Subsidies

All pharmaceutical laboratories received only 1% subsidies on sales proceeds, in 1966, while the rate was 4% for some other industries.

COMMISSION WORK:

Commissions (for liophilization) amounting to US \$ 40,000 are received annually in accordance with the quotation for each allotment. There is a sub-contractor to which US \$ 2,400 are paid annually for packing of tablets.

FUTURE PLAN:

From 1967 to 1972, approximately \$160,000 will be invested for the renovation of equipment and the introduction of new products. 10% additional man-hour (on the 1st shift) will then be required.

GOVERNMENT POLICIES:

Since 1968, taxes on sales proceeds have been doubled and subsidies been cancelled. Granting of a 6 months' credit for the Social Insurance and for the customers in general is desired.

Major Products:

Wax matches, friction matches. Capable of producing annually 750,000 gross boxes and 270,000 gross booklets on 1 shift operation.

Reporting Unit:

An old enterprise originally founded in 1888 but reconstructed and expanded after 1951. Private corporation with domestic capital.

I. FIXED CAPITAL ASSETS

(End of 1966)		Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
1 Primary process equipment				
TOTAL 1951-66 1,113 1,419				
- Process equipment 1,154 1,416				
- Hand tools & apparatus 38 -				
- Cost of installation (included in equipment value)				
2 Primary industrial building				
TOTAL - - -				
(total floor space: rented m ²)				
3 Auxiliary facilities				
TOTAL 1962 222				
- Water, steam, electricity, cooling & storing 114 114				
- Transportation facilities installed 22 -				
- Administrative facilities between 1951-66 2 -				
- Laboratory facilities 2 -				
TOTAL PHYSICAL FIXED CAPITAL ASSETS (excluding land) 1,413 1,434				
4 Other fixed capital assets				
TOTAL - - -				
- Land (total acreage: rented m ²)				

DETAIL OF PROCESS EQUIPMENT (val.)	Supplier country	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
- Equipment for wax match preparation	Mexico	1951-66	11	110
- Equipment for box making	"	"	29	35
- " " packaging	"	1951-66	9	22
- " " booklet making	U.S.A.	1952-66	7	17
- Maintenance equipment	various	1951-66	1	10
- Carpentry	Spain	1951-66	1	12
- Other equipment	Mexico U.S.A.	1951-66	11	113

HISTORY OF INVESTMENT:

In 1910, 1922 and 1951, major investments took place, for expansion of production and for rebuilding the new factory. Between 1952 and 1967, approximately U.S. \$1.5 million were invested for renovation with increased mechanization. The original purchase value of the existing equipment and other facilities represents practically these investments of the 1952-58 period (except the already scrapped assets).

CAPACITY POWER:	Generating equipment installed capacity	-	kVA
Process equipment	575	kW	
Electric motor			

EXTERNAL CONDITIONS:
 Transport: Long distances and local area - fair.
 Utilities: Electricity, water and gas, fair.
 Community: Residential, health and recreational, fair; educational excellent.

II. INVENTORIES AND WORKING CAPITAL

(in 000 US \$)

(End of 1966)		Actual value	2. Liquid assets	Actual value
1. Inventories		1,056	TOTAL 1,046	
TOTAL				
- Production materials	420	- Cash (hand/bank)	281	
- Other input materials	10	- Market. sec. & bonds	2	
- Work-in-process	60	- Short-term investment	1	
- Finished products	1,006	- Prepaid expenses	106	
		- Accounts receivable	48	
3. Desired working capital		Number of months	Value	
TOTAL		-	-	
- Production materials				
- Other input materials				
- Finished products				
- Wages & salaries				
- Other special items				

III. MANNING TABLE

(number of persons)

A - Machine operators
B - Other operatives

(1966 average)		Total	1st shift	2nd shift	3rd shift
			A	B	A + B
ALL SHOPS & UNITS:					
		102	102		-
1. Primary operative shops		188	114	74	-
- Wax matches		48	23	15	
- Packaging		47	29	18	
- Packing		64	46	18	
- Booklets making		12	8	4	
- Carpentry		3	3	-	
- Material transport		14	-	14	
2. Auxiliary operative units		60	60		-
- Repair and maintenance		11	11		
- Mechanical shop		12	12		
- Utilities control		2	2		
- Product & material storage		5	5		
- Off-site transport		4	4		
- Guards, cleaners, etc.		13	13		
- Auxiliary staff		13	13		
3. Auxiliary non-operative units		54	54		-
- Production management		2	2		
- Research & development		24	24		
- Sales unit		4	4		
- General administration		20	20		
- Special transport		4	4		

WORKING TIME PER OPERATIVE WORKER:

Normal hours/day:	8	hours	Normal days/year:	260	days
Actual hours/year:	2,080	hours			

CAPACITY OF OPERATIVE SHOPS:

Only 40% of the capacity of wax preparation is utilized; automation and mechanization, moderate
 23% of the capacity of booklets-making department is utilized; automation and mechanization high.

XII. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service

- | | | |
|---|---------------------------------------|------------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Imports and export promotion |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign investment |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
2				In certain cases the company is prepared to render financial assistance to firms in developing countries.
5				The establishment could, if necessary, provide also managerial and technical personnel.
7				The company is interested to sign licence agreements and know-how contracts.

XIII. SUPPLEMENTS & NOTES

Bottlenecks and current problems:

No major bottlenecks could be observed during the past years. Efforts are to be made in order to keep the current growth rate. Difficulties occur in finding suitable personnel especially for research work.

Inventory policy:

The average value of finished products in stock amounts to 2% of the total value of production. Production to order only. This enables company to better adapt production programs to individual customers' requirements.

License and know-how agreements:

Company signed license and know-how contract with an affiliated company in Brasil. - Application of company-owned patents.

Depreciation policy:

The straight-line as well as accelerated methods are applied.

Wages and salaries:

Commissions for salesmen account for appr. 30% of total wage costs.

IV. ANNUAL PRODUCTION

(1966) Products (or group of products)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price on factory (US \$)	Total production value (1000 US \$)
		Unit	Output			
- Wax matches (in boxes of 50 sticks)	..	Gross	402,000	400,000	3.4/gross	1,327
- " " (" " " 72 ")	..	"	224,466	350,000	4.5/"	1,010
- Friction matches (in booklets of 20 sticks)	"	"	58,527	210,000	0.7/"	41
- " " (" " 30 ")	"	"	1,330	16,000	1.0/"	1
- " " (" " 40 ")	"	"	1,971	24,000	1.4/"	3
* TOTAL VALUE OF PRODUCTION:						2,382

* The enterprise reported additional US \$ 2,240,000 revenue from the resale of finished matches (to which no more than re-labelling was performed in this enterprise). This additional revenue (as well as the expenditures and the profits originating from the resale activity) is not included in these Profile data.

EXPORTS: None

CAPACITY UTILIZATION:

The box-making capacity for wax matches is practically fully utilized. But the capacity for booklet-match production is nearly 4 times higher than the actual production; weak demand for book matches (which in turn is due to the excessive competition in this field of domestic industry) is the major reason.

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed				Total consumption value (1000 US \$)
	Unit	Purchase	% Imported	Tariff rate	
1. Energy and water					
TOTAL:					21
- Electricity	000 Kwh	358.3			8
- Liquid fuels and lubricants	000 l	392			11
- Water	000 m ³	35			2
2. Production materials					
TOTAL:					923
- Potassium chlorate	t	309.3	-		173
- Paper	t	44.0	-		15
- Paraffin	"	592.5	-		152
- Cardboard	"	773.0	-		274
- Phosphorus	"	22.8	100		40
- Sulphur	"	26.0	-		1
- Waxed paper	"	535.2	-		338

VI. VALUE ADDED

(1966)	Value (1000 US \$)
1. Wages & salaries	
- Employees in direct production (268 persons)	250
- Other employees (34 persons)	34
2. Other payments for employees	160
3. Annual depreciation	131
4. Rentals paid	26
5. Interest & royalties	17
6. Sales tax (not included in TOTAL)	(1,023)
7. Other ind. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	173

933	

VII. MONTHLY EARNING RATES

(End of 1966)	No. of emp.	Average earning rate (US \$)
1. Local non-operatives		
TOTAL:		
- Managers	1	1,500
- Engineers	-	-
- Technicians	-	-
- Accountants	3	480
- Sales officers	4	176
- Other professional staff	-	-
- Clerks & typists	17	176
2. Local operatives		
TOTAL:		
- Supervisors	1	1,250
- Foreman	6	400
- Machine operators	106	136
- Craftsmen	42	136
- Truck drivers	2	120
- Other full-time operatives	14	104
- Unskilled & part-time operatives	46	76
- Other specific category	65	72
3. Foreign employees		
TOTAL:		
-	-	-

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)
Industry group: Manufacture of miscellaneous chemical products (ISC: 319)

1. Size groups by number of persons employed	Number of estab.	Number of empl.	Avg. W. & S. per emp. (US \$)	Avg. gross prod. vol. per emp. (US \$)	Avg. emp. gross prod. rate* (%)
up to 5	478	1,555	658	8,661	65
6 - 15	450	4,302	1,073	7,565	71
16 - 25	222	4,458	1,295	10,868	72
26 - 100	435	22,157	1,386	8,853	79
over 100	175	47,208	2,045	11,170	71
TOTAL	1,760	79,680	1,740	10,265	73

2. Size groups by units of annual production (1000 US \$)	Number of estab.	Number of empl.	Avg. W. & S. per emp. (US \$)	Avg. gross prod. vol. per emp. (US \$)	Avg. emp. gross prod. rate* (%)
up to 8	508	1,322	183	1,239	74
8 - 40	466	3,375	573	2,891	94
40 - 120	336	5,423	992	4,554	79
120 - 240	231	7,175	1,127	559	86
240 - 400	153	6,201	1,310	7,636	71
over 400	356	56,739	2,023	12,291	72
TOTAL	2,064	80,235	1,728	5,387	80

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

COMMISSION WORK:
U.S. \$ 2,240,000 worth of matches, produced by a subcontractor and re-sold by this enterprise, is excluded from the cost-revenue relationship in this profile.

GOVERNMENT POLICIES:
There are as many as 23 firms competing in the same industry. Some measures should be taken to control price competition and quality standard.

Major Products: Soaps, detergents and cosmetics. Capable of producing annually about 1,600 t on 1-shift operation.

Reporting Unit: A one-establishment enterprise, privately owned; founded in 1945; 90 employees. Insignificant research, development and export activities.

I. FIXED CAPITAL ASSETS

(End of 1967)

	Original purchase value (000 US \$)	Replacement value (000 US \$)	Avg. age (Yrs.)
1. Primary process equipment (including installation cost)	..	254	
TOTAL	174	246	8
- Process equipment *	..	9	-
- Hand tools & apparatuses			
2. Buildings	24	135	
TOTAL			20
- Primary industrial buildings (total floor space: 4,000 m ²)	24	135	20
- Auxiliary buildings			
- Warehouses			
- Office administration buildings			
- Housing			
3. Auxiliary facilities (excl. buildings)	..	..
TOTAL	18	..	..
- Internal power equipment			
- Laboratory facilities	3	..	..
- Means of transportation	16	20	4
- Office equipment	..	31	5
TOTAL PHYSICAL FIXED ASSETS (excl. land):	..	..
4. Other fixed capital assets	6	77	
TOTAL	6	77	
- Land (total acreage: 70,000 m ²)			
- Land improvements			
- Others			

(**) Hanted since 1918; renovated in 1945.

*NB: Details of process equipment and capacity of primary operative shop: are given on Page three (Section VIII.)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1967 monthly average)

	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1. Local non-operatives						
- Managers	-	-	-	-	-	-
- Engineers	-	-	-	-	5	-
- Technicians	-	-	-	2	-	-
- Accountants	-	-	-	1	13	1
- Sales officers	-	-	-	2	2	-
- Clerks and typists	-	1	-	-	-	-
- Apprentices	1	-	-	-	-	-
- Others	-	2	-	1	1	-
2. Local operatives						
- Supervisors	-	-	-	2	-	-
- Foremen	-	-	-	-	-	-
- Skilled operative	-	-	3	7	1	-
- Machine operators	-	-	-	1	2	-
- Craftsmen	-	-	-	1	-	-
- Truck drivers	-	-	-	-	-	-
- Unskilled operatives	-	1	-	-	-	-
- Other full-time operative	-	32	7	-	-	-
- Part-time operative	4	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operative	-	-	-	-	-	-

EXTERNAL CONDITIONS:

Transport:	external long distance	fair
	internal long distance	"
	local end city	excellent
Utilities:	electricity	fair
	water	"
	gas	insignificant
Community:	residence	insignificant
	health and recreation	"
	education	fair
Own Welfare Facilities:		-

III. INVENTORIES

(End of 1967)

	Actual value (000 US \$)	Number of months
Inventories	158	
TOTAL		
- Production materials	31	1
- Other input materials	56	4
- Work-in-process	4	1
- Finished products	67	1

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift hours/day: (*)	9	-	-	hours
Actual hours/year:	2,080	-	-	hours
Actual days/year:	231	-	-	days

(*) Actual

IV. MANNING TABLE

(number of persons)

Shift categories: A. Supervisory staff and foremen (for all shifts)
B. Skilled operatives
C. Semi-skilled operatives (machine operators)
D. Unskilled operatives

(As per 30/9/1967)

	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	B-C	B-D
ALL SHOPS & UNITS:	90	34	56				-
1. Primary operative shops	45	2	1	7	35	-	-
- Soap boiling	3	1	1	1	-	-	-
- Laundry soap	11	-	-	1	10	-	-
- Toilet soap	13	-	-	1	12	-	-
- Powdered soap	3	-	-	3	-	-	-
- Cosmetic	15	1	-	1	13	-	-
2. Auxiliary operative units	11	-	11				-
- Repair & maintenance	2	-	2				-
- Mechanical shop	-	-	-				-
- Tooling shop	-	-	-				-
- Utilities control	1	-	1				-
- Product & material storage	1	-	1				-
- Off-site transport	3	-	3				-
- Guards, cleaners, etc.	2	-	2				-
- Others (boiler house)	2	-	2				-
3. Auxiliary non-operative units	34	32	2				-
- Production management	1	1	-				-
- Research & development	1	1	-				-
- Sales unit	18	18	-				-
- Accounting	14	12	-				-
- General administration			2				-

V. ANNUAL PRODUCTION

(1967)	Yr. of first prod.	Quantity produced		Av. unit price on factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Laundry soap (solid)	1945	t	540	350.2	189
Toilet soap	1950	"	244	1,060.6	258
Soft soap	1945	"	38	255.6	10
Shampoos	1958	"	13	2,399.4	31
Powdered soap	1945	"	416	294.5	123
Stain remover	1948	"	34	77.4	3
Hand cleaner	1956	"	39	194.5	8
Liquid soap	1956	"	196	430.6	84
Perfumes	1956	"	10	5,081.3	51
Others	..	..	..	..	217
Revenue from contract and commission work	..	..	..	..	53
TOTAL VALUE OF PRODUCTION:					1,027

VI. VALUE ADDED

(1967)	Total value (000 US \$)
1. Annual wages & salaries	
- Operative workers (61 persons)	84
- Non-operative workers (36 persons)	79
2. Other payments for employees	39
3. Annual depreciation	21
- Machinery & equipment	18
- Buildings & other facilities	2
- Non-physical capital assets	1
4. Rentals paid	9
5. Interests & royalties	8
6. Sales tax	49
7. Other indirect business taxes	
8. (-) Subsidies	-
9. Corporate income before tax	62
TOTAL VALUE ADDED:	
	351

DESCRIPTION OF MAJOR PRODUCTS:

Soaps, detergents and cosmetics are manufactured in batches.

All products could be exported, however, due to keen competition prospects for increasing foreign sales are rather uncertain.

Packaging: Laundry soaps: family-size packages.

Toilet soaps: single packages with appealing make-up.

Detergents: industrial and family-size packages.

Cosmetics: single packages with appealing make-up.

MARKET ASPECTS:

Re-sales:

Powdered soap, deodorant spray, particular brands of cosmetics.

Consumers of products:

Households, laundries, and industrial users.

Sales organization:

14 salesmen try to cover the whole country.

Share in the domestic market:

Approximately 10% of the national soap market.

EXPORT:

Total annual export: US \$ 6,800.

Major products	To Western countries	To Eastern countries	To Developing countries

No details available due to insignificance of exports; only Western countries are supplied with products of this company.

Export price policy:

Company reports difficulties to maintain abroad the price level of laundry soap and detergents due to heavy competition of internationally well-known enterprises. Mention is made that the establishment can compete with its toilet soap and cosmetics on the world market and therefore intends to promote exports.

Governmental policies:

The government subsidizes exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under VI.C. has been adjusted accordingly.

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import duties	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL:					12
- Electricity	000 kWh	179	-	-	6
- Coal	t	374	-	-	6
2. Production materials					
TOTAL:					331
- Tallow and other fats for soap	t	1,170	34	(*)	156
- Lye and caustic potash	"	220	3		23
- Fillers and soda	"	173	-		9
- Perfumes	"	4.3	82		40
- Dye-stuff	"	0.6	-		1
- Other raw materials (chemicals, linalin, glycerin, bleaching agents)	"	323	32		102

(*) Not determinable due to changing customs declarations.

	Total consumption value (000 US \$)
3. Other materials & supplies	
TOTAL:	167
- Packaging material (cartons, plastic and glass bottles, plastic bags)	162
- Parts, supplies & services	-
- Other materials & supplies	5
4. Business services purchased	
TOTAL:	166
- Transportation, storage & insurance	33
- Communication, advertising & other business services	133
5. Work performed by subcontractors	
TOTAL:	-
TOTAL VALUE OF CONSUMPTION:	
	676

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (1.1):

	Number	Original Purchase Value 000 US \$	Replacement value 000 US \$	Avg. Age (yrs)	Remarks
Soap boiling plant:					
- Boilers	18	18	20	17	
- Drying plant	23	23	25	5	
Laundry soap line:					
- Laundry soap presses and packing machines	4		4	10	
Toilet soap line:					
- Crystallizers	97	97	71	5	
- Spray-mixer	24		24	5	
- Packing machines	15		15	3	
- Packing machines for cosmetics	3		3	3	
- Dosing machines	15		15	5	
- Conveyor belts					
Other specialised machines	79				
Other common type of machines	31				

Source:
 III: Purchased second-hand
 IV: Obsolete
 V: Rented
 VI: Self-constructed

Further details:

Boilers:

Total capacity of all boilers amounts to 70,000 l.

Laundry soap line:

Daily running time 7 hrs; output capacity 500 - 700 kg/hr.

Various supplier countries (Italy, FR, Germany)

CAPACITY POWER:

Process equipment:
 - electric motors kW - 70 (miniature-sized motors only)

Generating equipment:

- installed capacity kVA -

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Manuf.	Autom.
Soap boiling shop		C	II
Drying plant		A	-
Laundry soap shop		C	I
Toilet soap shop		C	II
Powdered soap shop		C	II
Cosmetic shop		C	II

Modernization:
 A: most advanced
 B: considerably high standard
 C: modern standard
 D: appreciably short of today's standard
 E: almost outdated

Automation:
 I: fully automated
 II: semi-automated
 III: non-automated

Further details:

CAPACITY UTILIZATION:

Full-capacity output: US \$ 1,200,000

Current utilization: based on 1-shift operation.

Major products (or groups)	Approximate %						
	up to 30	30-50	50-60	60-70	70-80	80-90	100
All products							x

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output 000 US \$	No. of persons employed	Total exports 000 US \$
1963	730	84	1
1964	780	85	1
1965	820	83	1
1966	940	88	3
1967	1,040	97	7
1968	1,160	98	8

2. Investments in the past:

From 19 - to 19 57 :	Approximate amount 000 US \$	Type of investment
1957 - 1959 :	30	Continuous soap drying plant
1957 - 1959 :	70	Continuous toilet soap drying plant
in 1967 :	10	

3. Future Plan:

From 1968 to 1973 :	100	Further specialisation in cosmetics
---------------------	-----	-------------------------------------

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C - Confidential; figures of these size groups are included in those underlined.

(1964)
 Industry Soap and detergents manufacturing (ISIC-Code: 319)

1. Size groups by number of persons employed:	No. of estab.	No. of emp.	Avg. W. & S. per pers. (US \$)	Avg. gross prod. val. per pers. (US \$)	Avg. value added/gross prod. ratio (%)	2. Size groups by annual rate of production (000 US \$):		No. of estab.	No. of emp.	Avg. W. & S. per pers. (US \$)	Avg. gross prod. val. per pers. (US \$)	Avg. value added/gross prod. ratio (%)
						up to	over					
up to 19	127	481	1,447	9,607	53	up to 20	78	56	868	7,445	56	
20 - 99	39	1,735	1,817	11,469	51	20 - 40	12	59	1,328	6,067	55	
100 - 499	7	2,694	2,332	15,582	61	40 - 200	44	559	1,478	7,697	54	
500 - 999	1	C	C	C	C	200 - 400	13	355	1,829	10,859	53	
over 1,000	1	C	C	C	C	400 - 2,000	24	1,852	2,214	14,863	56	
TOTAL:	175	4,890	2,075	13,559	57	over 2,000	4	C	C	C	57	

XII. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services:

- | | | |
|---|---------------------------------------|--------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export promotion |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labor |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
-----------------	-------------------	-----------------	-------------------	-------------------------

3

Depending on the technical and financial possibilities of the projects in question, the company is prepared to provide know-how contracts.

XIII. SUPPLEMENTS & NOTES

Commission work:

The establishment manufactures brandname toilet soaps according to recipes of 4 contractors.
Commission received amounted to US \$ 53,000.
The work is based on long-term agreements.

Current problems:

How to protect against the ever increasing competition of large international concerns.

Inventory policy:

On the average the value of finished products amounts to 7% of the value of annual production.

Major Products: Pharmaceutical products (vasoconstrictants, anticonstics, analgetics, drops, etc.) and cosmetics (skin creams, skin tonics, lotions, skin and suntan oils, etc.). In 1968 total output amounted to 11.5 t of pharmaceuticals and to 4.5 t of cosmetics based on one-shift operation.

Reporting Unit: A one-establishment enterprise; founded in 1950; privately owned; no participation of foreign capital; 30 employees; licensed production of cosmetics. Some exports.

I. FIXED CAPITAL ASSETS

(End of 1968)

	Original purchase value (000 US \$)	Replacement value (000 US \$)	Avg. age (Yrs.)
1. Primary process equipment (including installation cost)			
TOTAL	63	75	1-13
- Process equipment	48	56	10
- Hand tools & apparatuses	15	19	
2. Buildings			
TOTAL	68	93	30
- Primary industrial buildings (total floor space: 500 m ²)	45	62	
- Auxiliary buildings	-	-	
- Warehouses	-	-	
- Office administration buildings	23	31	50
- Housing	-	-	
3. Auxiliary facilities (incl. buildings)			
TOTAL	30	35	
- Internal power equipment	-	-	
- Laboratory facilities	7	8	2
- Means of transportation	7	10	4
- Office equipment	16	17	10
TOTAL PHYSICAL FIXED ASSETS (excluding land):	161	203	
4. Other fixed capital assets			
TOTAL:	62	83	
- Land (total acreage: - m ²)	-	-	
- Land improvements (t.ocr. 750 ")	9	12	
- Others	53	71	

*NB Details of physical equipment and capacity of primary operative shops are given on Page three (Section VIII.)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1968 monthly average)

	up to 100 US\$	100-140 US\$	140-160 US\$	160-240 US\$	240-560 US\$	over 560 US\$
1. Local non-operatives						
- Managers	-	-	-	-	1	-
- Engineers	-	-	-	-	1	-
- Technicians	1	-	-	-	1	-
- Accountants	1	1	-	1	1	-
- Sales officers	-	-	-	3	-	-
- Clerks and typists	-	1	-	-	-	-
2. Local operatives						
- Supervisors	-	-	1	2	1	-
- Foremen	-	-	-	-	-	-
- Skilled operatives	-	-	-	-	-	-
- Machine operators	-	5	-	1	-	-
- Craftsmen	-	-	-	-	-	-
- Truck drivers	-	-	-	-	-	-
- Unskilled operatives	3	5	2	-	-	-
- Other full-time operatives	-	-	-	-	-	-
- Part-time operatives	2	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

EXTERNAL CONDITIONS:

Transport:	external long distance	excellent
	internal long distance	"
	local and city	fair
Utilities:	electricity	excellent
	water	"
	gas	"
Community:	residence	fair
	health and recreation	"
	education	"
Own Welfare Facilities:		-

III. INVENTORIES

(End of 1968)

	Actual value (000 US \$)	Number of months
Inventories	55	
TOTAL:		
- Production materials	37	5
- Other input materials	3	7
- Work-in-process	7	2
- Finished products	6	1

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
- Shift hours/day:	9	-	-	hours
- Actual hours/year:	2,023	-	-	hours
- Actual days/year:	228	-	-	days

IV. MANNING TABLE

(Number of persons)

Shift categories: A. Supervisory staff and foremen (for all shifts)
B. Skilled operatives
C. Semi-skilled operatives (machine operators)
D. Unskilled operatives

(1968 average)

	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	B-C	D
ALL SHOPS & UNITS:	32	15	-	17	-	-	
1. Primary operative shops	16	3	-	-	13	-	
- Processing shop	3	1	-	-	2	-	
- Packing shop	13	2	-	-	11	-	
2. Auxiliary operative units	4	-	-	4	-	-	
- Repair & maintenance	1	-	-	1	-	-	
- Mechanical shop	-	-	-	-	-	-	
- Tooling shop	-	-	-	-	-	-	
- Utilities control	-	-	-	-	-	-	
- Product & material storage	-	-	-	-	-	-	
- Off-site transport	1	-	-	1	-	-	
- Guards, cleaners, etc.	2	-	-	2	-	-	
3. Auxiliary non-operative units	12	12	-	-	-	-	
- Production management	1	1	-	-	-	-	
- Research & development	1	1	-	-	-	-	
- Sales unit	5	5	-	-	-	-	
- Accounting	3	3	-	-	-	-	
- General administration	2	2	-	-	-	-	

V. ANNUAL PRODUCTION

(1968)	Yr. of first prod.	Quantity produced		Avg. unit price on factory (US \$)	Total output value (1000 US \$)
		Unit	Quantity		
Products for group of products					
Pharmaceuticals:					
Vasokonstricting	1951-1961	kg	5,726	14.3	82
Drops	1968	"	2,300	2.6	6
Antiemetics	1953-1962	"	1,063	99.7	106
Analgetics	1951-1965	"	1,172	24.7	29
Others	1951-1968	"	1,107	4.5	5
Cosmetics:					
Skin creams	1962	"	1,162	32.7	38
Skin tonic lotions		l	1,390	7.2	10
Skin and suntan oils		kg	1,851	10.8	20
Others		l	665	22.5	15
TOTAL VALUE OF PRODUCTION:					311

VI. VALUE ADDED

(1968)	Total value (1000 US \$)
1. Annual wages & salaries	55
- Operative workers	22
(17 personal)	
- Non-operative workers	33
(15 personal)	
2. Other payments for employees	8
3. Annual depreciation	14
- Machinery & equipment	12
- Buildings & other facilities	1
- Non-physical capital assets	1
4. Rentals paid	-
5. Interests & royalties	9
6. Sales tax	16
7. Other indirect business taxes (*)	1
8. (-) Subsidies	-
9. Corporate income before tax	47
(*) Land tax, stamps. TOTAL VALUE ADDED:	150

DESCRIPTION OF MAJOR PRODUCTS:

Pharmaceuticals: Predominantly production of remedies for nausea and dizziness, anti-emetic drugs (50% of total production) and nose drops (25% of total production); limited product-mix; serial production; prompt delivery.

Packings: ampoules, drip-flacons, bottles, cellophane wrapped carton boxes, etc.

Cosmetics:

Licensed manufacture of high-quality products; serial production.

Packings: creams in pots; skin lotions, complexion milk in bottles; spray boxes.

MARKET ASPECTS:

Consumers of products:

Hospitals and pharmacies, households.

Sales organization:

5 salesmen for pharmaceuticals; 2 salesmen for cosmetics;

1 general representative in South-Eastern Europe and 1 in the Middle-East.

Extent of the market:

Mainly domestic market. Foreign sales area: particularly South-Eastern Europe.

Share in the domestic market:

Pharmaceuticals and cosmetics: approx. 0,5% each.

Exports and export price policy:

5 - 10% of annual sales of pharmaceuticals.

Prices for exports are fixed a bit higher than those for the domestic market.

EXPORT:

Total annual export: 11,000 US \$.

Major products	To Western countries	To Eastern countries	To Developing countries
Pharmaceuticals	100%	-	-

Governmental policies:

The government subsidizes exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under VI.C. has been adjusted accordingly.

Competition in the market:

Quality and prices of competing products are more or less the same. Direct marketing by licensor.

VII. ANNUAL CONSUMPTION

(1968)	Quantity consumed		% Import	Average import duties (1000 US \$)	Total consumption value (1000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL:					
- Electricity	000 kWh	18			1.4
- Fuel oil	t	22			1
- Gas	000 m3	4			0.3
- Water	000 m3	1.5			0.2
2. Production materials					
TOTAL:					
- Chemicals for pharmaceuticals	..	..	66	1	23
- Chemicals for cosmetic products (essence of perfumes)	..	..	20	0.3	8
- Packagings for pharmaceuticals	..	..	-	-	34
- Packagings for cosmetic products	..	..	3	-	15
3. Other materials & supplies					
TOTAL:					
- Packaging material					1
- Parts, supplies & services					4
- Other materials & supplies					3
4. Business services purchased					
TOTAL:					
- Transportation, storage & insurance					3
- Communication, advertising & other business services					64
5. Work performed by subcontractors					
TOTAL:					
					3
TOTAL VALUE OF CONSUMPTION:					161

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (N.I.):	Number	Original Purchase Value (1960 US \$)	Replacement value (1960 US \$)	Av. Age (yrs)	Supplier country	Daily running time	Capacity output	Remarks		
								III. Purchased second-hand	IV. Obsolete	V. Self-constructed
Tableting machine	2	2	3	1 and 13(*)	Austria	5 hrs	150,000 units/month			
Stirring machine	1	2	2	10	Ger., F.R.	2 "	150,000 " "			
Wrapping machine (cellophane)	2	4	5	2 and 6	UK, France	2 " 4 "	4,000 units/day 30,000 " "			
Packing machine (cartons)	1	11	12	2	Ger., F.R.	3 "	20,000 " "			
Quick drier	1	3	4	1	Switzerl.	2-3 hrs	150,000 units/month			
Bottle cleaning machine	1	3	3	1	Ger., F.R.	2-3 "	11,000 units/day			
Bottle filling machine	1	..	..	2	" "	3 "	5,000 " "			
Printing press and paper trimmer	1	2	2	1						
Central heating plant	1	10	12	8						
Shelf and supply depot	..	6	7	10 (*)						
Others	..	4	6	10 (*)						

CAPACITY POWER:
 Process equipment:
 - electric motors - kW
 Generating equipment:
 - installed capacity - kVA

(*) Obsolete process equipment

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechan.		Autom.		Further details
		A	B	C	D	
Processing shop and laboratory	Processing of substances and controlling of production materials; minor research activities.			C	II	Capacity output: 300,000 units/month
Packing	Tablets and liquids are filled into small containers which again are packed into cartons; automatic wrapping.			C	II	" " 300,000 " "

CAPACITY UTILIZATION:

Full-capacity output: US \$ 450,000 based on 1-shift operation.
 One additional non-operative and 4 operatives would be required in order to reach this figure.

Current utilization:

Major products (or processes)	Approximate %							
	up to 20	40	60	80	70	80	90	100
Vasokonstrictants								X
Antiseptica								X
Analgetica							X	
Skin creams							X	
Skin lotions							X	
Skin and suntan oils							X	

Underutilization of capacity is due to insufficient demand.

IX. HISTORY & PLAN

1. Performance in the past:		Total output (1960 US \$)	No. of persons employed	Total exports (1960 US \$)
Year:				
1963		170	34	6
1964		190	33	7
1965		200	35	6
1966		240	37	7
1967		270	38	12
1968		310	32	11

2. Investments in the past:		Approximate amount (1960 US \$)	Type of investment
From 1959 to 1963:		77	Purchasing of buildings
" 1959 " 1968:		37	Machinery and equipment
" 1959 " 1968:		44	Vans, central heating, equipment

3. Future Plan:

From 19.. to 19..: 77 Introduction of new products; rationalization of bottle filling; installation of new welfare facilities.

As a consequence of the proposed investment 4 auxiliary operatives will be employed less. However, one additional operative will be needed.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1964)

Industry: Pharmaceutical products manufacturing (SIC-Code: 2819)

1. Size groups by number of persons employed:		No. of estab.	No. of empl.	Avg. W. & B. per pers. (US \$)	Avg. gross prod. vol. per pers. (US \$)	Avg. value added/gross prod. ratio (%)
up to 19	88	457	1,679	9,071	56	
20 - 99	39	1,538	1,750	9,968	58	
100 - 499	14	3,074	2,065	13,838	53	
500 - 999	1	0	0	0	0	
over 1,000	-	-	-	-	-	
TOTAL:	142	5,069	1,935	11,931	54	

C - confidential, figures of this size group are included in the underlined figures.

2. Size groups by annual rate of production (1960 US \$):		No. of estab.	No. of empl.	Avg. W. & B. per pers. (US \$)	Avg. gross prod. vol. per pers. (US \$)	Avg. value added/gross prod. ratio (%)
up to 20	34	56	1,050	5,069	62	
20 - 40	17	87	1,415	5,639	58	
40 - 200	35	399	1,777	7,958	62	
200 - 400	27	1,008	1,760	7,646	57	
400 - 2,000	19	1,857	1,876	9,578	54	
over 2,000	6	1,662	2,201	18,672	53	
TOTAL:	142	5,069	1,935	11,931	54	

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service

- | | | |
|---|---------------------------------------|-----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export transactions |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultation | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Fields of industry	Description of projects
3				Participation in industrial projects is possible to a very limited extent only.
5				Delegation of experts feasible.
7				The reporting establishment is interested in signing licence agreements with developing countries.

XII. SUPPLEMENTS & NOTES

Commission work:

Pelleting of tablets, filling of ampoules and foil sealing of perforated bottles was done by subcontractors on a short-term basis. The commission paid by the enterprise amounted to US \$ 3,200.

Depreciation policy:

The straight-line method as well as the accelerated method are applied.

Inventories policy:

High amount of auxiliary materials due to purchasing policy (more favourable prices can be obtained by purchasing a higher quantity at once).

Value of finished products in stock amounts to about 2% of total value of production.

Governmental policies:

Producer prices are stipulated by government regulations at a very low level in comparison with world-market prices. Maximum profit margin allowed: 10%.

Major Products: Matchboxes, zip fasteners, metal for die casting and injection moulding.
In 1967 total value of production amounted to BE 9,143,338 based on 1-shift operation.

Reporting Unit: A branch of a establishment enterprise, privately owned, founded before 1945, 134 employees, 15 exports; almost no internal manufacturing.

I FIXED CAPITAL ASSETS

(End of 1967)	Book value (1000 US \$)	Replacement value (1000 US \$)	Avg age (Yrs)
1 Primary process equipment (including installation cost)			
TOTAL	1,113	—	—
- Process equipment*	1,113	—	—
- Hand tools & apparatus	—	—	—
2 Buildings			
TOTAL	1,222	—	—
- Primary industrial buildings (total floor space 14,560 m ²)	1,026	—	4
- Auxiliary buildings	—	—	—
- Warehouse	—	—	—
- Office administration buildings	296	—	50
- Housing	—	—	—
3 Auxiliary facilities (excl. buildings)			
TOTAL	277	—	—
- Internal power equipment	117	—	40
- Laboratory facilities	4	—	10
- Means of transportation	3	—	6
- Office equipment and others	126	—	—
TOTAL PHYSICAL FIXED ASSETS (excluding land)	2,612	—	—
4 Other fixed capital assets			
TOTAL	173	—	—
- Land (total acreage 14,117 m ²)	32	—	—
- Land improvements (t. acc. 75,997 m ²)	86	—	—
- Others (see "Office equipment")	—	—	—

*NB: Details of process equipment and auxiliary facilities are given in Page three (Section III).

II MONTHLY GROSS WAGES AND SALARIES

1967 monthly average	Number of persons					
	up to 100 US \$	100-140 US \$	140-160 US \$	160-200 US \$	200-250 US \$	over 250 US \$
1 Local non-operatives						
- Managers	—	—	—	—	1	2
- Engineers	—	—	—	—	7	—
- Technicians	—	—	—	—	1	—
- Accountants	—	—	—	—	1	—
- Sales officers	—	—	—	—	7	2
- Clerks and typists	—	—	1	6	4	—
- Foremen	—	—	1	6	—	—
2 Local operatives						
- Supervisors (*)	—	—	—	—	—	—
- Foremen (a)	—	—	—	15	—	—
- Skilled operatives	—	96	34	—	—	—
- Machine operators	—	—	2	14	—	—
- Craftsmen	—	—	2	—	—	—
- Truck drivers	—	—	—	—	—	—
- Unskilled operatives	—	—	4	—	—	—
- Other full-time operatives	—	43	—	—	—	—
- Part-time operatives	—	—	—	—	—	—
3 Foreign employees						
- Managerial staff	—	—	—	—	—	—
- Technical staff	—	—	—	—	—	—
- Other skilled operatives	—	—	—	—	—	—
- Unskilled operatives	—	—	—	—	—	—

(*) Company considers supervisors and foremen as local non-operatives.

EXTERNAL CONDITIONS

Transport	external long distance	excellent
	internal long distance	"
	local and city	"
Utilities	electricity	excellent
	water	"
	gas	"
Community	residence	fair
	health and recreation	excellent
	education	excellent
Own Welfare Facilities		—

III INVENTORIES

(End of 1967)	Actual value (1000 US \$)	Number of months
Inventories		
TOTAL	502	—
- Production materials	191	6
- Other input materials	6	2.5
- Work-in-process	81	6
- Finished products	224	3

WORKING TIME PER OPERATIVE WORKER

	1st shift	2nd shift	3rd shift	hours
Shift hours/day (*)	9	—	—	hours
Actual hours/year	2,069	—	—	hours
Actual days/year	234	—	—	days

(*) Actual hours; regular working time: 4 hrs/day

IV MANNING TABLE

(End of 1967)	Total	Shift categories				
		A	B	C	D	E
ALL SHOPS & UNITS	234	45	179	—	—	—
1 Primary operative shops	206	17	50	—	139	—
- Matchboxes	93	5	15	—	73	—
- Zip fasteners	69	5	20	—	44	—
- Metal for die casting and injection moulding	44	7	15	—	22	—
2 Auxiliary operative units	17	17	—	—	—	
- Repair & maintenance	6	6	—	—	—	
- Mechanical shop	—	—	—	—	—	
- Tooling shop	—	—	—	—	—	
- Utilities control	2	2	—	—	—	
- Product & material storage	4	4	—	—	—	
- Off-site transport	3	3	—	—	—	
- Guards, cleaners, etc.	2	2	—	—	—	
3 Auxiliary non-operative units	11	11	—	—	—	
- Production management	2	2	—	—	—	
- Research & development	—	—	—	—	—	
- Sales unit	6	6	—	—	—	
- Accounting	2	2	—	—	—	
- General administration	1	1	—	—	—	

Shift categories: A: Supervisory staff and foremen (for all shifts); B: Skilled operatives; C: Semi-skilled operatives; non-hour operatives; D: Unskilled operatives; E: Unskilled operatives.

Major Products: Synthetic resin and oil varnishes, thinners and other related products. Capable of producing approximately 1,650 tons of varnishes and thinners annually based on 1-shift operation. Full-capacity output amounts close to US \$ 1.5 million.

Reporting Unit: A one-establishment enterprise, privately owned; founded in 1934; 100 employees. Leading market position, company belongs to the 10 largest establishments producing varnishes. Close proximity to markets. A foreign wood protective fluid is manufactured under licence. Research activity and exchange of experience with other European firms.

I. FIXED CAPITAL ASSETS

(End of 1968)

	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average (Yrs.)
1. Primary process equipment (including installation cost) TOTAL	213	267	-
- Process equipment *	213	267	-
- Hand tools & apparatuses	-	-	-
2. Buildings TOTAL	349	639	-
- Primary industrial buildings (total floor space: 1,970 m ²)	252	503	10
- Auxiliary buildings	39	39	11
- Warehouses	58	97	15
- Office administration buildings	-	-	-
- Housing	-	-	-
3. Auxiliary facilities (excl. buildings) TOTAL	94	102	-
- Internal power equipment	-	-	-
- Laboratory facilities	29	32	4
- Means of transportation	41	45	2
- Office equipment	24	25	5
TOTAL PHYSICAL FIXED ASSETS (excluding land)	656	1,008	-
4. Other fixed capital assets TOTAL	391	1,335	-
- Land (total acreage: 3,080 m ²)	112	596	-
- Land improvements (t.acr. 3,020 ")	117	584	-
- Others (incl. intangible assets)	155	155	..

*NB Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1968 monthly average)

	up to 100 US\$	100 -140 US\$	140 -160 US\$	160 -240 US\$	240 -560 US\$	over 560 US\$
1. Local non-operatives	-	-	-	-	2	2
- Managers	-	-	-	-	-	-
- Engineers	-	-	-	6	-	-
- Technicians	-	-	1	2	1	-
- Accountants	-	-	1	5	8	1
- Sales officers	-	-	4	3	-	-
- Clerks and typists	4	-	-	-	-	-
- Commercial apprentices	-	-	-	-	-	-
2. Local operatives	-	-	-	-	2	-
- Supervisors	-	-	-	8	-	-
- Foremen	-	-	11	4	-	-
- Skilled operatives	-	-	-	19	-	-
- Machine operators	-	-	-	3	-	-
- Craftsmen	-	-	-	8	-	-
- Truck drivers	-	-	-	2	-	-
- Unskilled operatives	-	-	-	-	-	-
- Other full-time operatives	-	-	-	-	-	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees	-	-	-	-	-	-
- Managerial staff	-	-	-	-	2	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

EXTERNAL CONDITIONS:

Transport:	external long distance	excellent
	internal long distance	"
	local and city	"
Utilities:	electricity	excellent
	water	"
	gas	insignificant
Community:	residence	poor (see p.4/XII)
	health and recreation	excellent
	education	fair
Own Welfare Facilities:	Sports-club	

III. INVENTORIES

(End of 1968)

	Actual value (000 US \$)	Number of months
Inventories	128	
TOTAL:		
- Production materials	56	1
- Other input materials	3	1
- Work-in-process	4	1
- Finished products	65	1

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift hours/day	9	-	-	hours
Actual hours/year	2,232	-	-	hours
Actual days/year	255	-	-	days

IV. MANNING TABLE

(Number of persons)

III-B categories: A. Supervisory staff and foremen (for all shifts)
B. Skilled operatives
C. Semi-skilled operatives (machine operators)
D. Unskilled operatives

(1968 average)

	Total	1st Shift				2nd Shift	
		A	B	C	D	B-D	C-D
ALL SHOPS & UNITS:	99	50	49		-	-	
1. Primary operative shops	25	3	-	14	8	-	
- Oil and synthetic resin, varnishes	9	1	-	5	3	-	
- Nitrogen varnishes	16	2	-	9	5	-	
2. Auxiliary operative units	30	3	27		-	-	
- Repair & maintenance	2	-	2		-	-	
- Mechanical shop	-	-	-		-	-	
- Tooling shop	-	-	-		-	-	
- Utilities control	2	-	2		-	-	
- Product & material storage	11	3	8		-	-	
- Off-site transport	8	-	8		-	-	
- Guards, cleaners, etc.	5	-	5		-	-	
- Cleaning of packages	2	-	2		-	-	
3. Auxiliary non-operative units	44	44	-		-	-	
- Production management	5	5	-		-	-	
- Research & development	9	9	-		-	-	
- Sales unit	15	15	-		-	-	
- Accounting	8	8	-		-	-	
- General administration	7	7	-		-	-	

V ANNUAL PRODUCTION

Products (or group of products)	Yr. of first prod.	Quantity produced		Avg. unit price ex factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Matches	1890	cartons (4)	3,882	17.6	479
Zip fasteners	1960	m	568,600	0.5	303
Metal for die casting and injection moulding	1960	kg	37,300	5.7	212
Revenue from contract and commission work					33
1 carton containing 10,000 match-boxes					
TOTAL VALUE OF PRODUCTION:					1027

VI VALUE ADDED

(1967)	Total value (000 US \$)
1 Annual wages & salaries	313
- Operative workers (189 persons)	293
- Non-operative workers (43 persons)	13
2 Other payments for employees	35
3 Annual depreciation	56
- Machinery & equipment	65
- Buildings & other facilities	12
- Non-physical capital assets	2
4 Rentals paid	-
5 Interests & royalties	46
6 Sales tax (consumption tax)	44
7 Other indirect business taxes	2
8 () Subsidies	-
9 Corporate income before tax (loss)	(-) 140
TOTAL VALUE ADDED	481

DESCRIPTION OF MAJOR PRODUCTS:

No information available.

MARKET ASPECTS:

Consumers of products:

Matches: Foodstuff wholesalers, tobacco dealers, drug stores.

Zip fasteners: Clothing industry.

Metal for die casting and injection moulding: Electrical industry.

Sales commission:

6 representatives for consumer goods and 3 representatives for ancillary products.

1 foreign sales office.

Share in the domestic market:

Matches: 10%; zip fasteners: 16%.

Competition in the market:

Imported matches are sometimes up to 50% cheaper (dumping).

EXPORT:

Total annual export US \$ 180,000

Major product	To Western countries	To Eastern countries	To Developing countries
Matches	90%	-	20%
Zip fasteners	50%	35%	15%
Metal for die casting and injection moulding	100%	-	-

Export price policy:

Export prices have to be adjusted according to international market prices.

VII ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import duties	Total consumption value (000 US \$)
	Unit	Quantity			
1 Energy and water TOTAL					27
- Electricity	000 kWh	360			9
- Coal	t	1,386.4			15
- Petrol	t	11			0.4
- Gas	000 m ³	120			2
- Water	000 m ³	20			1
2 Production materials TOTAL					316
- Barbed wood	m ³ (*)	1,492			29
- Chemicals	kg	116,400			84
- Copper and nickel alloys	kg	33,400			51
- Zinc and aluminium alloys	kg	40,103			18
- Plastics	kg	40,870			13
- Textile ribbons	m	1,800,000			48
- Metal for zip fasteners	kg	200,000			63
- Cardboard	kg	40,900			10

(*) m³ (Postmeter) - (a) in terms of solid volume of wood.

	Total consumption value (000 US \$)
3 Other materials & supplies TOTAL	81
- Packaging material	81
- Parts, supplies & services	-
- Other materials & supplies	-
4 Business services purchased TOTAL	22
- Transportation, storage & insurance	9
- Communication, advertising & other business services	13
5 Work performed by subcontractors TOTAL	-
TOTAL VALUE OF CONSUMPTION:	446

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (I.1):	Number	Book Value (1000 US \$)	Replacement value (1000 US \$)	Av. Age (yrs)	Supplier country	Year of installation	Daily running time	Capacity output	Remarks:
									III. Purchased second-hand IV. Obsolete V. Rented VI. Self-manufactured
Zip fastener processing equipment	20	348	..	10	Germany, F.R.	1957-1964	7 hrs	700 - 1,100 m/day	
Die cast metal presses	8	194	..	5	Germany, F.R. Switzerland	1955-1966	6 hrs	..	
Injection moulded metal presses	9	194	..	4	Germany, F.R. Italy	1961-1966	6 hrs	..	
Match processing equipment	6	251	..	40/1	Austria USA	1930-1967	9 hrs	200,000 boxes/day	
Machine tools	..	116	..	5					

CAPACITY POWER:
 Process equipment:
 electric motors 600 kW

Generating equipment:
 installed capacity - LVA

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization:		Automation:		Further details:
		A. most advanced B. considerably high standard	C. moderate standard D. appreciably short of today's standards E. almost outdated	I. fully automated II. semi-automated	III. non-automated	
Matches			A		III	
Zip fasteners			C		III	
Metal for die casting and injection moulding			A		II	

CAPACITY UTILIZATION:

Full capacity output ..

Current utilization:

Major products for processes	Approximate %				
	up to 30	40	50	60	70

Approximately 60 - 70% of the existing capacity could be utilized.
 This under-utilization is due to lack of demand.

In order to operate at full-capacity output another 2 non-operatives and 33 operatives would be required on the 1st shift.

IX. HISTORY & PLAN

1. Performance in the past:	Total output (1000 US \$)	No. of persons employed	Total exports (1000 US \$)
Year: 1963	1,110	291	70
1964	1,180	320	90
1965	1,230	285	80
1966	1,150	281	80
1967	890	232	140
1968	1,220	240	310

2. Investments in the past:	Approximate amount (1000 US \$)	Type of investment
From 1960 to 1965 :	800	Machinery and equipment to produce zip fasteners and matches (booklet-type)
1967 :	130	

3. Future Plan:	Approximate amount (1000 US \$)	Type of investment
From 1968 to 1972 :	770	Introduction of new products, expansion of machinery and production departments, rationalization of machinery and manufacturing processes. Another 60 persons will then be required on the 1st shift.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C = confidential; figures of these size groups are included in those underlined.

(1964) Vegetable and animal oils and fats and manufacture of matches, medical preparations, soap and detergents, etc. (ISIC-Code: 319)

1. Size groups by number of persons employed:						2. Size groups by annual output of production (1000 US \$):					
No. of establishments	No. of emp.	Av. W. & S. per pers. (1000 \$)	Av. gross prod. val./per pers. (1000 \$)	Av. value added/gross prod. ratio (%)		No. of estab.	No. of emp.	Av. W. & S. per pers. (1000 \$)	Av. gross prod. val./per pers. (1000 \$)	Av. value added/gross prod. ratio (%)	
up to 19	472	2,066	1,599	10,737	51	up to 20	251	236	932	7,093	57
20 - 99	127	5,536	1,843	10,498	51	20 - 40	57	251	1,347	6,423	56
100 - 499	34	9,011	2,095	12,439	57	40 - 200	165	1,888	1,618	8,084	57
500 - 999	3	C	C	C	C	200 - 400	65	2,021	1,763	9,105	52
over 1,000	1	C	C	C	C	400 - 2,000	84	6,644	1,915	11,193	51
						over 2,000	15	5,573	2,241	14,946	57
TOTAL:	637	16,615	1,949	11,714	54	TOTAL:	637	16,615	1,949	11,714	54

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|---|---------------------------------------|--------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export promotion |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
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No information available.

XII. SUPPLEMENTS & NOTES

Contract and commission work:

The enterprise performed commission work for a subsidiary company. The commission received for mixing and packaging of insecticides amounted to US \$ 33,000.

Bottlenecks in the past:

Several machines caused severe bottlenecks which, however, could be abolished due to rationalisation of the production process. Therefore, the company had sometimes to operate on short-term basis which was partly responsible for the 1967 loss of US \$ 189,000.

Current problems:

Since imported matches are more or less dumped on the market, the company could not recover its costs of production. In the future more emphasis will be put on the other products and new ones.

Inventory policy:

On the average the value of finished products in stock amounts to 24% of the total value of production.

Training courses:

The company sends some of its technical and commercial employees to advanced training courses. Frequently machine suppliers offer courses to acquaint operatives with machinery which their company is going to buy.

Governmental policies:

The government subsidises exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under VI.6. has been adjusted accordingly.

Major Products: Prepared organic compounds to be used as a base for pharmaceutical products.

Annual capacity output is 50,000 kg per year on one-shift operation.

Reporting Unit:

A small, very modern establishment which is independent as a productive and accounting unit but linked to an industrial group which handles most of administrative work, all basic research, and most sales. Current value of total assets about US \$ 1,000,000 and 53 employees as of 1968.

I. FIXED CAPITAL ASSETS

(End of 1968)

	Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
1. Primary process equipment			
TOTAL	1967	490	(*)
- Process equipment			
- Hand tools & apparatuses		420	(*)
- Cost of installation			
2. Primary industrial building			
TOTAL	1967	320	(*)
(total floor space: .. m ²)		320	
3. Auxiliary facilities			
TOTAL	1967	120	(*)
- Water, steam, electricity, cooling & storing		160	
- Transportation facilities			
- Administrative facilities		30	
- Laboratory facilities			
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		990	(*)
4. Other fixed capital assets			
TOTAL		40	..
- Land (total acreage: 4,500 m ²)		40	..

(*) Replacement value is estimated to equal original purchase price.

Type of process equipment (Principal equipment only)	Supplier country	Year of installation	Orig. purchase value (US \$)	Replacement value (US \$)
Reaction-type boilers stainless steel, capacity 5,000 liters			14,500	
Reaction-type boilers stainless steel, capacity 2,000 liters			9,500	
Reaction-type boilers stainless steel, capacity 1,000 liters		1967	7,200	(*)
Reaction-type boilers lined, capacity 800 liters			6,400	
Reaction-type boilers lined, capacity 2,000 liters			11,000	
Centrifugal drying machines, 8 diameter 1,250 mm			13,000	
Hot air driers			8,000	
Rectification columns			9,500	

Principal other equipment:

Steam generator with water pipes of 5,500 kg/hr (capacity: 15 atmospheres of saturated steam)	1		16,000	
Refrigerating compressor (capacity 90,000 refrigeration units/hr)	1		6,500	
Bridge crane (for maintenance purposes)	1		4,000	
Water pumps (1,700 liters/minute)	2		5,800	
Electrical transformers 20,000 V - 380 V - of 160 kVA	3		..	

(*) Replacement value is estimated to equal original purchase price.

CAPACITY POWER:

Process equipment: 350 kW
Electric motors: ..

Generating equipment:
Installed capacity: 480 kVA

EXTERNAL CONDITIONS:

Transport: Local, national, international, all excellent.

Utilities: Fair.

Community: Housing: relatively poor; schools' medical facilities: fair; recreation facilities: limited; utilities: fair.

II. INVENTORIES AND WORKING CAPITAL

(in 1000 US \$)

(End of 1968)

1. Inventories	Actual value	2. Liquid assets	Actual value
TOTAL	800	TOTAL	Not available
- Production materials	320	- Cash (hand/bank)	
- Other input materials		- Market. sec. & bonds	
- Work-in-process	480	- Short-term investment	
- Finished products		- Prepaid expenses	
		- Accounts receivable	
3. Desired working capital	Number of months	Value	
TOTAL		700	
- Production materials(*)	3	100	
- Admin. and research costs		85	
- Finished products		500	
- Wages & salaries		15	
- Other special items			

III. MANNING TABLE

(Number of persons)

A - Machine operators
B - Other operatives

	Total	1st shift		2nd shift	
		A	B	A+B	A+B
(1968 average)	53	53	-	-	-
ALL SHOPS & UNITS:	53	53	-	-	-
1. Primary operative shops	21	21	-	-	-
- Compounding shop	15	15	-	-	-
- Distilling shop	2	2	-	-	-
- Drying shop	2	2	-	-	-
- Supervisory staff for the above units	2	2	-	-	-
2. Auxiliary operative units	20	20	-	-	-
- Repair and maintenance	3	3	-	-	-
- Mechanical shop	-	-	-	-	-
- Utilities control	5	5	-	-	-
- Product & material storage	5	5	-	-	-
- Off-site transport	-	-	-	-	-
- Guards, cleaners, etc.	5	5	-	-	-
- Others	2	2	-	-	-
3. Auxiliary non-operative units	12	12	-	-	-
- Production management	1	1	-	-	-
- Research & development	9	9	-	-	-
- Sales unit	-	-	-	-	-
- General administration	1	1	-	-	-
- Accounting	1	1	-	-	-

WORKING TIME PER OPERATIVE WORKER:

- Normal hours/day:	8.5 hours	- Normal days/year:	260 days
- Actual hours/year:	2,210 hours		

CAPACITY OF OPERATIVE SHOPS:

The plant has been very carefully balanced so that expansion will require an even increase of inputs throughout each of the four stages of production.

Absence rate:

Average daily rate: 5..

Employee turnover rate:

Annual average turnover as % of total labour force: 10..

IV. ANNUAL PRODUCTION

(1968)	Yr. of first prod.	Quantity produced	Planned capacity output	Unit price in factory (US \$)	Total production value (000 US \$)
Products for group of products	Unit	Output			
Heterocyclic compounds of "INDAZOL" base, produced in form of pharmaceutical salts, 2 types	1967	kg 20,000	30,000	(*)	1,200
Heterocyclic compounds of "OXAZOL" base, produced in form of pharmaceutical salts, 2 generic types	1967	kg 14,000	20,000	(*)	800
TOTAL VALUE OF PRODUCTION					2,000

(*) N.B.: Unit prices are not specified though simple division would yield one type of "unit prices". The problem is that the "unit" as such would be meaningless. The establishment was unwilling to supply further description or price data, in the interest of avoiding possible revelation of the firm's identity.

Exports: Approximately US \$ 1,200,000 of annual production in 1968 was exported. Major buyers were West European or Japanese. Sales were also costured, in a far lesser degree, over Latin America, East Europe, and several Asian countries. The U.S. market is yet to be tapped but the management is quite hopeful in this regard.

VI. VALUE ADDED

(1968)	(*) Value (000 US \$)
1. Wages & salaries	
- Employees in direct production (41 persons)	110
- Other employees (12 persons)	70
2. Other payments for employees	40
3. Annual depreciation	150
4. Rentals paid	160
5. Interest & royalties	
6. Sales tax	-
7. Other ind. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	500
(*) Very approximate estimates.	1,030

VII. MONTHLY EARNING RATES

(End of 1968)	No. of emp.	Average earning rate (monthly) (US \$)	Min.	Max.
1. Local non-operatives				
TOTAL:	11			
- Managers	1	500		
- Engineers	-	-		
- Technicians	6	150		300
- Accountants	1	150		300
- Sales officers	-	-		
- Other professional staff	-	-		
- Clerks & typists	3	320		500
2. Local operatives				
TOTAL:	41			
- Supervisors	4	200		300
- Foremen	-	-		
- Machine operators	19	160		300
- Craftsmen	-	-		
- Truck drivers, (*)	8	160		
- Other full-time operatives	5	120		
- Unskilled & part-time operatives	5	100		
(*) mechanics, and electricians.				
3. Foreign employees				
TOTAL:	-	-		

V. ANNUAL CONSUMPTION

(1968)	Quantity consumed	Total consumption value (000 US \$)
	Unit	
1. Energy and water		
TOTAL:		33
- Electricity	000 Kwh ..	20
- Fuels (mainly liquid)	..	13
- Water	m ³ 10,900 (from own well)	-
2. Production materials		
TOTAL:		420
- Basic chemical compounds	t 100	420
3. Other direct costs		
TOTAL:		122

4. Other materials & supplies

TOTAL:	Total consumption value (000 US \$)
TOTAL:	50
- Packagings	10
- Repair & maintenance	40
- Non-factor service inputs	-
5. Business services purchased	
TOTAL:	65
- Transport, storage & insurance	50
- Communication, advertisements, etc.	15
6. Basic research and administrative expenses performed by industrial group headquarters	
TOTAL:	280
	970

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1961)	IBIC-code: (319)	Industry group: Manufacture of miscellaneous chemical products	Value added (in US \$)	Labour payments (in US \$)	Fixed investment (in US \$)	Value added/labour ratio	Value added/total output ratio
1. Size groups by number of persons employed:							
up to 99		3,900	2,960	490	75.8	26.9	
100 - 499		4,800	3,320	615	69.3	34.2	
500 - 999		5,750	3,760	840	65.3	35.1	
1,000 - 4,999		6,750	3,500	1,400	52.6	34.7	
5,000 and more		6,850	3,820	1,450	55.8	42.7	
TOTAL		28,000	13,660	4,160	58.6	37.7	
Per Establishment in 000 of US \$							
2. Size groups by number of persons employed:							
up to 99		985	33	265	201	68	
100 - 499		3,080	135	1,060	730	220	
500 - 999		10,900	555	3,800	2,480	660	
1,000 - 4,999		36,800	2,650	12,800	6,730	1,890	
5,000 and more		175,000	15,700	74,200	41,600	10,820	
TOTAL		230,765	16,573	87,665	42,640	12,600	

IX. SUPPLEMENTS

INDICATIVE COST SUPPLEMENT (*)

Item	Value (000 US \$)	Total (%)
A. Direct costs	820	41
Primary products	420	20.5
Other direct costs	420	20.5
B. Indirect costs	680	34
Administrative -- general costs	250	12.5
Research	180	9
Interests, royalties, etc.	250	12.5
C. Profits	500	25
TOTAL:	2,000	100

(*) Provided totally by management.

Major Products: Lubricating oils and greases.
Capable of producing annually 6,000 t of greases and 2,400 t of lubricating oils. Full-capacity output amounts to approximately US \$ 850,000.

Reporting Unit: A one-establishment enterprise; privately owned; production was started in 1938; since 1893 engaged in re-selling lubricants. 57 employees. Largest lubricant producing enterprise in the country. Unfavourably located. No licensed production and company-conducted research activity. 8% exports.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (000 US \$)	Book value (000 US \$)	Average age (Yrs.)
1. Primary process equipment (including installation cost)			
TOTAL:	..	61	..
- Process equipment *	..	40	..
- Hand tools & apparatuses	..	21	-
2. Buildings			
TOTAL:	..	227	18
- Primary industrial buildings (total floor space: 4,600 m ²)	..	124	18
- Auxiliary buildings	..	40	5
- Warehouses	..	6	5
- Office administration buildings	..	16	1
- Housing	..	41	30
3. Auxiliary facilities (excl. buildings)			
TOTAL:	..	78	-
- Internal power equipment	..	-	-
- Laboratory facilities	..	8	5
- Means of transportation	..	53	3
- Office equipment	..	17	1
TOTAL PHYSICAL FIXED ASSETS (excluding land):	..	366	-
4. Other fixed capital assets			
TOTAL:	..	320	-
- Land (total acreage: 22,000 m ²)	..	2	-
- Land improvements (i.e. 13,600 ")	..	318	-
- Others	..	-	-

*NB. Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1967 monthly average)	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1. Local non-operatives						
- Managers	-	-	-	1	1	1
- Engineers	-	-	-	1	-	-
- Technicians	-	-	1	-	-	-
- Accountants	-	-	-	-	-	-
- Sales officers	-	-	1	-	-	-
- Clerks and typists	3	2	-	1	-	-
- Supervisors	-	-	1	1	1	-
2. Local operatives						
- Supervisors (*)	-	-	-	-	-	-
- Foremen	-	2	-	-	-	-
- Skilled operatives	-	-	-	-	-	-
- Machine operators	-	3	-	-	-	-
- Craftsmen	-	5	-	-	-	-
- Truck drivers	-	3	-	-	-	-
- Unskilled operatives	2	-	-	-	-	-
- Other full-time operatives	6	20	-	-	-	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

(*) Company considers supervisors as local non-operatives.

EXTERNAL CONDITIONS:

Transport:	external long distance	fair
	internal long distance	excellent
	local and city	insignificant
Utilities:	electricity	excellent
	water	fair
	gas	insignificant
Community:	residence	poor (*)
	health and recreation	excellent
	education	poor (*)
Own Welfare Facilities:		-

(*) Lack of vocational schools and housing.

III. INVENTORIES

(End of 1967)

	Actual value (000 US \$)	Number of months
Inventories	106	
TOTAL:		
- Production materials	79	2.5
- Other input materials	-	-
- Work-in-process	-	-
- Finished products	27	0.5

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
- Shift hours/day: (*)	10	-	-	hours
- Actual hours/year:	2,438	-	-	hours
- Actual days/year:	247	-	-	days
(*) Actual hours due to overtime (normal working time: 2,400 hours).				

IV. MANNING TABLE

(number of persons)

Shift categories: A. Supervisory staff and foremen (for all shifts)
B. Skilled operators
C. Semi-skilled operatives (machine operators)
D. Unskilled operatives

(31 December 1967)	Total	1st Shift				2nd Shift	3rd Shift	
		A	B	C	D	B-D	B-D	
ALL SHOPS & UNITS:	57	15	42				-	-
1. Primary operative shops	39	3	1	11	24	-	-	
- Manufacture of lubricants	39	3	1	11	24	-	-	
2. Auxiliary operative units	7	1	6				-	-
- Repair & maintenance	3	1	2				-	-
- Mechanical shop	-	-	-				-	-
- Tooling shop	-	-	-				-	-
- Utilities control	-	-	-				-	-
- Product & material storage	-	-	-				-	-
- Off-site transport	3	-	3				-	-
- Guards, cleaners, etc.	1	-	1				-	-
3. Auxiliary non-operative units	11	11	-				-	-
- Production management	2	2	-				-	-
- Research & development	1	1	-				-	-
- Sales unit	1	1	-				-	-
- Accounting	4	4	-				-	-
- General administration	3	3	-				-	-

V. ANNUAL PRODUCTION

(1967)

Products in group of products	Yr. of first prod.	Quantity produced		Av. unit price on factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Lubricants:					
Lithium grease	1938	t	1,300	127.2	665
Lime saponified grease	"	"	780		
Soda soap grease	"	"	390		
Aluminum saponified greases	"	"	400		
Other greases (e.g. for cables)	1957	"	650		
Motor oils	1938	"	395		
Transmission lubricants	"	"	400		
Chain lubricants	"	"	390		
Other lubricants	"	"	520		

TOTAL VALUE OF PRODUCTION: 665

VI. VALUE ADDED

(1967)

	Total value (000 US \$)
1. Annual wages & salaries	153
- Operative workers (41 persons)	199
- Non-operative workers (16 persons)	54
2. Other payments for employees	30
3. Annual depreciation	65
- Machinery & equipment	50
- Buildings & other facilities	6
- Non-physical capital assets	9
4. Rentals paid	4
5. Interest & royalties	24
6. Sales tax	4
7. Other indirect business taxes	9
8. (-) Subsidies	-
9. Corporate income before tax	18

TOTAL VALUE ADDED: 308

DESCRIPTION OF MAJOR PRODUCTS:

Lime saponified grease: Lubricants have to be manufactured in accordance with specifications given by users concerning viscosity, solidification, flash point, dripping point, weight, colour and basis of grease.

Soda soap grease: Cup grease, water pump grease, high pressure grease, lubricating grease. Ball bearing grease, transmission grease.

Aluminium saponified greases: Alu grease. of various SAE ratings.

Transmission lubricants: Premium motor oil (SAE 10 - 50), premium motor oil super (SAE 10 - 50), tractor oils (HD 20 - 50).

Motor lubricants: Spring oil, drilling oils, anti-corrosion oils, concrete casing oils, motor saw chain oils, break fluid, grease for cable car ropes, etc.

Other oils: Products are packed in barrels (100 - 200 kg), hobcocks (25 - 100 kg) and cans (up to 20 kg). Short-term delivery.

MARKET ASPECTS:

Re-sales:

See page 4/XII - Supplements.

Consumers of products:

Heavy metal working industry such as manufacturers of machinery, cars, combustion motors, cables, agricultural machinery. Motor car repair shops.

Sales organization:

No own sales force. The 30 largest customers account for 90% of the total turnover.

Share in the domestic market:

Industrial lubricants: approximately 70%.

Export price policy:

The separation of the European market into two large trading areas makes it very difficult for the company to sell its products to the block which it does not belong to.

EXPORT:

Total annual export: US \$ 40,000.

Major products	To Western countries	To Eastern countries	To Developing countries
Cable grease	100%	-	-
Motor vehicles lubricants	100%	-	-

Governmental policies:

The government subsidizes exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under VI.6. has been adjusted accordingly.

VII. ANNUAL CONSUMPTION

(1967)

	Quantity consumed		% import	Average import duties (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL:					
- Electricity	000 kWh	674	-	-	9
- Diesel oil and gasoline	t	46	-	-	5
- Water	m3	..	-	-	-
2. Production materials					
TOTAL:					
- Mineral oil	t	..	6	13	132
- Additives	"	..	100	12	40
- Animal oils and greases	"	..	-	-	9
- Cellulose	"	..	80	7	26
- Chemicals	"	..	50	18	11
- Other raw materials	"	..	20	10	66

3. Other materials & supplies

	Total consumption value (000 US \$)
TOTAL:	17
- Packaging material (barrels, cans, tins, cartons)	13
- Parts, supplies & services	2
- Other materials & supplies	2

4. Business services purchased

	Total consumption value (000 US \$)
TOTAL:	47
- Transportation, storage & insurance	40
- Communication, advertising & other business services	7

5. Work performed by subcontractors

	Total consumption value (000 US \$)
TOTAL:	-

TOTAL VALUE OF CONSUMPTION: 357

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (1):	Number	Original Purchase Value (1968 US \$)	Book value (1968 US \$)	Av. Age (yrs)	Remarks B: Purchased second-hand C: Obsolete D: Rented E: Self-manufactured	Supplier country	Daily running time	Output capacity per charge
Rotary mixers, autoclaves	10	..	4	5	partial	Germany, F.R.	4 hrs	2 tons
Stills, boiler plants (for lithium)	7	..	7	4	BC	Switzerl.	2.5 hrs	..
Grease guns, rollers	10	..	1	4	-			
Pump manufacturing machines	5	..	2	14	-			
Other process equipment	3	..	17	4	-			
Boilers, heating plant	2	..	6	1	-			
Tanks for raw material (240,000 l)	..	..	3	..	-			
Tanks for motor fuel (354,000 l)								

CAPACITY POWER:
 Process equipment:
 - electric motors 440 kW
 Generating equipment:
 - installed capacity - kVA

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization		Further details	Capacity output	Capacity utilization
		A. most advanced	B. considerably high standard			
Extraction				B II	4 - 6 charges /day	70%
Bleeding				C II	4 - 6 charges /day	80%
Refinery (oils)				C II	different sizes of charges	70%
Packing				C II	..	70%

CAPACITY UTILIZATION:

Full capacity output US \$ 850,000.

Current utilization: Based on 1-shift operation.

Major products for present	Approximate %						
	up to 20	20-40	40-60	60-70	70-80	80-90	90-100
Lithium grease			X				
Lime saponified grease							X
Soda soap grease			X				
Aluminum saponified grease			X				
Other greases (e.g. for cables)			X				
Motor oil					X		
Transmission lubricants					X		
Chain lubricants					X		
Other lubricants					X		

IX. HISTORY & PLAN

1. Performance in the past:

Year	Turnsales (*) (1968 US \$)	No. of crews (**) employed	Total square (***)
1963	950	66	7
1964	1,070	71	14
1965	1,200	76	18
1966	1,460	79	40
1967	1,510	82	46
1968			

(*) including resales of motor fuel; (**) incl. personnel of gasoline station (resales); (***) incl. lubricants, oil

2. Investments in the past:

From	To	Approximate amount (1968 US \$)	Type of investment
1956	1967	970	Machinery and equipment; primary and auxiliary production facilities; buildings, tank cars.
ix 1967		70	

3. Future Plan:

From 1972 to 1975 : .. Expansion of machinery and equipment; rationalisation of product-mix.
 No additional personnel required.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C = confidential; figures of those size groups are included in those underlined.

(1964)

Industry Petroleum refineries (ISIC Code: 321)

1. Size groups by number of persons employed:	No. of estab.	No. of empl.	Av. value added/ gross prod. rate (1968 US \$)		
			W. & S. per pers. (1968 US \$)	Av. gross prod. val./ per pers. (1968 US \$)	Av. value added/gross prod. rate (%)
up to 19	12	63	1,960	14,574	56
20 - 99	12	489	2,315	10,426	43
100 - 499	5	3,613	2,567	41,059	36
500 - 999					
over 1,000	1	C	C	C	C
TOTAL:	30	4,165	2,528	37,062	36

2. Size groups by annual rate of production (1968 US \$):	No. of estab.	No. of empl.	Av. value added/ gross prod. rate (1968 US \$)		
			W. & S. per pers. (1968 US \$)	Av. gross prod. val./ per pers. (1968 US \$)	Av. value added/gross prod. rate (%)
up to 20	5	3	2,245	9,574	40
20 - 40	1	C	C	C	C
40 - 200	7	104	2,083	7,373	34
200 - 400	5	120	2,238	12,631	35
400 - 2,000	8	3,938	2,542	38,612	36
over 2,000	4	C	C	C	C
TOTAL:	30	4,165	2,528	37,061	36

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|---|---------------------------------------|-----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export transactions |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
1				Feasibility studies as well as engineering studies could be prepared for companies to produce greases and lubricating oils.
3				Know-how contracts could be provided for the production of some greases and lubricating oils.
5				Only available to a limited extent and on short-term basis.
7				Cost estimates prepared by producers of machinery and equipment could be checked and evaluated by reporting company.

XII. SUPPLEMENTS & NOTES

Depreciation policy:

The company applies both the straight-line and accelerated methods of depreciation.

Re-sales:

Gasoline and motor oils. Revenue in reporting year: US \$ 830,000 which amounts to about 5% of the company's total turnover.

Own service and gasoline station, each engaging 7 operatives and 2 non-operatives.

The Manning Table (item IV/page 1) as well as Value Added Table (item VI/page 2) have been reduced accordingly.

Working time:

In order to avoid a second shift for the time being company operates with rather large amount of overtime (15%).

Major Products: Window glass, tumblers, bottles, crystal vases, etc.

Annual output amounted to approximately US \$ 1.9 million on 3-shift operation.

Reporting Unit:

A one-establishment enterprise, founded in 1938; wholly privately owned; no foreign capital participation; construction of the factory was started in 1938, trial production in 1939 and commercial production in 1954; the first profits were made in 1955, when the total output amounted to approximately US \$ 660,000; expansion possibilities are good. No exports.

I. FIXED CAPITAL ASSETS

(End of 1968)	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average (Yrs.)
1. Primary process equipment (including installation cost)			
TOTAL	2,340	..	10
- Process equipment *	2,340	..	10
- Hand tools & apparatuses	-	-	-
2. Buildings			
TOTAL	1,356	..	10
- Primary industrial buildings (total floor space: 18,380 m ²)	1,356	..	10
- Auxiliary buildings	-	-	-
- Warehouses	-	-	-
- Office administration buildings	-	-	-
- Housing	-	-	-
3. Auxiliary facilities (excl. buildings)			
TOTAL	27	..	5.5
- Internal power equipment	5	..	6
- Laboratory facilities	-	-	-
- Means of transportation	22	..	5
- Office equipment	-	-	-
TOTAL PHYSICAL FIXED ASSETS (excluding land):	3,723	..	
4. Other fixed capital assets			
TOTAL	136	..	
- Land (total acreage: 41,430 m ²)	136	..	
- Land improvements	-	-	-
- Others	-	-	-

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII).

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1968 monthly average)	US\$	US\$	US\$	US\$	US\$	US\$
1. Local non-operatives						
- Managers			..		460	
- Engineers						
- Technicians						
- Accountants		120			200	
- Sales officers		90			160	
- Clerks and typists					90	
- Others					65	
2. Local operatives						
- Supervisors		110			130	
- Foremen		130			145	
- Skilled operatives }		100			105	
- Machine operators }						
- Craftsmen		130			145	
- Truck drivers		80			90	
- Unskilled operatives		40			53	
- Other full-time operatives		40			53	
- Part-time operatives						
3. Foreign employees						
- Managerial staff					790	
- Technical staff						
- Other skilled operatives						
- Unskilled operatives						

EXTERNAL CONDITIONS:

Transport:	external long distance	fair
	internal long distance	fair
	local and city	excellent
Utilities:	electricity	fair
	water	fair
	gas	fair
Community:	residence	-
	health and recreation	fair
	education	fair
Own Welfare Facilities:		-

III. INVENTORIES

(End of 1968)	Actual value (000 US \$)	Number of months
Inventories	351	
TOTAL:		
- Production materials	154	
- Other input materials	38	
- Work-in-process	20	
- Finished products	139	

(See Section III. for liquid assets and the desired working capital.)

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
- Shift hours/day:	8	8	8	hours
- Actual hours/year:	2,149	2,149	2,149	hours
- Normal days/year:	307	307	307	days

IV. MANNING TABLE

(Number of persons)

Shift categories: A: Supervisory staff and foremen (for all shops) & Machine operators
B: Other operatives

(1968 average)	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	B-B	B-B
ALL SHOPS & UNITS:	354	43	190		66	55	
1. Primary operative shops	265	17	31	104		62	51
- All shops	265	17	31	104		62	51
2. Auxiliary operative units	67	4	55		4	4	
- Repair & maintenance	13	2	11		-	-	
- Mechanical shop	-	-	-		-	-	
- Tooling shop	6	1	5		-	-	
- Utilities control	6	-	2		2	2	
- Product & material storage	34	1	33		-	-	
- Off-site transport	2	-	2		-	-	
- Guards, cleaners, etc.	6	-	2		2	2	
3. Auxiliary non-operative units	22	22	-		-	-	
- Production management	1	1	-		-	-	
- Research & development	1	1	-		-	-	
- Sales unit	4	4	-		-	-	
- Accounting	2	2	-		-	-	
- General administration	6	6	-		-	-	
- Others	8	8	-		-	-	

V. ANNUAL PRODUCTION

Products (or group of products)	Yr. of first prod.	Quantity produced		Av. unit price on factory (US \$)	Total output value (1000 US\$)
		Unit	Quantity		
Nitrogen varnishes (colourless and pigmented), thinners	1948	t	1,190	774	816
Oil varnishes and synthetic resin varnishes (colourless and pigmented)	1955	t	265	1,161	308
Dispersions and emulsions	1955	t	25	774	19
Reaction varnishow	1948	t	79	1,355	107
TOTAL VALUE OF PRODUCTION:					1,250

VI. VALUE ADDED

(1968)	Total value (1000 US \$)
1. Annual wages & salaries	227
- Operative workers (50 persons)	92
- Non-operative workers (50 persons)	135
2. Other payments for employees	47
3. Annual depreciation	54
- Machinery & equipment	
- Buildings & other facilities	54
- Non-physical capital assets	
4. Rentals paid	4
5. Interests & royalties	13
6. Sales tax	69
7. Other indirect business taxes	4
8. (-) Subsidies	-
9. Corporate income before tax	138
TOTAL VALUE ADDED:	556

DESCRIPTION OF MAJOR PRODUCTS:

The production programme includes all special varnishes for surface finishing of wood, industrial varnishes and products for "Do-it-yourself" activities.

All products are manufactured in batches between 50 kg and 3 tons.

Packages of 0.25, 0.5, 1, 5, 10, 25, 50, 200 l.

Terms of delivery: Prompt. During construction season slight delays possible.

MARKET ASPECTS:

Re-sales:

The company sold abrasives, brushes and other articles amounting to US \$ 47,000.

Consumers of products:

Households (Do-it-yourself), carpenters, furniture manufacturers, metal industry.

Sales organization:

Own sales organization, 11 salesmen, warehouse in 4 large cities of the country.

Sales radius:

Primarily the domestic market.

Durability of products:

2 - 10 years.

Share in the domestic market:

20 - 30% of the domestic production of varnishes for surface finishing of wood.

EXPORT:

Total annual export: approx. 3,900 US \$

Major products	To Western countries	To Eastern countries	To Developing countries
Oil varnishes, nitrogen and synthetic resin varnishes for surface finishing of wood	100%	-	-

Rather keen competition with other European countries.

Competition in the market:

The enterprise is able to compete with imported varnishes, thinners and emulsions particularly since sometimes they are up to 40% more expensive due to import duties. Nevertheless, customers still show great reluctance to buy domestic products.

Governmental policies:

The government subsidizes exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under VI.6. has been adjusted accordingly.

VII. ANNUAL CONSUMPTION

(1968)	Quantity consumed		% import	Average import duties	Total consumption value (1000 US \$)	Total consumption value (1000 US \$)
	Unit	Quantity				
1. Energy and water						16
TOTAL:						
- Electricity	000 kWh	226	-	-	5	
- Fuel oil	t	50	-	-	2	
- Diesel oil	t	60	-	-	6	
- Petrol	t	14	-	-	2	
- Water	000 m ³	..	-	-	1	
2. Production materials						507
TOTAL:						
- Solvents (aromatic and aliphatic)	t	786	-	-	152	
- Dyes	t	80	-	-	93	
- Nitrocellulose	t	84	-	-	46	
- Synthetic resins	t	165	-	-	102	
- Softening agents	t	39	-	-	30	
- Others	..	..	-	-	84	
3. Other materials & supplies						90
TOTAL:						
- Packaging material (packages, cartons, strings)						70
- Parts, supplies & services						17
- Other materials & supplies						3
4. Business services purchased						81
TOTAL:						
- Transportation, storage & insurance						31
- Communication, advertising & other business services						50
5. Work performed by subcontractors						-
TOTAL:						694
TOTAL VALUE OF CONSUMPTION:						694

V. ANNUAL PRODUCTION

(1968)

Products (or group of products)	Yr. of first prod.	Quantity produced		Av. unit price ex factory (US \$)	Total output value (1000 US \$)
		Unit	Quantity		
Window glass	1954	m ²	96,650	11	1,077
Glass and tumblers	1957	000 pcs	10,155	40	434
Bottles	1957	000 pcs	5,603	60	345
Crystal wares	1964	000 pcs	51.7	1,300	68
TOTAL VALUE OF PRODUCTION:					1,924

VI. VALUE ADDED

(1968)

	Total value (1000 US \$)
1. Annual wages & salaries	
- Operative workers (132 persons)	407
- Non-operative workers (22 persons)	10
2. Other payments for employees	11
3. Annual depreciation	262
- Machinery & equipment	100
- Buildings & other facilities	162
- Non-physical capital assets	-
4. Rentals paid	-
5. Interests & royalties	-
6. Sales tax *	1.1
7. Other indirect business taxes	(15)
8. (-) Subsidies	-
9. Corporate income before tax	(-) 11
	218
*) not included in the total	
TOTAL VALUE ADDED:	682

DESCRIPTION OF MAJOR PRODUCTS:

MARKET ASPECTS:

Consumers of products:

Private persons and enterprises.

Sales organisation:

Central sales department in the capital, selling agencies in all provinces.

Extent of the market:

The enterprise is the only producer of glass in the country. A new glass factory is likely to be built in the near future to compete with this enterprise.

Share in the domestic market:

The enterprise holds a share of about 30%, the other 70% are imported products.

Prospects of exports:

Good prospects, but at prices lower than the current domestic prices.

EXPORT:

Total annual export: -

Major products	To Western countries	To Eastern countries	To Developing countries

VII. ANNUAL CONSUMPTION

(1968)

	Quantity consumed		% Import	Average import duties	Total consumption value (1000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL:					
- Electricity	000 kWh	617	-	-	261
- Gas oil	..	8,346	-	-	242
- Gas	000 m ³	..	-	-	7
2. Production materials					
TOTAL:					
- Silice	t	7,706	-	-	80
- Dolomite	t	1,755	-	-	13
- Lime	t	380	-	-	2
- Pepsar	t	266	-	-	5
- Soda sulphate (salte)	t	301	-	-	15
- Carbonite	t	2,580	-	-	226
- Borax	t	30	-	-	7
- Nitrate	t	32	100	..	4
- Arsenic	t	22	100	..	6
- Selenium	kg	113	100	..	2
- Carbonite potasse	t	12	100	..	4
- Plumb oxide	t	9	-	-	4
- Zinc oxide	kg	26	-	-	10
- Others	..	400	..	..	15

3. Other materials & supplies

TOTAL:	386
- Packaging material	119

- Parts, supplies & services
- Other materials & supplies

	4
	243

4. Business services purchased

TOTAL:	2
- Transportation, storage & insurance	0.5

- Communications, advertising & other business services

	1
--	---

5. Work performed by subcontractors

TOTAL:	-
---------------	---

TOTAL VALUE OF CONSUMPTION 1,924

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT N.1:

Number	Original Purchase Value (1968 US \$)	Replacement value (1968 US \$)	Avg. Age (yrs)	Remarks
--------	--------------------------------------	--------------------------------	----------------	---------

Example:
 III. Purchased second-hand
 (D) Obsolete
 E. Aged
 F. Self-renewed

The entire equipment was supplied by U.K.
 and Federal Republic of Germany.

Further details:

CAPACITY POWER:

Process equipment:
 - electric motors .. kW
 Generating equipment:
 - nominal installed capacity 2,120 kVA
 - actual production in 1968 800 kWh

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Mechanization:
 A. most advanced
 B. considerably high standard
 C. modern standard
 D. appreciably short of today's standard
 E. almost outdated

Automation:
 I. fully automated III. non-automated
 II. semi-automated

Major primary operative shops	Kind of process involved	Mechan.	Autom.
-------------------------------	--------------------------	---------	--------

Glass processing shop

C

III

Crystal shop

B

II

Further details:

CAPACITY UTILIZATION:

Full-capacity output: US \$ 2,000,000.

Current utilization:

Major products (or processes)	Approximate %									
	up to 20	20-40	40-60	60-70	70-80	80-90	90-95	95-98	98-99	100

The actual over-all capacity utilisation rate is considered to be about 96%.

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output (1968 US \$)	Nb. of persons employed	Total exports (1968 US \$)
1963	1,190	350	-
1964	1,330	350	-
1965	1,440	350	-
1966	1,130	350	-
1967	1,950	364	-
1968	1,920	354	-

2. Investments in the past:

Year	Approximate amount (1968 US \$)	Type of investment
1962	660	Machinery and building
1968	660	Machinery

3. Future Plan:

From 19 to 19 : -

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1967)

Industry Manufacture of glass and glass products (ISIC-Code 332)

1. Size groups by number of persons employed: up to	No. of estab.	No. of emp.	Av. W. & S per pers. (US \$)	Av. gross prod. val./ per pers. (US \$)	Av. value added/ gross prod. val. (%)	2. Size groups by annual value of production (1968 US \$): up to	No. of estab.	No. of emp.	Av. W. & S. per pers. (US \$)	Av. gross prod. val./ per pers. (US \$)	Av. value added/gross prod. value (%)
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(No comparable enterprise in this particular branch of industry yet.)

TOTAL: _____

TOTAL: _____

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service:

- | | | |
|---|---------------------------------------|----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export transaction |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultation | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

1. Services performed during the past five years:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
-----------------	-------------------	-----------------	-------------------	-------------------------

XII. SUPPLEMENTS & NOTES

Governmental policies:

Government imposes high import duties. Raw materials may only be imported from certain countries at high prices; could be imported from other countries at lower prices.

Commission work:

Bottles to the amount of US \$ 2,100 were manufactured for one contracting firm on a commission basis. The contract was based on short-term agreements.

Labour training:

On-job training is currently in operation.

Depreciation policy:

The following depreciation rates are applied: Machinery 10%, buildings 10%, laboratory facilities 25%. (The depreciated book value of machinery is already less than 1/2 of the original purchase value shown in Section I.)

Liquid assets:

	000 US \$
- Cash on hand and in bank	33
- Marketable securities and bonds	66
- Accounts receivable from delivery of goods and services	16
- <u>Other accounts receivable</u>	<u>12</u>
Total average liquid assets	127

Desired working capital:

	000 US \$	Equivalent number of months
- Production materials	33	1
- Other materials and supplies	33	1
- Finished products	12	1
- Wages for primary operative workers	27	1
- Other wages and salaries	6	1
- Training costs	-	-
- Administrative costs, sales costs and contingencies	0.1	1
<u>Total desired working capital</u>	<u>102</u>	<u>1</u>

Major Products:

Bricks and other clay products for construction. Annual capacity output is 15,600 t on a 3-shift operation.

Reporting Unit:

A one-establishment enterprise founded in 1959. Private corporation; foreign capital participation 49%.

I. FIXED CAPITAL ASSETS

(End of 1966)	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
1. Primary process equipment		966	..
TOTAL		966	..
- Process equipment	1960-66	958	..
- Hand tools & apparatuses		8	..
- Cost of installation (incl. in process equip.)			
2. Primary industrial building	1966	248	..
TOTAL		248	..
(total floor space: 11448 m ²)			
3. Auxiliary facilities		305	..
TOTAL		305	..
- Water, steam, electricity, cooling & storing & railroad spurs	in process	219	..
- Transportation facilities		32	..
- Administrative facilities		54	..
- Laboratory facilities		-	..
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		1,519	..
4. Other fixed capital assets		176	..
TOTAL		176	..
- Land (total acreage: 26,040 m ²)		176	..

DETAIL OF PROCESS EQUIPMENT (incl. Supplier country)	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
- Mills	U.S.A.	9.6	..
- Elevators	1960-66	50.0	..
- Sifters	"	32.4	..
- Hoppers	(18) "	57.6	..
- Mixers	(4) "	9.0	..
- Extruder	(1) "	15.2	..
- Presses	(8) "	113.6	..
- Tunnel kilns	(3) "	528.0	..
- Electric substations	(2) "	42.4	..

HISTORY OF INVESTMENT:

The construction of the factory was first started in 1959. The first commercial production started in 1959 and the production proved profitable already in 1959. The following amounts were invested for expansion of clay manufacture:

1960	US \$	240,000
1961	" "	132,000
1965	" "	132,000
1966	" "	643,000

CAPACITY POWER:

Process equipment:		
- Electric motors:	323	kW
- Tunnel kilns (3)	346	"

Generating equipment:

Installed capacity: - kVA

EXTERNAL CONDITIONS:

Transport: Long distances and local area, excellent.

Utilities: Electricity and gas excellent; water, fair.

Community: Residential, excellent; health and recreational, educational fair.

II. INVENTORIES AND WORKING CAPITAL

(in 000 US \$)

(End of 1966)	Actual value	2. Liquid assets	Actual value
1. Inventories	709	TOTAL:	381
TOTAL	709	- Cash (hand/bank)	11
- Production materials	346	- Market. sec. & bonds	12
- Other input materials	106	- Short-term investment	15
- Work-in-process	36	- Prepaid expenses	101
- Finished products	221	- Accounts receivable	242
3. Desired working capital	Number of months	Value	
TOTAL		1322	
- Production materials	6	4.4	
- Other input materials	4.5	32	
- Finished products	2	360	
- Wages & salaries	1.5	35	
- Other special items	2.5	431	

III. MANNING TABLE

(number of persons)

A - Machine operators
B - Other operatives

(1966 average)	Total	1st shift A	2nd shift B	2nd shift A+B	3rd shift A+B
ALL SHOPS & UNITS:	259	132	63	64	64
1. Primary operative shops	127	17	26	16	26
- Milling department	30	1	9	1	9
- Press	75	8	17	8	17
- Furnace	22	8	-	7	7
2. Auxiliary operative units	51	22	14	15	15
- Repair and maintenance	15	5	5	5	5
- Mechanical shop	15	5	5	5	5
- Utilities control	-	-	-	-	-
- Product & material storage	-	-	-	-	-
- Off-site transport	7	7	-	-	-
- Guards, cleaners, etc.	4	1	1	2	2
- Quality control	10	4	3	3	3
3. Auxiliary non-operative units	81	67	7	7	7
- Production management	29	15	7	7	7
- Research & development	5	5	-	-	-
- Sales & technical unit	20	20	-	-	-
- General administration	21	21	-	-	-

WORKING TIME PER OPERATIVE WORKER:

- Normal hours/day:	7.5	hours	- Normal days/year:	305	days
- Actual hours/year:	2,135	hours			

CAPACITY OF OPERATIVE SHOPS:

"Nominal" processing capacity of the milling department where grinding is done is 8 tons per hour. But actual processing capacity is no more than 2.5 to 3 tons, depending on the humidity of primary materials. Moderate automation and mechanisation.

Advantages connosed with foreign capital participation

The foreign affiliated company provides managerial personnel as required, technical advice on equipment, know-how, acquisition of important (locally unavailable) materials, etc. Also, a significant portion of the output is marketed through commercial network of the foreign affiliates.

IV. ANNUAL PRODUCTION

(1965)	Yr. of first prod.	Quantity produced		Nominal capacity, output	Unit price in factory (US \$)	Total production value (1965 US \$)
		Unit	Output			
- Bricks and other clay products (refractorise)	1959	tons	10,250	12,000	140.8	1,441
- Specialities of clay (mortars, concrete, refractorise, plastic refractorise, etc.)	1960	"	2,760	3,600	100.00	276
TOTAL VALUE OF PRODUCTION:						1,717

3 quality groups of bricks, (medium, high and superior) can be distinguished. Also a great variety of different forms is produced, e.g. right-angled, wedge-shaped, semi-circular ones, etc. Refractorise are also produced in a variety of forms and sizes. Plastic refractorise are extruded, mouldable plastic clay blocks. The walls or sections of a furnace constructed with this plastic clay acquires the desired property of mechanical resistance when subjected to adequate heating.

** Nominal capacity output is based on 3 shift operation for 305 working days per year; interruptions only occur in the tunnel kiln operation.

CAPACITY UTILIZATION:

Slightly underutilised but satisfactory.

VI. VALUE ADDED

(1965)	Value 1965 US \$
1. Wages & salaries	
- Employees in direct production (170 persons)	110
- Other employees (89 persons)	170
2. Other payments for employees	15
3. Annual depreciation	50
4. Rentals paid	10
5. Interests & royalties	10
6. Sales tax (not incl. in TOTAL)	141
7. Other incl. bus. taxes	10
8. (-) Subsidies	10
9. Corporate income before tax	251
1,717	

VII. MONTHLY EARNING RATES

(End of 1965)	No. of emp.	Average earning rate (US \$)
1. Local non-operatives		
TOTAL	24	confidential
- Managers	1	
- Engineers	1	
- Technicians	1	
- Accountants	4	
- Sales officers	5	
- Other professional staff	45	
- Clerks & typists	15	
2. Local operatives		
TOTAL	166	confidential
- Supervisors	1	
- Foremen	12	
- Machine operators	120	
- Craftsmen	15	
- Truck drivers	1	
- Other full-time operatives	4	
- Unskilled & part-time operatives	6	
3. Foreign employees		
TOTAL	1	confidential
- Technical adviser	1	

V. ANNUAL CONSUMPTION

(1965)	Quantity consumed			Total consumption value (1965 US \$)
	Unit	Purchase	% imported	
1. Energy and water				64
TOTAL:				
- Electricity	000 Kwh	1,280	-	26
- Gas and lubricants	000 m ³	5,100	-	38
2. Production materials				949
TOTAL:				
- Raily clay	tons	1,750	100	63
- Flint clay	"	2,600	100	173
- Plastic loam	"	3,900	-	114
- Calcined material	"	4,650	-	213
- Bauxite	"	2,200	100	132
- Kaolin	"	700	-	8
- Miscellaneous	"	2,800	50	246

	emp.	Total consumption value (1965 US \$)
3. Other materials & supplies		86
TOTAL:		
- Packaging	-	19
- Repair & maintenance	50	50
- Non-factor service inputs	-	17
4. Business services purchased		142
TOTAL:		
- Transport, storage & insurance	-	116
- Communication, advertisements, etc.	-	6
5. Work performed by sub-contractors		-
TOTAL:		1,241

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)	Industry group: Manufacture of structural clay products (ISIC: 331)					
1. Size groups by number of persons employed	Number of estab.	Number of emp.	Av. emp.		Av. emp. prod. rate* (%)	
			W. & L. per emp. (US \$)	prod. val. per emp. (US \$)		
up to 5	1,446	4,651	154	577	29	
6 - 25	391	3,200	296	797	119	
26 - 100	27	1,431	713	2,425	115	
over 100	10	2,601	1,730	10,997	105	
TOTAL	1,874	11,883	604	3,140	97	
2. Size groups by value of annual production (1965 US \$)						
up to 2	1,877	5,040	58	282	39	
2 - 40	796	4,631	292	918	45	
40 - 120	18	769	540	1,693	96	
120 - 240	5	478	732	1,869	114	
over 240	14	2,665	1,788	11,270	106	
TOTAL	2,710	13,583	528	2,790	96	

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

FUTURE PLAN:

Within a period of 3 years approx. US \$ 500,000 will be invested for the expansion of production of structural clay products. Less personnel will then be employed due to increased automation.

GOVERNMENT POLICIES:

No specific comments.

Major Products: Flat glass, flat and curved wind screens for cars, mirrors and others. Capable of producing annually about 7,500,000 m² (of which 300,000 m² automotive glass) on 2-shift (except furnace) operation.

Reporting Unit: A one-establishment enterprise, founded in 1955. Private corporation; proportion of foreign capital in total capital stock 30%.

I. FIXED CAPITAL ASSETS		Orig. purchase value (000 US \$)	Replacement value (000 US \$)
(End of 1966)			
1. Primary process equipment	Year of installation		
TOTAL		6,736	..
- Process equipment		5,760	}
- Hand tools & apparatus		-	
- Cost of installation		960	
2. Primary industrial building		980	..
TOTAL		380	..
(total floor space: 42,000 m ²)			
3. Auxiliary facilities		416	..
TOTAL			
- Water, steam, electricity, cooling & storing		400	}
- Transportation facilities		16	
- Administrative facilities		-	
- Laboratory facilities		-	..
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		8,132	..
4. Other fixed capital assets		121	..
TOTAL		121	..
- Land (total acreage: 151,000 m ²)		121	..

DETAIL OF PROCESS EQUIPMENT (no.):	Supplier country	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
- Melting furnaces	2 Mexico, USA	1956-59	5,760	..
- Cooling system	1 " "	1956-59		
- Feeding and weighing system	1 USA	1956-59		
- Instrumentation	1 Mexico, USA	1956-59		
- Hardening furnaces	2 Mexico, USA	1959-61		
- Workshop equipment	1 USA	1956-66		
- Auxiliary equipment	1 USA	1956-66		

HISTORY OF INVESTMENT:

The factory was constructed in 1956. Trial as well as commercial production started in 1956. The factory made its first profits in 1957 when 80% of the capacity was utilized. The following investments for expansion purposes were made: (in 000 US \$)

1959	approx.	2,960	New furnace
1959	"	1,280	Expansion of the finishing department
1961	"	160	Introduction of mirror production
1962	"	640	Expansion of automotive glass production
1965-68	"	21,600	Production of crystal glass

CAPACITY POWER:

Process equipment:
Electric motors: 5,000 kW

Generating equipment:
Installed capacity: - tVA

EXTERNAL CONDITIONS:

Transport: Long distance, fair; local area, excellent.

Utilities: Electricity, fair; gas, excellent.

Community: Residential, health and recreational, educational, fair.

II. INVENTORIES AND WORKING CAPITAL (in 000 US \$)

I. Inventories		Actual value	2. Liquid assets		Actual value
TOTAL:		3,069	TOTAL:		583
- Production materials		2,387	- Cash (hand/bank)		6
- Other input materials		-	- Market, sec. & bonds		9
- Work-in-process		38	- Short-term investment		-
- Finished products		644	- Prepaid expenses		-
			- Accounts receivable		568
3. Desired working capital		Number of months	Value		
TOTAL:		-	-		
- Production materials					
- Other input materials					
- Finished products					
- Wages & salaries					
- Other special items					

III. MANNING TABLE

	Number of persons		A = Machine operators B = Other operatives		
	Total	1st shift A	2nd shift B	2nd shift A+B	2nd shift A+B
(1966 average)					
ALL SHOPS & UNITS:	870	712	112	46	
1. Primary operative shops	328	220	86	22	
- Fabrication	146	87	37	22	
- Processing	98	49	49	-	
- Finishing	84	84	-	-	
2. Auxiliary operative units	292	262	15	15	
- Repair and maintenance	96	96	-	-	
- Mechanical shop	-	-	-	-	
- Utilities control	48	48	-	-	
- Product & material storage	40	40	-	-	
- Off-site transport	45	15	15	15	
- Guards, cleaners, etc.	-	-	-	-	
- Auxiliary workers	63	63	-	-	
3. Auxiliary non-operative units	250	230	11	9	
- Production management	42	22	11	9	
- Research & development	4	4	-	-	
- Sales unit	-	-	-	-	
- General administration	204	204	-	-	

WORKING TIME PER OPERATIVE WORKER:

- Normal hours/day: 8 hours - Normal days/year: 304 days

- Actual hours/year: 2,432 hours

CAPACITY OF OPERATIVE SHOPS:

The capacities of different departments are considered to be well balanced. Automation and mechanisation is moderate.

Technical advantages connected with the participation of foreign capital:

- Granting of technical assistance
- Provision of designs for equipment
- Provision of patents and "know-how"
- Large market for products.

There are, however, no particular advantages in connection with the acquisition of production materials.

IV. ANNUAL PRODUCTION

(1966) Products (or group of products)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit (*) price ex factory (US \$)	Total production value (000 US \$)	
		Unit	Output			Unit cost	Total cost
- Flat glass	1956	000 m2	5,583	7,200	(0.68/m2)	(3,796)	
- Flat glass for cars	1959	" "	225	260	(3.20/m2)	(720)	
- Curved glass for cars	1962	" "	42	42	(4.40/m2)	(185)	
- Mirrors and others	1961	" "	not produced in 1966				
TOTAL VALUE OF PRODUCTION (aggregate of selling values)						6,007	*****

(*) The average production cost per m2 is shown, instead of the selling price. The latter varies greatly according to shapes, sizes and other specifications which do not affect much the production cost.

EXPORTS:

Part of flat glass is exported at the price of US \$ 0.68 per unit. There are no specific collateral benefits connected with exports.

COMPETING IMPORTS:

No flat glass (for general construction purposes) is imported. Flat wind screens for cars are imported at the price of US \$ 4.- per unit and curved wind screens are imported at the price of US \$ 5.2 per unit.

CAPACITY UTILIZATION:

The existing capacity can be considered as being fully utilized. The "Nominal capacity output" assumes continual production for 365 days (partial 2 shifts, i.e. 3 shifts for furnace operation which is actually not feasible. Normally there are a few weeks or months of stoppage period for maintenance and renovation work.

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed				Total consumption value (000 US \$)
	Unit	Purchase	% imported	Tariff rate	
1. Energy and water					
TOTAL:					497
- Electricity	000 Kwh	9,050			137
- Natural gas		..			355
2. Production materials					
TOTAL:					1,144
- Silica sand	000 m3	21,710			462
- Crushed glass	" "	4,547			147
- Feldspat	" "	853			39
- Soda ash	" "	7,077			373
- Dolomite	" "	6,485			51
- Sodium sulphate	" "	104			62
- Magnesite	" "	8			4
- Charcoal	" "	63			4

VI. VALUE ADDED

(1966)	Value (000 US \$)
1. Wages & salaries	
- Employees in direct production (563 persons)	1,117
- Other employees (307 persons)	717
2. Other payments for employees	274
3. Annual depreciation	728
4. Rentals paid	-
5. Interests & royalties	201
6. Sales tax (not incl. in TOTAL)	(199)
7. Other ind. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	643
TOTAL	3,680

VII. MONTHLY EARNING RATES

(End of 1966)	No. of pers. emp.	Average earning rates (US \$)
1. Local non-operatives		
TOTAL:	86	390
- Managers	8	800
- Engineers	45	480
- Technicians	-	-
- Accountants	3	400
- Sales officers	-	-
- Other professional staff	-	-
- Clerks & typists	30	144
2. Local operatives		
TOTAL:	..	..
- Supervisors	1	480
- Foremen	34	200
- Machine operators	27	144
- Craftsmen	48	144
- Truck drivers	6	120
- Other full-time operatives	..	80
- Unskilled & part-time operatives	-	-
3. Foreign employees		
TOTAL:	-	-

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965) Industry group: Manufacture of glass and glass products (HSIC: 332)					
1. Size groups by number of persons employed	Number of estab.	Number of empl.	Avg. W. & S.	Avg. gross prod. val.	Avg. emp. gross prod. value*
			per pers. (US \$)	per pers. (US \$)	value* (US \$)
up to 5	81	241	352	1,497	35
over 5	99	16,679	1,425	5,733	102
TOTAL	180	16,920	1,409	5,672	102
2. Size groups by rate of annual production (000 US \$):					
up to 40	205	976	379	1,460	58
40 - 120	35	1,218	793	2,272	78
over 120	39	14,850	1,515	11,577	55
TOTAL	279	17,044	1,399	5,640	102

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

Future plan:

In 1971, approx. US \$ 2.8 million will be invested for general expansion of the establishment. Additional 110 persons will then be employed. (40 persons on the 1st shift, 35 on the 2nd shift and 35 on the 3rd shift).

Government policies:

It is desired to establish better political relations with the regional common market, in order to exploit the export potentials.

Major Products: Glassware (containers). Capable of producing annually about 55,000 t on 3-shift operation.

Reporting Unit: A two-establishment enterprise, originally founded in 1935, expanded in 1954 and 1963; privately owned. No participation of foreign capital.

I. FIXED CAPITAL ASSETS

(End of 1966)	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
1. Primary process equipment			
TOTAL:		3,636	..
- Process equipment		2,796	
- Hand tools & apparatuses		200	..
- Cost of installation		640	
2. Primary industrial building			
TOTAL:		280	..
(total floor space: 6,000 m ²)		280	..
3. Auxiliary facilities			
TOTAL:		86	..
- Water, steam, electricity, cooling & storing		38	
- Transportation facilities		48	..
- Administrative facilities			
- Laboratory facilities			
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		4,002	..
4. Other fixed capital assets			
TOTAL:		560	..
- Land (total acreage: 14,000 m ²)		560	..

DETAIL OF PROCESS EQUIPMENT (no.)	Supplier country	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
Handling of raw material and furnaces department			776	
Feeding and forming equipment		mostly	1,096	
Tempering equipment		1959	336	..
Charge for tempering equipment		and	68	
Decoration department		1963	336	
Moulding equipment			184	

HISTORY OF INVESTMENT

Construction of one of the two factories originally in 1935. Following investments were made for expansion purposes: (in 000 US \$)

1935	approx.	16
1950	"	500
1954	"	1,200
1963	"	2,400

CAPACITY POWER:

Process equipment		Generating equipment:	
Electric motors	1,170 kW	Installed capacity	1,170 kVA

EXTERNAL CONDITIONS:

Transport: Long distance, good; air, fair.

Utilities: Electricity, power: good; water and gas, excellent.

Community: Residential, health and recreational, educational, fair.

Costs of power failures in the year of reference are estimated at US \$ 24,000.

II. INVENTORIES AND WORKING CAPITAL

(in 000 US \$)

(End of 1966)	Actual value	2. Liquid assets	Actual value
1. Inventories	664	TOTAL:	2,240
TOTAL:		- Cash (hand/bank)	
- Production materials	132	- Market. sec. & bonds	2,240
- Other input materials	12	- Short-term investment	
- Work-in-process	24	- Prepaid expenses	
- Finished products	496	- Accounts receivable	
3. Desired working capital			
	Number of months	Value	
TOTAL:		-	
- Production materials			
- Other input materials			
- Finished products			
- Wages & salaries			
- Other special items			

III. MANNING TABLE

(number of persons)

A - Machine operators
B - Other operatives

(1966 average)	Total	1st shift A	B	2nd shift A+B	3rd shift A+B
ALL SHOPS & UNITS:	1,200	514		343	343
1. Primary operative shops	611	217	-	197	197
- Production material and composing department	100	40	-	30	30
- Furnace and smelting department	36	12	-	12	12
- Forming department	229	79	-	75	75
- Classification and packing department	246	86	-	80	80
2. Auxiliary operative units	448	196		126	126
- Repair and maintenance	51	18		18	18
- Mechanical shop	46	16		15	15
- Utilities control	-	-		-	-
- Product & material storage	30	10		10	10
- Off-site transport	66	66		-	-
- Guards, cleaners, etc.	7	3		2	2
- Quality control	20	6		6	6
- Bottle decoration	225	75		75	75
3. Auxiliary non-operative units	141	101		20	20
- Production management	30	30		-	-
- Research & development	-	-		-	-
- Sales unit	5	5		-	-
- General administration	30	30		-	-
- Others (general workers)	76	36		20	20

WORKING TIME PER OPERATIVE WORKER:

- Normal hours/day:	7.5 hours	- Normal days/year:	295 days
- Actual hours/year:	2,212 hours		

CAPACITY OF OPERATIVE SHOPS:

No special automation involved.

(This profile data covers the enterprise in its entirety since its two establishments do not have their own accounting systems.)

IV. ANNUAL PRODUCTION

(1966) Products for group of products	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price in factory (US \$)	Total production value (1000 US \$)
		Unit	Output			
Glass ware (containers)	1935	t	55,700	55,000 -56,000	0.11/kg	6,152
TOTAL VALUE OF PRODUCTION						6,152

EXPORTS:

Part of glass ware is exported for US \$ 0.11/kg.

CAPACITY:

Despite some electric power failures in the area, the existing capacity is more than fully utilized. A new plant of a similar capacity is urgently needed.

VI. VALUE ADDED

(1966)	Value (1000 US \$)
1. Wages & salaries	
- Employees in direct production (800 persons)	917
- Other employees (400 persons)	460
2. Other payments for employees	172
3. Annual depreciation	174
4. Rentals paid	-
5. Interests & royalties	155
6. Sales tax (not incl. in TOTAL)	(192)
7. Other ind. bus. taxes	56
8. (-) Subsidies	-
9. Corporate income before tax	1,120
TOTAL	3,704

VII. MONTHLY EARNING RATES

(End of 1966)	No. of pers. emp.	Average earning rate (US \$)
1. Local non-operatives		
TOTAL	47	..
- Managers	2	1,280
- Engineers	9	480 - 720
- Technicians	-	-
- Accountants	4	400 - 1,200
- Sales officers	5	400 - 1,600
- Other professional staff	10	240 - 500
- Clerks & typists	17	144 - 240
2. Local operatives		
TOTAL	..	..
- Supervisors	-	-
- Foremen	12	320 - 480
- Machine operators	..	240 - 450
- Craftsmen	28	88 - 240
- Truck drivers	8	128
- Other full-time operatives	1,104	..
- Unskilled & part-time operatives	-	-
3. Foreign employees		
TOTAL	1	1,440
- Engineers, trainers and other technical control staff	1	1,440

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed			Total consumption value (1000 US \$)
	Unit	Purchase	% imported	
1. Energy and water				
TOTAL				893
- Electricity	000 KwH	15,440		213
- Liquid fuels and lubricants		..		48
- Gas	000 m3	10,250		616
- Water	000 m3	2,000		16
2. Production materials				
TOTAL				1,081
- Silice sand	t	22,000	8	416
- Soda ash	"	8,700	-	466
- Lime	"	5,800	-	51
- Alumina	"	424	100	68
- Borax	"	236	100	30
- Sodium nitrate	"	247	100	21
- Others	"	398	20	29

3. Other materials & supplies

TOTAL	376
- Packaging	192
- Repair & maintenance	177
- Non-factor service inputs	4

4. Business services purchased

TOTAL	28
- Transport, storage & insurance	86
- Communication, advertisements, etc.	12

5. Work performed by sub-contractors

TOTAL	-
TOTAL	2,448

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965) Industry group: Manufacture of glass and glass products (ISIC: 332)						
1. Size groups by number of persons employed	Number of estab.	Number of empl.	Avg. no. of pers. per estab. (US \$)	Avg. gross prod. val. per pers. (US \$)	Avg. emp. rate* (%)	
up to 5	81	241	352	1,497	35	
over 5	99	16,679	1,425	5,733	102	
TOTAL	180	16,920	1,409	5,672	102	
2. Size groups by value of annual production (1000 US \$)						
up to 40	205	976	379	1,460	58	
40 - 120	35	1,218	793	2,272	78	
over 120	39	14,850	1,515	11,577	55	
TOTAL	279	17,044	1,399	5,040	102	

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

Government policies:

A special 6% sales tax (on revenue) has recently been introduced on glass packagings (except for milk bottles and similar). This might affect the demand to some extent.

Importation of equipment requires cumbersome, time-consuming procedures, which makes it difficult to execute a necessary investment plan in time.

Future plans:

Within the period from 1968-1972, approx. US \$ 4 million will be invested for constructing a new plant. Additional 500-600 operatives will then be employed.

Major Products: Bricks, ceramic tiles, stoneware and stove tiles.
Capable of producing annually 550,000 m³ of fire bricks and 190,000 m² of ceramic tiles based on 2-shift operation.
Full-capacity output amounts to US \$ 11,6 million.

Reporting Unit: A 15-establishment enterprise, consisting of 12 brick and 3 stoneware manufacturing plants and a central office.
Joint stock company; founded in 1869. The company is partly owned by a semi-governmental bank. Although the company is very old, the machinery and equipment utilized meet modern standards. Shutting down of inefficient plants. Approx. 1,400 employees; largest clay products manufacturing company in the country; insignificant exports; insignificant licensed production; no research activities. This study covers all 15 manufacturing establishments.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (000 US \$)	Replacement value (000 US \$)	Avg. age (Yrs.)
1. Primary process equipment (including installation cost)	16,592	20,075 (**)	
TOTAL:	16,592	20,075	7
- Process equipment *	..	..	7
- Hand tools & apparatuses	..	..	..
2. Buildings	2,629	..	
TOTAL:	2,291	..	7
- Primary industrial buildings (total floor space: 63,000 m ²)	261	..	20
- Auxiliary buildings	..	..	..
- Warehouses	..	..	..
- Office administration buildings	77	661	100
- Housing (self constructed)	..	3,875	100
3. Auxiliary facilities (excl. buildings)	699	..	
TOTAL:	..	..	..
- Internal power equipment	..	..	..
- Laboratory facilities	64	..	5
- Means of transportation	84	..	3
- Office equipment	551	..	5
TOTAL PHYSICAL FIXED ASSETS (excluding land):	19,920	..	..
4. Other fixed capital assets	949	..	
TOTAL:	125	..	..
- Land (total acreage: 4,963,231 m ²)	24	..	..
- Land improvements (t. acc. 296,769 ")	800	..	10
- Others	..	..	..

(**) Including primary industrial buildings as well as auxiliary buildings.

*NB Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII.)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1967 monthly average)	up to					over
	US\$	US\$	US\$	US\$	US\$	US\$
1. Local non-operatives						
- Managers						
- Engineers						
- Technicians						
- Accountants						
- Sales officers						
- Clerks and typists						
2. Local operatives						
- Supervisors						
- Foremen						
- Skilled operatives						
- Machine operators						
- Craftsmen						
- Truck drivers						
- Unskilled operatives						
- Other full-time operatives						
- Part-time operatives						
3. Foreign employees						
- Managerial staff						
- Technical staff						
- Other skilled operatives						
- Unskilled operatives						

No data available for the 15-establishment enterprise. For details of one single establishment see MIDDLE EUROPE : 331 - (2).

EXTERNAL CONDITIONS:

Transport:	external long distance internal long distance local and city	} fair	
Utilities:	electricity water gas		} excellent
Community:	residence health and recreation education:			} fair
Own Welfare Facilities:	Cafeteria, sports club, voluntary contribution to pension fund, apartments.		

III. INVENTORIES

(End of 1967)	Actual value (000 US \$)	Number of months
Inventories	2,874	
TOTAL:	295	3.7
- Production materials	292	2.7
- Work-in-process	125	..
- Finished products	2,162	3

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
- Shift hours/day:	9	9	9	hours
- Actual hours/year:	1,935	1,935	1,935	hours
- Actual days/year:	215	215	215	days

IV. MANNING TABLE

(number of personnel)

Shift categories: A: Supervisor, staff and foremen (for all shifts)
B: Skilled operatives
C: Semi-skilled operatives (machine operators)
D: Unskilled operatives

(1967 average)	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	B-D	B-D
ALL SHOPS & UNITS:	1,408	260	252	173	23		
1. Primary operative shops	1,065	92	789	161	23		
- Brick manufacturing departments	639	48	484	89	18		
- Stoneware manufacturing departments (*)	426	44	305	72	5		
2. Auxiliary operative units	183	20	151	12	-		
- Repair & maintenance	132	7	113	12	-		
- Mechanical shop	-	-	-	-	-		
- Tooling shop	-	-	-	-	-		
- Utilities control	12	12	-	-	-		
- Product & material storage	15	1	14	-	-		
- Off-site transport	6	-	6	-	-		
- Guards, cleaners, etc.	18	-	18	-	-		
3. Auxiliary non-operative units	160	148	12	-	-		
- Production management	26	26	-	-	-		
- Research & development	28	16	12	-	-		
- Sales unit	47	47	-	-	-		
- Accounting	40	40	-	-	-		
- General administration	19	19	-	-	-		

(*) Tile production was discontinued in August 1967 since it could not be changed from seasonal to permanent operation.

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT N.1:	Number	Original Purchase Value (000 US \$)	Replacement value (000 US \$)	Av. Age (yrs)	Remarks	Supplier country	Year of installation	Daily running time	Capacity output
Roller frames	4	23	25	5		Austria	1965	10 hrs.	50-150 kg paste per hr
Ball mills	4	9	12	1		FR.Germ.	1968	10 hrs.	1,000 kg/24-36 hrs
Dispensing machines	2	3	3	6		Austria	1962	3 hrs.	250 kg/hr
Dissolving machines	2	12	15	5		"	1968	5 hrs.	1,000 kg/hr
Stirring machines	11	3	5	5	SC	"	1964	6 hrs.	1,500 kg/hr
Filling machines	4	12	15	3		Italy	1965	6-8 hrs.	800-1,000 time/hr
Concentration plants	3	12	15	10		FR.Germ.	1956	4-5 hrs.	300 kg/hr
Distilling plant for solvents	1	12	15	2		Switzerl.	1968	5 hrs.	60 l/hr
Others	20	52	63	..					
Stacker truck	1	12	14	1					
Tanks for solvents	16	58	77	5					
Scales	18	9	8	3					

CAPACITY POWER:
Process equipment:
- electric motors 410 kW

Generating equipment:
- installed capacity - 1kVA

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization:		Further details:
		Mechan.	Autom.	
Oil and synthetic resin varnishes	Preparation - pre-dispersion - grinding replenishing - storing.	C	II	
Nitrogen varnishes	Moistening of nitrocellulose with non-solvents, addition of solvents, resin, softening agents and auxiliary materials - stirring - standardizing - control.	A	II	

CAPACITY UTILIZATION:

Full-capacity output: US \$ 1,500,000.

Current utilization:

Major products (in process)	Approximate %					
	up to 20	20-40	40-60	60-70	70-80	80-100
Oil and synthetic resin varnishes						X
Nitrogen varnishes						X

The current rate of capacity utilization is mainly due to high demand for the products manufactured and a good supply of raw materials. Full-capacity output based on 1-shift operation can only be reached with 6 additional operatives and 2 additional non-operatives.

IX. HISTORY & PLAN

1. Performance in the past:

Year:	Total output (000 US \$)	No. of persons employed	Total exports (000 US \$)
1963	..	77	-
1964	700	85	-
1965	820	71	-
1966	990	74	-
1967	1,050	77	-
1968	1,250	99	4

2. Investments in the past:

From 1955 to 1957:	Approximate amount (000 US \$)	Type of investment
1957 " 1959:	20	Varnish melting department.
" 1960 " 1961:	30	Research laboratory for surface finishing of wood.
" 1962 " 1967:	140	Primary industrial building.
" 1968:	80	Tanks, office buildings, warehouses.
	230	Primary industrial building.

3. Future Plan:

From 1968 to 1969:	Approximate amount (000 US \$)	Type of investment
1968 to 1969:	230	Construction of a warehouse, expansion and specialisation of machinery and products. 2 more operatives and 4 more auxiliary operatives as well as non-operatives will have to be employed on the 1st shift.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C - Confidential; figures of this size group are included in that underlined.

(1964)

Industry: Paints and varnishes manufacturing (ISIC-Code: 313 1)

1. Size groups by number of persons employed:	No. of units	No. of empl.	Av. W. & B. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)	2. Size groups by annual scale of production (US \$):		Av. W. & B. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)	
						No. of units	No. of empl.				
up to 19	56	347	1,719	13,390	42	up to 20	18	12	609	14,822	44
20 - 99	29	1,184	2,047	11,649	45	20 - 40	8	17	1,400	13,661	48
100 - 499	10	1,489	2,221	14,629	45	40 - 200	23	251	1,606	9,598	45
500 - 999	-	-	-	-	-	200 - 400	18	477	1,840	9,869	45
over 1,000	-	-	-	-	-	400 - 2,000	24	2,263	2,216	14,474	44
						over 2,000	4	C	C	C	C
TOTAL:	95	3,020	2,095	13,313	45	TOTAL:	95	3,020	2,095	13,313	45

V. ANNUAL PRODUCTION

(1967) Products (or group of products)	Yr. of first prod.	Quantity produced		Av. unit price ex factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Fire bricks	..	m3	546,000	0.03	7,733
Ceramic tiles	..	m2	186,200	2.6	483
Stoneware	..	t	29,760	73.8	2,197
Stove tiles	..	m2	29,000	0.4	422
Others	..	m2	4,297	1.9	8
TOTAL VALUE OF PRODUCTION:					10,843 *****

VI. VALUE ADDED

(1967)	Total value (000 US \$)
1. Annual wages & salaries	3,643
- Operative workers (1,148 persons)	2,777
- Non-operative workers (260 persons)	866
2. Other payments for employees	787
3. Annual depreciation	1,118
- Machinery & equipment	916
- Buildings & other facilities	298
- Non-physical capital assets	4
4. Rentals paid	60
5. Interests & royalties	455
6. Sales tax	537
7. Other indirect business taxes (*)	117
8. (-) Subsidies	-
9. Corporate income before tax	444
(*) Land tax, car tax, etc.	
TOTAL VALUE ADDED:	7,161 *****

DESCRIPTION OF MAJOR PRODUCTS:

- Bricks:** Solid bricks, hollow bricks, bricks for ceilings, roofing tiles.
Delivery: on pallets.
- Stoneware:** Sewage pipes, agricultural stoneware.
Delivery: packed or unpacked.
- Stove tiles:** Various shapes and colours.
Delivery: in boxes.

All products are produced in series (mass production) and can be delivered promptly.

MARKET ASPECTS:

Re-sales:

In order to complete its product-mix the company imports stoneware.

Consumers of products:

Bricks: construction firms. Stoneware: chemical and pharmaceutical industry.
Stove tiles: potters and stove-fitters. Ceramic tiles: tile layers.

Sales organization:

One central sales department (40 employees) which is divided according to product groups.
Joint advertising and public relations for all 15 establishments.

Extent of the market:

The sales radius approximates 150 km except for roof tiles, stoneware and stove tiles where it is much larger.

Share in the domestic market:

Bricks: 20% (excluding imports). Stoneware: 90%. Tiles: 50%.

Competition in the market: Increasing competition with substitutes (concrete blocks, prefabricated elements, heaped concrete, etc.).

EXPORT:

Insignificant.

Total annual export:

Major products	To Western countries	To Eastern countries	To Developing countries

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import duties (000 US \$)	Total consumption value (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity				
1. Energy and water TOTAL:					1,322	
- Electricity	000 kWh	20,766			436	
- Pit-coal	t	2,655			42	
- Fuel oil	t	21,370			428	
- Gas	000 m3	16,449			402	
- Water	000 m3	256			14	
2. Production materials TOTAL:					957	
Bricks:						
Clay	m3	405,891	-	-	490	
Barium	kg	115,385	-	-	12	
Potters:						
Clay	t	39,743	13	-	281	
Fire-proof clay	t	10,829	100	-	81	
Glasings	t	472	49	8	93	
3. Other materials & supplies TOTAL:						834
- Packaging material and auxiliary material						337
- Parts, supplies & services						460
- Other materials & supplies						37
4. Business services purchased TOTAL:						569
- Transportation, storage & insurance						111
- Communication, advertising & other business services						458
5. Work performed by subcontractors TOTAL:						-
TOTAL VALUE OF CONSUMPTION:						3,682 *****

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (S.I.): (as available)	Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Av. Age (yrs)	Remarks:		Year of installation	Daily running time	Capacity output
					IV. Purchased second-hand or obsolete	V. Revised or self-constructed			
Chargers	12	77	..				1963	16 hrs	390 m ³ /day
Pug mill	8	234	..				1963	16 hrs	390 m ³ /day
Finishing rolls	12	77	..				1962	16 hrs	327 m ³ /day
Round chargers	17	81	..				1962	16 hrs	327 m ³ /day
Malanders	3	210	..				1962	..	1,000 m ³ /filling capacity
Vacuum aggregates	11	156	..				1962	16 hrs	327 m ³ /day
Tube extruding presses	5	104	..				1960	16 hrs	30 m ³ /day
Transport wagons	8	39	..				1962	16 hrs	18,500 metric tons/day
Chamber drying ovens	11	1,268	..				1960	24 hrs	40 t/day (30 t dehydration)
Tunnel furnaces	12	1,953	..				1962	24 hrs	218 t/day
Conveyor belts	..	404	..						
Overhead tanks	4	109	..						
Cranes	14	857	..						
Diggers	13	78	..						

CAPACITY POWER:
Process equipment:
- electric motors kW 4,600

Generating equipment:
- installed capacity kVA -

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization:		Automation:		Capacity output	Capacity utilization
		A. most advanced B. considerably high standard	C. moderate standard D. appreciably short of today's standard E. almost obsolete	I. fully automated II. semi-automated	III. non-automated		
Bricks	Clay quarry and preparation	B	III			1,600 m ³	60%
	Forming	B	II			1,600 m ³ /day	70%
	Drying (from 24 to 6% water content)	A	I			750 t/day	93% (7 days/week, 3-shift operation)
	Burning (1100° C)	B/C	II/III			750 t/day	146% (7 days/week, 3-shift operation)
Stoneware	Shipping	B	III			950 t/day	70%
	Clay and fireproof clay storing					Storage capacity 13,000 m ³	90%
	Material preparation	A	I			90 m ³ /day	70%
(For continuation see page 4)	Pressing	C	III			90 m ³ /day	70%
	Hand-moulding	C	III			18 m ³ /day	70%

CAPACITY UTILIZATION:

Full-capacity output: US \$ 11,610,000

Current utilization: based on 2-shift operation

Major products (or processes)	Approximate %					
	up to 30	40	50	60	70	80 90 100
Bricks						X
Stoneware						X
Ceramic tiles	X					
Stove tiles		X				
Others (1-shift operation only)					X	

Due to insufficient demand for ceramic tiles and stove tiles the company could not fully utilize its capacity. In order to achieve this target another 50 operatives would be required on the 2nd shift of the furnace departments.

IX. HISTORY & PLAN

1. Performance in the past:

Year:	Total output (1000 US \$)	No. of persons employed	Total exports (1000 US \$)
1963	9,520	1,801	-
1964	10,190	1,653	-
1965	10,500	1,618	-
1966	10,750	1,628	-
1967	10,850	1,408	-
1968	8,990	1,124	-

2. Investments in the past:

From 1959 to 1967:	Approximate amount (1000 US \$)	Type of investment
1959 to 1967:	15,370	Buildings, additions to machinery, maintenance programme, standardization of process equipment.
in 1967:	450	

3. Future Plan:

From 1968 to 1973:	Approximate amount (1000 US \$)	Type of investment
1968 to 1973:	7,740	Rationalisation of production process, expansion of operative shops, introduction of new products.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C - confidential; figures of these size groups are included in those underlined.

(1964) Manufacture of structural clay products and manufacture of glass and glass products (IBIC-Code: 332 + 331)

1. Size groups by number of persons employed:	No. of estab.	No. of empl.	Av. W. & B. per pers. (US \$)	Av. gross prod. vol./per pers. (US \$)	Av. value added/gross prod. ratio (%)	2. Size groups by annual sale of production (1000 US \$):	No. of estab.	No. of empl.	Av. W. & B. per pers. (US \$)	Av. gross prod. vol./per pers. (US \$)	Av. value added/gross prod. ratio (%)
up to 19	331	2,011	1,445	5,191	66	up to 20	181	342	982	4,387	52
20 - 99	174	6,682	1,673	5,976	68	20 - 40	73	532	1,126	3,852	61
100 - 499	32	12,842	2,075	5,390	72	40 - 200	193	4,029	1,575	4,634	71
500 - 999	3	C	C	C	C	200 - 400	60	2,889	1,584	5,766	66
over 1,000	2	C	C	C	C	400 - 2,000	45	5,583	1,941	6,399	68
						over 2,000	10	8,260	2,196	5,500	74
TOTAL:	542	21,535	1,891	5,553	70	TOTAL:	542	21,535	1,891	5,553	70

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|---|---------------------------------------|-----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export transactions |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of services	Country or region	No. of projects	Field of industry	Description of projects
1				The company is interested in preparing engineering, profitability and feasibility studies for the brick and clay products industry.
2				Financial assistance could possibly be granted in co-operation with the bank to which the company partly belongs to.
3				Know-how contracts covering production techniques (clay quarry), quality control and planning of plant lay-out could be signed.
5				Industrial engineers, chemical engineers and managers could be sent abroad as experts.
6				Supervisors, foremen and salesmen could receive in-plant training only in the ceramic industry.

XII. SUPPLEMENTS & NOTES

This study presents 12 brick and 3 stoneware manufacturing plants as one unit. The sizes of these plants vary as follows:

The largest plant produces 10 times as much as the smallest one; 5 plants are producing 50%, one about 25% and the rest about 10% of the largest one.

Inefficient plants are shut down.

Inventory policy:

On the average the value of the stock of finished products amounts to 20% of the total value of production.

Training courses:

Training courses are provided for employees of the ceramic department.

and VIII. TECHNOLOGICAL CHARACTERISTICS - Capacity of primary ceramic shops: (cont'd)

Major primary ceramic shops	Kind of process involved	Mechan.	Autom.	Capacity output	Capacity utilization
Stoneware	Drying (from 24 to 0% water content)	A	I	80 t/day	146% (7 days/week, 3-shift operation)
	Glazing and composing	C	III	..	70%
	Burning (1200°C)	A	II	80 t/day	146% (7 days/week, 3-shift operation)
	Sorting out	C	III	180 t/day	70%

Major Products: Fire bricks (solid, hollow, etc.)
Capable of producing annually 100,000 m³ of bricks based on 2-shift operation. Full-capacity output amounts to US \$ 1.3 million.

Reporting Unit: A branch of a 15-establishment enterprise (see MIDDLE EUROPE : 331 - (1)).
Company was founded in 1869. The reporting plant was built in 1962. Modern machinery and equipment.
Approximately 80 employees; insignificant exports; no licensed production; research activities.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (000 US \$)	Replacement value (000 US \$)	Avg. age (Yrs.)
1. Primary process equipment (including installation cost)			
TOTAL	1,008	1,209	
- Process equipment *	1,005	1,206	5
- Hand tools & apparatuses	3	3	5
2. Buildings			
TOTAL	428	..	
- Primary industrial buildings (total floor space: .. m ²)	366	..	5
- Auxiliary buildings	62	..	5
- Warehouses	-	-	-
- Office administration buildings	-	-	-
- Housing	-	-	-
3. Auxiliary facilities (excl. buildings)			
TOTAL	90	104	
- Internal power equipment	28	33	5
- Laboratory facilities	-	-	-
- Means of transportation	60	69	5
- Office equipment	2	2	5
TOTAL PHYSICAL FIXED ASSETS (excluding land):	1,526	..	
4. Other fixed capital assets			
TOTAL	26	..	
- Land (total acreage: 1,005,000 m ²)	25	..	-
- Land improvements (t. acc. 17,225 "	1	..	-
- Others	-	-	-

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(1967 monthly average)	Number of persons					
	up to 100 US\$	100 -140 US\$	140 -160 US\$	160 -240 US\$	240 -560 US\$	over 560 US\$
1. Local non-operatives						
- Managers	-	-	-	-	1	-
- Engineers	-	-	-	-	-	-
- Technicians	-	-	-	-	3	-
- Accountants	-	-	-	-	1	-
- Sales officers	-	-	-	-	1	-
- Clerks and typists	-	-	-	-	-	-
2. Local operatives						
- Supervisors	-	-	-	-	1	-
- Foreman	-	-	-	-	-	-
- Skilled operatives	-	-	-	63	-	-
- Machine operators	-	-	-	5	5	-
- Craftsmen	-	-	-	-	-	-
- Truck drivers	-	-	-	-	-	-
- Unskilled operatives	-	-	3	-	-	-
- Other full-time operatives	-	-	-	-	-	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

EXTERNAL CONDITIONS:

Transport:	external long distance	insignificant
	internal long distance	fair
	local and city	excellent
Utilities:	electricity	excellent
	water	"
	gas	"
Community:	residence	fair
	health and recreation	"
	education	"
Own Welfare Facilities:		Apartments

III. INVENTORIES

(End of 1967)	Actual value (000 US \$)	Number of months
Inventories		
TOTAL:	246	
- Production materials	5	0.5
- Other input materials	21	1.5
- Work-in-process	9	0.5
- Finished products	211	2.5

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift hours/day	9	9	8	hours
Actual hours/year	1,935	1,935	1,720	hours
Actual days/year	215	215	215	days

IV. MANNING TABLE

(1967 average)	Number of persons					
	Total	A	B	C	D	3rd Shift
ALL SHOPS & UNITS:	83	6	47	27	3	
1. Primary operative shops	63	-	34	26	3	
- Clay quarry and preparation department	5	-	3	2	-	
- Forming department	2	-	1	1	-	
- Drying department	7	-	4	3	-	
- Burning department	24	-	12	9	3	
- Shipping department	25	-	14	11	-	
2. Auxiliary operative units	13	-	12	1	-	
- Repair & maintenance	10	-	9	1	-	
- Mechanical shop	-	-	-	-	-	
- Tooling shop	-	-	-	-	-	
- Utilities control	-	-	-	-	-	
- Product & material storage	-	-	-	-	-	
- Off-site transport	-	-	-	-	-	
- Guards, cleaners, etc.	3	-	3	-	-	
3. Auxiliary non-operative units	7	6	1	-	-	
- Production management	7	6	1	-	-	
- Research & development	-	-	-	-	-	
- Sales unit	-	-	-	-	-	
- Accounting	-	-	-	-	-	
- General administration	-	-	-	-	-	

Shift categories: A: Supervisory staff and foremen (for all shifts)
B: Skilled operatives
C: Semi-skilled operatives (machine operators)
D: Unskilled operatives

V. ANNUAL PRODUCTION

(1967)	Yr. of first prod.	Quantity produced		Av. unit price ex factory (US \$)	Total output value (000 US\$)
		Unit	Quantity		
Products for group of products					
Fire bricks (solid, hollow, etc.)	1963	m3	93,372	0,02	1,182
TOTAL VALUE OF PRODUCTION:					1,182

VI. VALUE ADDED

(1967)	Total value (000 US \$)
1. Annual wages & salaries	
- Operative workers (77 persons)	254
- Non-operative workers (6 persons)	36
2. Other payments for employees	63
3. Annual depreciation	198
- Machinery & equipment	141
- Buildings & other facilities	57
- Non-physical capital assets	-
4. Rentals paid	-
5. Interests & royalties	51
6. Sales tax	53
7. Other indirect business taxes	13
8. (-) Subsidies	-
9. Corporate income before tax	124
TOTAL VALUE ADDED:	
	792

DESCRIPTION OF MAJOR PRODUCTS:

Bricks: solid bricks, hollow bricks, bricks for ceilings.

Delivery on pallets.

Terms of delivery: prompt.

MARKET ASPECTS:

Consumers of products:

Private and public construction firms.

Sales organization:

Own central sales department for all 15 establishments of the company.

Competition in the market:

Increasing competition with industries producing substitutes (concrete blocks, prefabricated elements, heaped concrete, etc.) besides the normal competition with other manufacturers of bricks.

EXPORT: Insignificant.

Total annual export:

Major products	To Western countries	To Eastern countries	To Developing countries

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import duties	Total consumption value (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity				
1. Energy and water						
TOTAL:					220	
- Electricity	000 kWh	3,090			65	
- Fuel oil	t	7,690			153	
- Water	000 m3	36			2	
2. Production materials						
TOTAL:					101	
- Clay	m3	70,567			101	
3. Other materials & supplies						
TOTAL:						69
- Packaging material and auxiliary material						9
- Parts, supplies & services						40
- Other materials & supplies						20
4. Business services purchased						
TOTAL:						-
- Transportation, storage & insurance						-
- Communication, advertising & other business services						-
5. Work performed by subcontractors						
TOTAL:						-
TOTAL VALUE OF CONSUMPTION:						390

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (1.1):	Number	Original Purchase Value 1000 US \$	Replacement value 1000 US \$	Av. Age (yrs)	Supplier Country	Year of installation	Daily running time	Capacity output	Remarks:
									III - Purchased second-hand O4 - Obsolete R - Rented SC - Self-consumed
Charger	1	7	8	5	Germany, F.R.	1962	16 hrs	100,000 m ³ /year	
Pug mill	1	58	70	5	"	1962	16 hrs	100,000 m ³ /year	
Finishing rolls	2	17	21	5	"	1962	16 hrs	100,000 m ³ /year	
Melander	1	75	91	5	"	1962	24 hrs	1,000 m ³ filling capacity	
Round charger	1	4	5	5	"	1962	16 hrs	100,000 m ³ /year	
Vacuum aggregate	1	20	24	5	"	1962	16 hrs	100,000 m ³ /year	
Automatic cutting machine	1	5	5	5	Switzerland	1962	16 hrs	8 million units/year	
Transport wagon	1	10	12	5	Germany, F.R.	1962	16 hrs	5,600 ton kilometers	
Chamber drying oven	1	317	380	5	"	1962	24 hrs	67,000 t dehydrated	
Tunnel furnaces	2	443	531	5	"	1962	24 hrs	136,000 t/year	
Cranes	3	49	59	5					

CAPACITY POWER:
 Process equipment:
 - electric motors kW 650
 Generating equipment:
 - installed capacity kVA -

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization:		Capacity output	Capacity utilization rate
		A. most advanced B. considerably high standard	C. moderate standard D. appreciably short of today's standard E. almost outdated		
Clay quarry and preparation department		B	III	100,000 m ³ /year	60%
Forming department		B	II	100,000 m ³ /year	60%
Drying department		A	I	67,000 t dehydration (7 days/week, 3-shift oper.)	146%
Burning department		B	II	136,000 t (7 days/week, 3-shift oper.)	146%
Shipping department		B	III	approx. 93,600 m ³ /year	60%

CAPACITY UTILIZATION:

Full-capacity output: US \$ 1.3 million

Current utilization: based on 2-shift operation

Major products (or processes)	Approximate %					
	up to 30	40	50	60	70	80 90 100
Bricks						x

IX. HISTORY & PLAN

	Total output (1000 US \$)	No. of persons employed	Total exports (1000 US \$)
1. Performance in the past:			
Year: 1963	..	83	-
1964	1,010	83	-
1965	1,190	83	-
1966	1,260	83	-
1967	1,330	83	-
1968	1,370	83	-
2. Investments in the past:			
From 19 to 19	No data available.		
3. Future Plan:			
From 1970 to 1971:	58	Expansion of production equipment. 4 additional unskilled operatives will then be employed on the 2nd shift.	

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C = confidential; figures of these size groups are included in those underlined.

(1964) Manufacture of structural clay products and manufacture of glass and glass products (ISIC-Code: 332)						331 +							
1. Size groups by number of persons employed:		No. of estab.	No. of empl.	Av. W. & B. per pers. (US \$)	Av. gross prod. vol./per pers. (US \$)	Av. value added/gross prod. ratio (%)	2. Size groups by annual sale of production (1000 US \$):		No. of estab.	No. of empl.	Av. W. & B. per pers. (US \$)	Av. gross prod. vol./per pers. (US \$)	Av. value added/gross prod. ratio (%)
up to 19	331	2,011	1,445	5,191	66	up to 20	161	242	962	4,367	62		
20 - 99	174	6,682	1,673	5,976	68	20 - 40	73	532	1,126	3,852	61		
100 - 499	32	12,842	2,975	5,320	72	40 - 200	193	4,029	1,575	4,634	71		
500 - 999	3	C	C	C	C	200 - 400	60	2,889	1,584	5,766	66		
over 1,000	2	C	C	C	C	400 - 2,000	45	5,583	1,941	6,399	68		
						over 2,000	10	8,260	2,196	5,500	74		
TOTAL:	542	21,535	1,891	5,553	70	TOTAL:	542	21,535	1,891	5,553	70		

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|---|---------------------------------------|--------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export insurance |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labor |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
-----------------	-------------------	-----------------	-------------------	-------------------------

See MIDDLE EUROPE : 331 - (1).

XII. SUPPLEMENTS & NOTES

This branch is the second-largest establishment of the 15-establishment enterprise studied (MIDDLE EUROPE : 331 - (1)). It accounts for 20% of the bricks manufactured and about 10% of the total value of production of the entire company.

The plant was built in 1962, production started one year later; the breakeven point was reached in 1965 with a total value of production surpassing US \$ 1 million.

Inventory policy:

On the average the value of the stock of finished products amounts to 6% of the total value of production.



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XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services:

- | | | |
|---|---------------------------------------|-----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export transactions |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of services	Country or region	No. of projects	Field of industry	Description of projects
1				The company shows interest in preliminary and feasibility studies for varnish producing factories.
3				Know-how contracts as well as patents could be supplied to manufacture varnishes for surface finishing of wood.
5				Industrial, mechanical, and chemical engineers could be provided to supervise start of production.
6				The establishment is prepared to provide in-plant training for unskilled workers.
8				The company would like to import production material of superior quality from developing countries. The total product-mix could be exported.

XII. SUPPLEMENTS & NOTES

Depreciation policy:

The straight-line as well as accelerated methods are applied.

Bottlenecks:

Delayed deliveries during construction season can only be avoided if the newly built production hall could be finished soon.

and EXTERNAL CONDITIONS (page 1):

Since the plant is located in a tourist area it is difficult to find suitable housing for workers. Therefore, it is considered to set up company-owned housing projects.

Major Products: Detergents.
Full-capacity output amounts to US \$ 8 million. Capable of producing annually about 16,000 t on 3-shift operation.

Reporting Unit: A one-establishment, privately owned enterprise; founded in 1961; 142 employees; no foreign capital participation. Construction of the factory was first started in 1961, trial production in 1963 and commercial production in 1964; profits were made first in 1964, when the total output amounted to US \$ 3,000,000; no merging with other companies envisaged. Exports amount to approximately US \$ 1.25 million.

I. FIXED CAPITAL ASSETS

(End of 1968)

	Original purchase value (000 US \$)	Replace ment value (000 US \$)	Average (Yrs.)
1. Primary process equipment (including installation cost)	946	..	..
TOTAL	946	..	..
- Process equipment *	-	-	-
- Hand tools & apparatuses	-	-	-
2. Buildings	172	..	..
TOTAL	172	..	..
- Primary industrial buildings** (total floor space: .. m ²)	-	-	-
- Auxiliary buildings	-	-	-
- Warehouses	-	-	-
- Office administration buildings	-	-	-
- Housing	-	-	-
3. Auxiliary facilities (excl. buildings)	29	..	..
TOTAL	29	..	..
- Internal power equipment	15	14.9	..
- Laboratory facilities	-	-	-
- Means of transportation	-	-	-
- Office equipment	14	..	..
TOTAL PHYSICAL FIXED ASSETS (excluding land)	1,147	..	..
4. Other fixed capital assets	369	..	..
TOTAL	369	..	..
- Land (total acreage: 13,890 ^e) m ²)	356	..	..
- Land improvements	-	-	-
- Others	13	-	-

* Purchased from the owners of the plant in 1969
** Depreciated value

*NB Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1968 monthly average)

	US\$	US\$	US\$	US\$	US\$	US\$
1. Local non-operatives						
- Managers	790	-	1,980			
- Assistant managers	460	-	925			
- Technicians	105	-	265			
- Accountants	105	-	400			
- Sales officers	80	-	530			
- Clerks and typists	80	-	200			
2. Local operatives						
- Supervisors						
- Foremen	105	-	265			
- Skilled operatives						
- Machine operators	50	-	85			
- Craftsmen	120	-	210			
- Truck drivers	35	-	160			
- Unskilled operatives	35	-	46			
- Other full-time operatives	35	-	80			
- Part-time operatives						
3. Foreign employees						
- Managerial staff						(no foreign employees)
- Technical staff						
- Other skilled operatives						
- Unskilled operatives						

EXTERNAL CONDITIONS:

Transport:	external long distance	fair
	internal long distance	fair
	local and city	fair
Utilities:	electricity	fair
	water	excellent
	gas	fair
Community:	resid-nc	fair
	health and recreation	fair
	education	fair
Own Welfare Facilities:		-

IV. MANNING TABLE

(Number of persons)

Shift categories: A Supervisory staff and foremen (for all shifts)
B Machine operators

(1968 average)

	Total	Shift categories			
		A	1st Shift	2nd Shift	3rd Shift
ALL SHOPS & UNITS:	142	29	40	38	35
1. Primary operative shops	122	9	40	38	35
- All shops	122	9	40	38	35
2. Auxiliary operative units	5	-	5	-	-
- Repair & maintenance	1	-	1	-	-
- Mechanical shop	-	-	-	-	-
- Tooling shop	-	-	-	-	-
- Utilities control	-	-	-	-	-
- Product & material storage	1	-	1	-	-
- Off-site transport	1	-	1	-	-
- Guards, cleaners, etc.	1	-	1	-	-
- Others	1	-	1	-	-
3. Auxiliary non-operative units	15	-	15	-	-
- Production management	1	-	1	-	-
- Research & development	1	-	1	-	-
- Sales unit	4	-	4	-	-
- Accounting	3	-	3	-	-
- General administration	1	-	1	-	-
- Others	5	-	5	-	-

III. INVENTORIES

(End of 1968)

	Actual value (000 US \$)	Number of months
Inventories	806	
TOTAL:	806	
- Production materials	370	..
- Other input materials	-	..
- Work-in-process	119	..
- Finished products	317	..

(See Section XII - Liquid assets and Desired working capital.)

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift hours/day	8	8	8	hours
Average hours/year	2,368	2,368	2,368	hours
Normal days/year	296	296	296	days

V. ANNUAL PRODUCTION

(1968)	Yr. of first prod.	Quantity produced		Av. unit price ex factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Detergente	1964	t	11,810	488.4	5,768
TOTAL VALUE OF PRODUCTION:					5,763

VI. VALUE ADDED

(1968)	Total value (000 US \$)
1 Annual wages & salaries	
- Operative workers (127 persons)	110
- Non-operative workers (15 persons)	53
2 Other payments for employees	29
3 Annual depreciation	140
- Machinery & equipment	110
- Buildings & other facilities	20
- Non-physical capital assets	1
4 Rentals paid	92
5 Interests & royalties	172
6 Sales tax	-
7 Other indirect business taxes	-
8 (-) Subsidies	-
9 Corporate income before tax	237
TOTAL VALUE ADDED:	
	839

DESCRIPTION OF MAJOR PRODUCTS:

Good terms of delivery; good competitive position within the local market.

MARKET ASPECTS:

Consumers of products: Private households.

Sales organisation: Depends on own sales network.

Share in the domestic market: 70%.

Competition with imported products: No prohibitive tariff barrier exists against competitive imports.

Acquisition of production materials: Sodium sulphate and sodium phosphate from F.R. Germany. Silicate and mono-acid from U.K. as well as from F.R. Germany. Imports are on usual terms, subject to import duties, though there are no import restrictions.

EXPORT:

Total annual export: US \$ 1,250,000

Major products	To Western countries	To Eastern countries	To Developing countries
Detergente	-	75%	25%

Prospects of exports: favourable.

Export price policy: At possible minimum prices to increase exports.

VII. ANNUAL CONSUMPTION

(1968)	Quantity consumed		% import	Average import duties	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL:					
- Electricity	000 kWh	1,140	-	-	30
- Liquid fuels, lubricants	000 l	821	-	-	16
- Water	000 m3	21,520	-	-	44
2. Production materials					
TOTAL:					
- D.D.B.	t	2,090	-	-	589
- Sulphur	t	352	-	-	63
- Sodium sulphate	t	2,299	100	..	305
- Sodium phosphate	t	4,396	100	..	1,177
- Sodium silicate	t	638	100	..	96
- Mono-acid	t	120	100	..	80
- Others	t	..	-	-	105

3. Other materials & supplies		Total consumption value (000 US \$)
TOTAL:		1,426
- Packaging material (bags, boxes, etc.)		1,171
- Parts, supplies & services		40
- Other materials & supplies		13
4. Business services purchased		
TOTAL:		1,008
- Transportation, storage & insurance	}	1,008
- Communication, advertising & other business services		
5. Work performed by subcontractors		
TOTAL:		-
TOTAL VALUE OF CONSUMPTION:		4,929

VII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (I.1.):

Total value of process equipment amounts to US \$ 946,000.
All machines can be considered as most modern.

Sample:
III. Forward standard
IV. Obsolete
V. Revised
VI. Self-constructed

Further details:

CAPACITY POWER:

Process equipment:
- electric motors - kW

Generating equipment:
- installed capacity - kVA

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Mechanization:
A. most advanced
B. considerably high standard
C. moderate standard
D. approximately that of today's standard
E. almost outdated

Automation:
I. fully automated
II. semi-automated
III. unautomated

Major primary operative shops	Kind of process involved	Mechan.	Autom.	Further details:
Powder shop		B	II	

CAPACITY UTILIZATION:

Full-capacity output: approx. US \$ 9,000,000.

Current utilization:

Major products (or processes)	Approximate %					
	up to 30	30-40	40-50	50-60	60-70	70-80

The actual over-all capacity utilization rate is considered to be only about 72% due to lack of demand.

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output tons	No. of persons employed	Total output tons
1963	2,270	128	-
1964	3,100	128	4
1965	3,700	128	17
1966	5,200	130	430
1967	11,810	142	2,553

2. Investments in the past:

From 19 to 19 : None.

3. Future Plan:

From 19 to 19 : None.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

*) Selected three other establishments producing detergents (which represent only part of ISIC-code 319).

(1967) Manufacture of miscellaneous chemical products (ISIC-Code: 319 *)

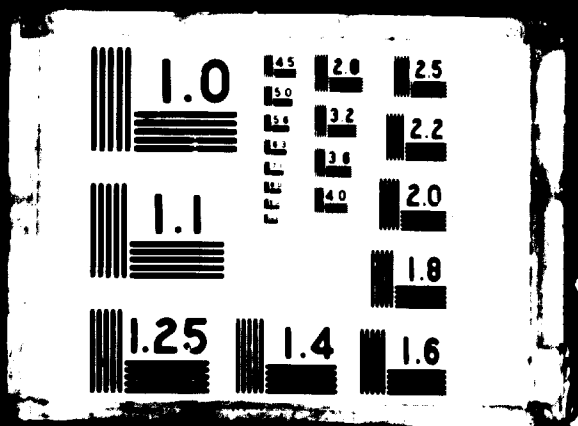
1. Size groups by number of persons employed:	No. of establ.	No. of empl.	Average W. & S. per pers. (US \$)	Average gross output per pers. (US \$)	Average value added/gross output ratio (%)	Fixed capital per pers. (US \$)
up to 10	2	78	410	31,408	87	8,586
over 10	1	130	765	39,934	92	12,589
TOTAL:	3	208	632	36,737	90	11,088

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OF

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Major Products:

glass bottles, wide-mouthed glass containers, lighting glasses, etc.
Full-capacity output amounts to 25,000 t of glassware based on 3-shift operation.

Reporting Unit:

A branch of a 2-establishment enterprise; founded in 1859; privately owned joint-stock company; 358 employees.
6% exports. Although the reporting company is very old, the process equipment utilized has always been kept at modern standards. The whole enterprise has 1,200 employees. The purchase and sales departments are centrally organized. No own research activities.

I. FIXED CAPITAL ASSETS

(End of 1968)	Original purchase value (000 US \$)	Replacement value (000 US \$)	Avg. age (Yrs.)
1. Primary process equipment (including installation cost) TOTAL	1,757	2,181	
- Process equipment *	1,612	1,978	5
- Hand tools & apparatuses	145	203	5
2. Buildings TOTAL	902	1,411	
- Primary industrial buildings (total floor space: 2,900 m ²)	117	261	15
- Auxiliary buildings	110	229	20
- Warehouses	183	267	5
- Office administration buildings	56	105	30
- Housing	336	549	50
3. Auxiliary facilities (excl. buildings) TOTAL	413	486	
- Internal power equipment	378	439	5
- Laboratory facilities	7	8	5
- Means of transportation	10	11	3
- Office equipment	18	28	6
TOTAL PHYSICAL FIXED ASSETS (excluding land):	2,972	4,078	
4. Other fixed capital assets TOTAL	84	295	
- Land (total acreage: 6,312 m ²)	38	24	-
- Land improvements (t.acr.63,718 "	46	217	-
- Others		54	30

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII).

II. MONTHLY GROSS WAGES AND SALARIES

(1968 monthly average)

	Number of persons					
	up to 100 US\$	100 -140 US\$	140 -160 US\$	160 -240 US\$	240 -560 US\$	over 560 US\$
1. Local non-operatives						
- Managers	-	-	-	4	2	
- Engineers	-	-	-	3	1	
- Technicians	-	-	2	2	-	
- Accountants	-	-	-	2	-	
- Sales officers	-	-	-	-	-	
- Clerks and typists	-	1	-	9	4	1
2. Local operatives						
- Supervisors	-	-	-	4	6	-
- Foremen	-	-	-	1	6	-
- Skilled operatives	-	-	-	-	-	-
- Machine operators	-	-	-	30	28	-
- Craftsmen	-	-	-	39	25	-
- Truck drivers	-	-	-	2	-	-
- Unskilled operatives	-	-	76	4	-	-
- Other full-time operatives	-	-	31	76	-	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

EXTERNAL CONDITIONS:

Transport:	external long distance	poor (*)
	internal long distance	fair
	local and city	insignificant
Utilities:	electricity	excellent
	water	fair
	gas	insignificant
Community:	residence	fair
	health and recreation	excellent
	education	fair
Own Welfare Facilities: Housing, sport facilities.		
(*) Company reports increase of production costs by 5-6% due to long distance transport.		

III. INVENTORIES

(End of 1968)	Actual value (000 US \$)	Number of months
Inventories	917	
TOTAL:		
- Production materials	39	0.5
- Other input materials	51	2
- Work-in-process	-	-
- Finished products	627	2

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift hours/day	8	8	8	hours
Actual hours/year	2,920	2,800	2,800	hours
Actual days/year	365	365	365	days

IV. MANNING TABLE

(1968 average)

	Total	Skill categories: A. Supervisory staff and foremen (for all shifts) B. Skilled operatives C. Semi-skilled operatives (machine operators) D. Unskilled operatives					
		Number of persons					
		1st Shift				2nd Shift	3rd Shift
		A	B	C	D	B-D	B-D
ALL SHOPS & UNITS:	358	43	163			81	71
1. Primary operative shops	219	14	48			23	70
- Glass melting department	7	-	3			-	2
- Glass processing department	51	6	13			2	15
- Grading and packing dept.	146	5	26			21	47
- Grinding and screen printing department	15	3	6			-	6
2. Auxiliary operative units	121	11	92			11	7
- Repair & maintenance	56	3	49			-	-
- Mechanical shop	-	-	-			-	-
- Tooling shop (Mould design)	21	3	15			3	-
- Utilities control	6	1	3			1	1
- Product & material storage	26	4	18			2	2
- Off-site transport	1	-	1			-	-
- Guards, cleaners, etc.	11	-	6			3	2
3. Auxiliary non-operative units	18	18	-			-	-
- Production management	2	2	-			-	-
- Research & development	5	5	-			-	-
- Sales unit	2	2	-			-	-
- Accounting	4	4	-			-	-
- General administration	5	5	-			-	-
- Central office	(27)	(27)	-			-	-

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

- Type of services
- | | | |
|---|---------------------------------------|----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export transaction |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultation | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

1. Services performed during the past five years:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
-----------------	-------------------	-----------------	-------------------	-------------------------

XII. SUPPLEMENTS & NOTES

<u>Average liquid assets:</u>	<u>(000 US \$)</u>	<u>Desired working capital:</u>	<u>(000 US \$)</u>	<u>Equivalent number of months</u>
Cash on hand and in bank	1,203	Production materials	2	2
Accounts receivable from delivery of goods and services	1,132	Other materials and supplies	31	2
Total	2,335	Wages for primary operative workers	76	2
		Other wages and salaries	14	2
		Other special items	5	..
		Total	128	

Labour training:

Regular internal and external training classes.

Major Products: Cement and binding agents.
Capable of producing annually about 400,000 t. Full-capacity output approximates US \$ 5.6 million, based on 3-shift operation.

Reporting Unit: A branch of a 3-establishment enterprise (one other establishment is presented in MIDDLE EUROPE : 334 - 2). Privately owned, founded in 1893; 280 employees. Own research activities to develop new building materials. No exports.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (1000 US \$)	Replacement value (1000 US \$)	Avg. age (Yrs.)
1. Primary process equipment (including installation cost)			
TOTAL	8,204	10,035	18
- Process equipment *	7,945	9,694	18
- Hand tools & apparatuses	259	341	10
2. Buildings			
TOTAL	2,404	4,296	
- Primary industrial buildings (total floor space: 5,000 m ²)	1,507	2,516	15
- Auxiliary buildings	270	534	20
- Warehouses	4	8	20
- Office administration buildings	39	77	20
- Housing	584	1,161	20
3. Auxiliary facilities (excl. buildings)			
TOTAL	588	813	
- Internal power equipment	387	542	10
- Laboratory facilities	23	35	10
- Means of transportation	104	135	5
- Office equipment	74	101	10
TOTAL PHYSICAL FIXED ASSETS (excluding land)	11,196	15,144	
4. Other fixed capital assets			
TOTAL	472	1,343	
- Land (total acreage: 2,245,000 m ²)	275	1,045	-
- Land improvements (t. approx. 15,000 ")	39	39	-
- Others	197	259	10

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(1967 monthly average)	Number of persons				
	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	over 240 US\$
1. Local non-operatives					
- Managers	-	-	-	-	-
- Engineers	-	-	3	4	1
- Technicians	-	-	6	1	-
- Accountants	-	2	1	7	3
- Sales officers	-	1	-	3	3
- Clerks and typists	2	6	2	9	3
2. Local operatives					
- Supervisors	-	-	-	6	-
- Foreman	-	-	3	-	-
- Skilled operatives	-	81	18	10	-
- Machine operators	-	38	9	-	-
- Craftsmen	-	4	-	-	-
- Truck drivers	-	3	-	-	-
- Unskilled operatives	17	3	-	-	-
- Other full-time operatives	-	34	9	-	-
- Part-time operatives	-	-	-	-	-
3. Foreign employees					
- Managerial staff	-	-	-	-	-
- Technical staff	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-

EXTERNAL CONDITIONS:

Transport:	external long distance	poor
	internal long distance	"
	local and city	insignificant
Utilities:	electricity	fair
	water	excellent
	gas	insignificant
Community:	residence	poor
	health and recreation	fair
	education	excellent
Own Welfare Facilities:		Cinema, sports ground

III. INVENTORIES

(End of 1967)	Actual value (1000 US \$)	Number of months
Inventories	894	
TOTAL:	8	0.5
- Production materials	507	1
- Other input materials	240	0.5
- Work-in-process	139	0.25
- Finished products		

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
- Shift hours/day: (*)	8.8	8.8	8.8	hours
- Actual hours/year:	2,300	2,300	2,300	hours
- Actual days/year:	260	260	260	days

(*) Actual; normal working time: 8 hrs/day

IV. MANNING TABLE

(1967 average)	Total	Shift categories:				
		A	B	C	D	E
ALL SHOPS & UNITS:	280	58	153	48	21	
1. Primary operative shops	125	8	29	22	46	19
- Exploitation of raw material	21	2	9	1	9	-
- Preparation of raw material	15	2	4	1	4	4
- Production of clinker	36	1	8	4	11	11
- Cement milling	13	1	2	2	4	4
- Packing shop	35	1	2	14	18	-
- Power station	5	1	4	-	-	-
2. Auxiliary operative units	98	7	87	2	2	
- Repair & maintenance	55	2	53	-	-	-
- Mechanical shop	-	-	-	-	-	-
- Tooling shop	-	-	-	-	-	-
- Utilities control	10	3	3	-	-	-
- Product & material storage	-	-	-	-	-	-
- Off-site transport	8	-	8	-	-	-
- Guards, cleaners, etc.	16	1	15	-	-	-
- Others	9	1	8	-	-	-
3. Auxiliary non-operative units	57	43	14	-	-	
- Production management	18	8	10	-	-	-
- Research & development	1	1	-	-	-	-
- Sales unit	16	16	-	-	-	-
- Accounting	8	8	-	-	-	-
- General administration	14	10	4	-	-	-

V. ANNUAL PRODUCTION

(1967)	Yr. of Prod. grad.	Quantity produced		Av. unit price or factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Products for group of products					
Cement	1894	t	320,494 (*)	15.8	5,064
Binding agents	1961	t	25,020	11.0	276
Electricity and others	1900	-	-	-	50

(*) Not including internal consumption of 1,369 t of cement

TOTAL VALUE OF PRODUCTION: 5,390

VI. VALUE ADDED

(1967)	Total value (000 US \$)
1. Annual wages & salaries	622
- Operative workers (222 persons)	454
- Non-operative workers (58 persons)	168
2. Other payments for employees	198
3. Annual depreciation	963
- Machinery & equipment	911
- Buildings & other facilities	43
- Non-physical capital assets	9
4. Rentals paid	14
5. Interests & royalties	69
6. Sales tax	306
7. Other indirect business taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	191
TOTAL VALUE ADDED:	2,563 *****

DESCRIPTION OF MAJOR PRODUCTS:

Cement and binding agents.
Continuous production.
Packaging units: sacks of 50 kg.
Terms of delivery: Prompt.

MARKET ASPECTS:

Consumers of products:

Construction companies.

Sales organization:

Own staff of salesmen to supply wholesalers and retailers.

Share in the domestic market:

A share of 8% is allotted by the cartel.

Competition in the market:

Little competition due to cartel agreement.

EXPORT: No exports.

Total annual export:

Major products	To Western countries	To Eastern countries	To Developing countries

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% Import	Average import dollar	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					1,316
TOTAL:					
- Electricity	000 kWh	30,161 (**)	-	-	541
- Fuel oil	t	31,628	-	-	775
(*) Not including internal supply of 4,335,000 kWh					
2. Production materials					409
TOTAL:					
- Limestone	t	261,998 (**)	-	-	-
- Clay	"	258,080 (**)	-	-	-
- Gypsum	"	18,330	-	-	140
- Blast furnace slag	"	23,877	-	-	70
- Flue dust	"	5,009	-	-	16
- Roasted pyrites	"	2,866	-	-	21
- Iron ore	"	2,880	-	-	18
- Fluorite	"	1,153	-	-	36
- Clinker	"	7,512	-	-	108
(**) Internally supplied					

	Total consumption value (000 US \$)
3. Other materials & supplies	780
TOTAL:	
- Packaging material (paper sacks)	273
- Parts, supplies & services	265
- Other materials & supplies	242
4. Business services purchased	322
TOTAL:	
- Transportation, storage & insurance	87
- Communication, advertising & other business services	235
5. Work performed by subcontractors	-
TOTAL:	
TOTAL VALUE OF CONSUMPTION:	2,027 *****

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT N.1:

	Number	Original Purchase Value (1959 US \$)	Replacement value (1959 US \$)	Avg. Age (yrs)	Remarks
i) Machines for exploitation of raw material (in quarry and rock crushing plant)	..	813	1,045	10	-
ii) Machines for preparation of raw material for shaft furnaces	..	387	522	40	partly Ob
Machines for preparation of raw material for rotary kilns	..	774	1,033	15	-
iii) Production of clinker in shaft furnaces	3	267	325	40	partly Ob
Production of clinker in rotary kilns	3	3,019	3,483	15	-
iv) Cement mills	4	642	851	15	-
Packing equipment and silos	..	1,502	1,769	10	-
Electric motors	..	480	619	10	-
Transformers	..	62	85	10	-

Remarks:
 III: Purchased second-hand
 Ob: Obsolete
 R: Rented
 S: Self-constructed

Further details

- i) Electro pneumatic large-hole drilling machine; supplier country: Fed. Rep. of Germany; installed in 1960. Special terraces. Digger; special trucks.
- ii) Clay drying plant, grinder, mixing silos for unisized raw dust, storage tanks.
- iii) Lepol grating, rotary kiln, clinker cooling equipment, slag crusher, clinker storage equipment, cranes.
- iv) Cement mills, silos, packing machines.

CAPACITY POWER:

Process equipment:
 - electric motors kW 6,950

Generating equipment:
 - installed capacity LVA 1,220

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization:		Mechan.	Autom.	Daily running time	Capacity output	Capacity utilization
		A: most advanced B: considerably high standard	C: medium standard D: appreciably short of today's standard E: almost outdated					
Exploitation of raw material	Exploitation of lime-stone with blasting every 2 - 3 months	B	E	B	III	7 hrs	22,000 t/month	30%
Preparation of raw material	Exploitation of clay Lime crushing, clay crushing and drying, production of raw dust, processing of granulated material	B	E	B	III	24 hrs	28,000 t/month	95%
Production of clinker	Sintering in rotary kilns (1500°C)	B	E	B	III	24 hrs	500 t/day	95%
Cement milling	Milling of clinker in ball mills together with blast furnace slag and gypsum	B	E	B	II	24 hrs	45 t/hour	100%
Packing and dispatch shop	Filling into sacks of 50 kg or shipment in wagons or silo-trucks	B	E	B	II	24 hrs	1,800 t/day	95%

CAPACITY UTILIZATION:

Full-capacity output US \$ 5,611,500

Current utilization: Based on 3-shift operation

Major products (in process)	Approximate %									
	to 30	40	50	60	70	80	90	100		
Cement										X
Binding agents										X

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output (1959 US \$)	No. of persons employed	Total output (1959 US \$)
1963	5,080	311	-
1964	5,650	308	-
1965	6,290	307	-
1966	7,360	297	-
1967	7,600	278	-
1968	-	-	-

2. Investments in the past:

From	To	Approximate amount (1959 US \$)	Type of investment
1955	1966	8,260	2 rotary kilns, storage silos, cement mills, packing and loading equipment, raw mill.
	1967	1,140	

3. Future Plan:

From	To	Approximate amount (1959 US \$)	Type of investment
1968	1973	3,870	Expansion of machinery and equipment; rationalization of product-mix, machinery and equipment, production facilities, etc.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C = confidential; figures of these size groups are included in underlined ones.

(1964)

Industry: Manufacture of cement (ISIC Code: 334)

1. Size groups by number of persons employed	No. of estab.	No. of empl.	Av. W. & B. per pers. (US \$)	Av. gross prod. val. per pers. (US \$)	Av. value added/gross prod. ratio (%)	2. Size groups by annual rate of production (1959 US \$)	No. of estab.	No. of empl.	Av. W. & B. per pers. (US \$)	Av. gross prod. val. per pers. (US \$)	Av. value added/gross prod. ratio (%)
up to 19	2	C	C	C	C	up to 20	-	-	-	-	-
20 - 99	2	C	C	C	C	20 - 40	1	C	C	C	C
100 - 499	12	4,082	2,272	14,977	56	40 - 200	1	C	C	C	C
500 - 999	1	C	C	C	C	200 - 400	-	-	-	-	-
over 1,000	-	-	-	-	-	400 - 2,000	3	228	2,182	12,467	56
						over 2,000	12	3,784	2,282	15,176	57
TOTAL:	17	4,082	2,272	14,977	56	TOTAL:	17	4,082	2,272	14,977	56

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services:

- | | | |
|---|---------------------------------------|-----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export transactions |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, maintenance & repair | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of services	Country or region	No. of projects	Field of industry	Description of projects
------------------	-------------------	-----------------	-------------------	-------------------------

For further details see MIDDLE EUROPE : 334 - (2)
since both branch establishments are under the same management.

XII. SUPPLEMENTS & NOTES

Depreciation policy:

The straight-line as well as the accelerated methods of depreciation are applied.

Labour training facilities:

Qualified workers are sent abroad to participate in advanced training courses to become foremen.

Inventory policy:

On the average the value of finished products in stock amounts to 4% of the total value of production.
The company delivers cement and binding agents immediately after production.

Major Products: Cement and cement-lime mixture.

Capable of producing annually 250,000 t of cement and cement-lime mixture based on 3-shift operation. Full-capacity output amounts to US \$ 3.5 million.

Reporting Unit:

Branch of a 3-establishment enterprise (one other branch is presented in MIDDLE EUROPE : 334 - (1)). Privately owned; founded in 1939; 150 employees; no exports. Own research activities in order to develop new building materials.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average age (Yrs)
1 Primary process equipment (including installation cost)			
TOTAL	2,913	3,708	
- Process equipment *	2,779	3,677	11
- Hand tools & apparatuses	23	31	6
2 Buildings			
TOTAL	635	948	
- Primary industrial buildings (total floor space: 47,000 m ²)	476	668	8
- Auxiliary buildings	13	77	15
- Warehouses	-	-	-
- Office administration buildings	47	155	10
- Housing	23	68	10
3 Auxiliary facilities (excl. buildings)			
TOTAL	276	352	
- Internal power equipment	143	186	6
- Laboratory facilities	12	15	8
- Means of transportation	51	62	3
- Office equipment	70	89	5
TOTAL PHYSICAL FIXED ASSETS (excluding land)	3,724	5,008	
4 Other fixed capital assets			
TOTAL	317	678	
- Land (total acreage: 206,700 m ²)	147	177	-
- Land improvements (total acre: 63,500 m ²)	46	124	-
- Others	124	155	8

*NB: Details of process equipment and capacity of primary operations are given on Page three, Section VIII.

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1967 monthly average)	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1. Local non operatives						
- Managers	-	-	-	-	3	2
- Engineers	-	-	-	3	-	-
- Technicians	-	-	2	3	-	-
- Accountants	-	1	1	3	4	-
- Sales officers	-	-	-	-	-	-
- Clerks and typists	-	-	1	4	-	-
2 Local operatives						
- Supervisors	-	-	-	4	1	-
- Foremen	-	-	-	-	-	-
- Skilled operatives	-	1	5	39	2	-
- Machine operators	-	2	7	8	4	-
- Craftsmen	-	1	3	3	2	-
- Truck drivers	-	9	6	6	-	-
- Unskilled operatives	-	3	1	10	-	-
- Other full-time operatives	2	2	-	-	-	-
- Part-time operatives	-	-	-	-	-	-
3 Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

EXTERNAL CONDITIONS.

Transport	external long distance	fair
	internal long distance	excellent
	local and city	excellent
Utilities	electricity	fair
	water	excellent
	gas	insignificant
Community	residence	fair
	health and recreation education	excellent fair
Own Welfare Facilities.		-

III. INVENTORIES

(End of 1967)	Actual value (000 US \$)	Number of months
Inventories	488	
TOTAL		
- Production materials	4	0.5
- Other input materials	271	2
- Work-in-process	143	1.5
- Finished products	70	0.25

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift hours/day (*)	8.3	8.3	8.3	hours
Actual hours/year	2,200	2,200	2,200	hours
Actual days/year	265	265	265	days

(*) Actual; normal working hours: 8 hrs./day.

IV. MANNING TABLE

(number of persons)

Shift categories: A: Supervisory staff and foremen (for all shifts)
B: Skilled operatives
C: Semi skilled operatives (machine operators)
D: Unskilled operatives

(1967 average)	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	B-D	B-D
ALL SHOPS & UNITS:	150	27		81		24	18
1 Primary operative shops	74	8	2	25	4	18	17
- Exploitation of raw material	10	1	1	6	2	-	-
- Preparation of raw material	18	-	-	4	2	6	6
- Production of clinker	21	2	1	6	-	6	6
- Cement milling	8	-	-	3	-	3	2
- Packing and dispatch shop	17	5	-	6	-	3	3
2. Auxiliary operative units	44	3		34		6	1
- Repair & maintenance	23	3		16		4	-
- Mechanical shop	-	-		-		-	-
- Tooling shop	-	-		-		-	-
- Utilities control	8	-		5		2	1
- Product & material storage	-	-		-		-	-
- Off-site transport	9	-		9		-	-
- Guards, cleaners, etc.	4	-		4		-	-
3. Auxiliary non-operative units	32	16		16		-	-
- Production management	15	3		12		-	-
- Research & development	3	1		2		-	-
- Sales unit	6	4		2		-	-
- Accounting	6	6		-		-	-
- General administration	2	2		-		-	-

V. ANNUAL PRODUCTION

(1967)	Yr. of first prod.	Quantity produced		Av. unit price ex factory (US \$)	Total output value (000 US\$)
		Unit	Quantity		
Products for group of products)					
Portland cement	1949	t	205,456	14.0	2,874
Cement and lime mixture (special product)	1951	t	24,403	12.4	302
Others	-	-	..	..	6
TOTAL VALUE OF PRODUCTION:					3,182

VI. VALUE ADDED

(1967)	Total value (000 US \$)
1. Annual wages & salaries	146
- Operative workers (123 persons)	252
- Non-operative workers (27 persons)	22
2. Other payments for employees	84
3. Annual depreciation	345
- Machinery & equipment	266
- Buildings & other facilities	84
- Non-physical capital assets	1
4. Rentals paid	6
5. Interests & royalties	17
6. Sales tax	132
7. Other indirect business taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	672
TOTAL VALUE ADDED: 1,612	

DESCRIPTION OF MAJOR PRODUCTS:

Cement-lime mixture: Similar qualities like mortar after water and sand have been added; frost-resistant.

Continuous production of cement and cement-lime mixture.

Packing units: Both products are packed in sacks of 50 kg.

Terms of delivery: Prompt.

MARKET ASPECTS:

Consumers of products:

Construction companies.

Sales organization:

Own sales organization; 2 representatives for both wholesalers and retailers.

Market and competition:

Share in the domestic market: 3.6% has been allotted by the cement cartel.

EXPORT:

Total annual export: No exports.

Major products	To Western countries	To Eastern countries	To Developing countries

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import duties	Total consumption value (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity				
1. Energy and water						
TOTAL					566	
- Electricity	000 kWh	19,263	-	-	234	
- Mineral coal	t	19,310	-	-	293	
- Fuel oil	t	1,370	-	-	39	
2. Production materials						
TOTAL					470	
- Limestone	t	213,153 (*)	-	-	-	
- Clay	"	60,851	-	-	36	
- Gypsum	"	15,649	-	-	90	
- Slag	"	36,919	-	-	65	
- Roasted pyrites	"	2,518	-	-	35	
- Clinker	"	16,701	-	-	244	
3. Other materials & supplies						410
TOTAL						156
- Packaging material (paper sacks)						168
- Parts, supplies & services						96
4. Business services purchased						134
TOTAL						14
- Transportation, storage & insurance						120
- Communication, advertising & other business services						-
5. Work performed by subcontractors						-
TOTAL						1,580
TOTAL VALUE OF CONSUMPTION:						1,580

(*) Internally supplied.

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (I.I.):

	Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Avg. Age (yrs)	Remarks
i) Various machines (quarry)	..	337	426	6	-
ii) Various machinery (rock crushing plant)	..	4	12	20	SH
iii) Preparation of raw material for shaft furnaces	1	74	116	20	SH
Preparation of raw material for rotary kiln	1	197	252	6	-
iv) Production of clinker in shaft furnace	1	101	147	20	SH
Production of clinker in rotary kiln	1	619	832	7	-
v) Cement mill I	1	43	97	28	Ob
" " II	1	108	135	6	-
" " III	1	348	406	3	-
Packing and loading equipment, silo	..	662	851	6	-
Electric motors	..	255	348	6	-
Transformers	..	15	19	4	-
Repair shop equipment	..	27	35	7	-

Remarks:
 NI: Purchased second-hand
 Ob: Obsolete
 R: Rented
 SC: Self-constructed

Further details:

- i) Electro pneumatic large-hole drilling machine; supplier country: Fed. Rep. of Germany; installed in 1960. Special lorries.
- ii) Digger; special trucks.
- iii) Clay drying plant, grinder, mixing silos for unsintered raw dust, storage tanks.
- iv) Lepol grating, rotary kiln, clinker cooling equipment, slag crusher, clinker storage equipment, crane.
- v) Cement mills, silos, packing machines.

CAPACITY POWER:

Process equipment:
 - electric motors kW 5,300

Generating equipment:
 - installed capacity kVA -

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization: A: most advanced B: considerably up standard	Automation: C: modern standard D: appreciably short of today's standard E: almost outdated	Further details	Capacity output	Capacity utilization
Exploitation of raw material	Exploitation of lime-stone with blasting every 2 - 3 months	B	III	20,000 t/month/5 hrs/daily	20%	
Preparation of raw material	Exploitation of clay Lime crushing, clay crushing and drying, production of raw dust, processing of granulated material	B	II	27,000 t/month/ 24 hrs/daily	50% 90%	
Production of clinker	Sintering in rotary kilns (1500° C)	C	II	450-470 t/day/ 24 hrs/daily	90%	
Cement milling	Milling of clinker in ball mills together with blast furnace slag and gypsum	B	II	45 t/hr / 24 hrs/daily	100%	
Packing and dispatch shop	Filling into sacks of 50 kg or shipment in wagons or silo-trucks	B	II	1,500 t/day 24 hrs/daily	90%	

CAPACITY UTILIZATION:

Full capacity output 250,000 t

Current utilization Based on 3-shift operation.

Major products (or processes)	up to 30	40	50	60	70	80	90	100
Portland cement								x
Cement and lime mixture (special product)								x

Full-capacity output can only be reached after additional machines for the preparation of raw material for both the shaft furnaces and the rotary kiln have been installed.

Shortage of unsintered raw dust.

No further operatives required.

IX. HISTORY & PLAN

1. Performance in the past:	Total output (1000 US \$)	No. of persons employed	Total exports (1000 US \$)
Year: 1963	2,330	142	-
1964	2,760	145	-
1965	3,320	144	-
1966	3,880	143	-
1967	3,990	144	-
1968	..	..	-

2. Investments in the past:	Approximate amount (1000 US \$)	Type of investment
From 1955 to 1966:	3,540	Rotary kiln, 2 cement mills, packaging department, silo, drying department and oil furnace, crushing plant
In 1967:	192	

3. Future Plan:	Approximate amount (1000 US \$)	Type of investment
From 1968 to 1973:	970	Additions to product-mix, rationalisation of machinery and equipment, other primary production facilities.

No additional man-power requirements.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C = confidential; figures of these six groups are included in underlined ones.

(1964)

Industry Manufacture of cement (ISIC Code: 334)

1. Size groups by number of persons employed:	No. of estab.	No. of empl.	Avg. W. & S. per pers. (US \$)	Avg. gross prod. val. per pers. (US \$)	Avg. value added/gross prod. ratio (%)
up to 19	2	C	C	C	C
20 - 99	2	C	C	C	C
100 - 499	12	<u>4,082</u>	<u>2,272</u>	<u>14,977</u>	<u>56</u>
500 - 999	1	C	C	C	C
over 1,000	-	-	-	-	-
TOTAL	17	4,082	2,272	14,977	56

2. Size groups by annual value of production (1000 US \$):	No. of estab.	No. of empl.	Avg. W. & S. per pers. (US \$)	Avg. gross prod. val. per pers. (US \$)	Avg. value added/gross prod. ratio (%)
up to 20	-	-	-	-	-
20 - 40	1	C	C	C	C
40 - 200	1	C	C	C	C
200 - 400	-	-	-	-	-
400 - 2,000	3	<u>298</u>	<u>2,142</u>	<u>12,447</u>	<u>58</u>
over 2,000	12	<u>3,784</u>	<u>2,282</u>	<u>15,176</u>	<u>57</u>
TOTAL	17	4,082	2,272	14,977	56

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|---|---------------------------------------|----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export transaction |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labor |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of services	Country or region	No. of projects	Field of industry	Description of projects
1				The company reports interest to prepare engineering studies for the production of cement. Feasibility studies could be drafted particularly for African countries.
2				Financial assistance could be provided through the supply of second-hand machinery and equipment.
3				Know-how contracts and rights could be made available.
4				The following machines and equipment could be supplied : 2 complete rotary kilns with water screen and new gratings; special blinets; fixtures for material transport (clinker) with a capacity of 150 t/day.
5				In connection with a know-how contract the company is willing to send technicians, foremen and chemists abroad.
6				Laboratory workers, technical supervisors, kiln-operators, mill operators and mining engineers could receive in-plant training.
7				Pre-investment studies could be provided.
9				Foreign operatives could be admitted seasonally.

XII. SUPPLEMENTS & NOTES

History of production and investment:

Production started in 1949. In 1956 the establishment surpassed the break-even point with an output of US \$ 1,161,000.

Depreciation policy:

The straight-line as well as the accelerated methods of depreciation are applied.

Labour training services:

Qualified workers are sent abroad to participate in advanced training courses to become production foremen.

Inventory policy:

On the average the value of finished products in stock amounts to about 3.2% of the total value of production. The company delivers cement and cement-lime mixture immediately after production.

Major Products: Portland cement and clinker.
Capable of producing annually 650,000 t of Portland cement and 100,000 t of clinker based on 2- and 3-shift operation.

Reporting Unit: A one-establishment enterprise; privately owned; production started in 1933; approximately 240 employees; no exports; very favourable location regarding road and railway communications; total production process is characterized by high-standards of rationalization and mechanisation. Member of a cartel which regulates sales by a quota system.

I. FIXED CAPITAL ASSETS

(End of 1968)	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average (Yrs.)
1 Primary process equipment (including installation cost)	5,672	6,889	-
TOTAL	5,447	6,629	-
- Process equipment *	225	261	-
- Hand tools & apparatuses			
2 Buildings	1,890	2,355	
TOTAL	1,890	2,355	
- Primary industrial buildings (total floor space: 13,000 m ²)	881	1,025	6
- Auxiliary buildings	611	700	6
- Warehouses	140	175	8
- Office administration buildings	242	275	7
- Housing	16	180	..
3 Auxiliary facilities (excl. buildings)	808	921	
TOTAL	808	921	-
- Internal power equipment	-	-	-
- Laboratory facilities	150	203	5
- Means of transportation	563	604	4
- Office equipment	95	114	7
TOTAL PHYSICAL FIXED ASSETS (excluding land)	8,360	10,165	-
4 Other fixed capital assets	3,150	3,833	
TOTAL	3,150	3,833	-
- Land (total acreage: 1,250,000 m ²)			
- Land improvements (t.a. 79,386 ")	2,125	2,550	-
- Others	1,025	1,283	-

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1968 monthly average)

	up to 175 US\$	175 - 250 US\$	250 - 375 US\$	375 - 500 US\$	500 - 1,000 US\$	over 1,000 US\$
1. Local non-operatives						
- Managerial staff	-	-	-	-	-	2
- Technical staff	-	1	9	5	2	2
- Commercial staff	-	4	7	6	3	-
2. Local operatives						
- Foremen	-	-	6	-	-	-
- Skilled operatives	-	38	93	-	-	-
- Semi-skilled operatives	-	13	35	-	-	-
- Unskilled operative	-	9	6	-	-	-
- Part-time operative	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operative	-	-	-	-	-	-

EXTERNAL CONDITIONS:

Transport	external long distance internal long distance local and city	excellent excellent excellent
Utilities:	electricity water gas	excellent excellent -
Community:	residence health and recreation education	fair fair excellent
Own Welfare Facilities:	Cafeteria; aid fund.	

III. INVENTORIES

(End of 1968)

	Actual value (000 US \$)	Number of months
Inventories	498	
TOTAL	498	approx. 1
- Production materials	255	0.5
- Other input materials	210	1 day
- Work-in-process	33	
- Finished products		

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift hours/day	8	9	8	hours
Actual hours/year	1,760	1,760	1,760	hours
Actual days/year	220	220	220	days

IV. MANNING TABLE

(number of persons)

Shift categories: A: Supervisory staff and foremen (for all shifts)
B: Skilled operatives
C: Semi-skilled operatives (machine operators)
D: Unskilled operatives

(1968 average)

ALL SHOPS & UNITS:	Total	1st Shift				2nd Shift	
		A	B	C	D	B-D	B-D
TOTAL	241	41	126	37	37	37	37
1. Primary operative shops	118	5	16	17	6	37	37
- Quarry	42	1	9	5	1	13	13
- Preparation of raw materials	18	3	3	2	-	5	5
- Kilne	21	-	3	3	1	7	7
- Cement milling department	13	1	1	2	1	4	4
- Packing department	24	-	-	5	3	8	8
	91	4	87	-	-	-	-
2. Auxiliary operative units	46	1	45	-	-	-	-
- Repair & maintenance	-	-	-	-	-	-	-
- Mechanical shop	-	-	-	-	-	-	-
- Tooling shop	9	2	7	-	-	-	-
- Utilities control	-	-	-	-	-	-	-
- Product & material storage	9	-	9	-	-	-	-
- Off-site transport	21	-	21	-	-	-	-
- Guards, cleaners, etc.	6	1	5	-	-	-	-
- Cafeteria							
	32	32	-	-	-	-	-
3. Auxiliary non-operative units	4	4	-	-	-	-	-
- Production management	1	1	-	-	-	-	-
- Research & development	11	11	-	-	-	-	-
- Sales unit	6	6	-	-	-	-	-
- Accounting	10	10	-	-	-	-	-
- General administration							

V. ANNUAL PRODUCTION

(1968)	Yr. of first prod.	Quantity produced		Avg. unit price ex factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Bottles	1939	t	10,500	165.8	1,741
Wide mouthed glass containers	"	"	10,600	162.8	1,726
Lighting glasses	"	"	800	483.8	387
Others			..	..	75
TOTAL VALUE OF PRODUCTION:				3,929	*****

VI. VALUE ADDED

(1968)	Total value (000 US \$)
1. Annual wages & salaries	646
- Operative workers (318 persons)	528
- Non-operative workers (40 persons)	118
2. Other payments for employees	356
3. Annual depreciation	289
- Machinery & equipment	258
- Buildings & other facilities	24
- Non-physical capital assets	7
4. Rentals paid	105
5. Interests & royalties	-
6. Sales tax (see also p.4.411)	177
7. Other indirect business taxes	18
8. (-) Subsidies	-
8. Corporate income before tax	573
TOTAL VALUE ADDED:	2,164

DESCRIPTION OF MAJOR PRODUCTS:

All products are manufactured in series. Products are packed on pallets (400 - 2,000 pieces). Company has to keep large inventories due to seasonal fluctuation of sales. Exports are insignificant because the rather low-priced products cannot be charged with too high transportation costs. Standard products can be delivered immediately, special products are manufactured to order. Designing is aimed at developing light weight bottles and wide mouthed glass containers which can meet increasing competition of substituting materials.

MARKET ASPECTS:

Consumers of products:

The company sells its products to the following industries: Food, beverage, dairy, condiment processing, fish canning, pharmaceutical, chemical, cosmetics.

Sales organization:

The company's central office employs 7 salesmen who engage in direct selling to the above mentioned industries.

Share in domestic market:

25% of the total market for container glass and 100% of the market for wide mouthed bottles

Competition in the market:

Increasing trend to substitute glass-made for plastic-made containers.

EXPORT:

Total annual export: US \$ 275,000.

Major products	To Western countries	To Eastern countries	To Developing countries
Petroleum lamps	-	-	100%
Lighting glasses	100%	-	-

Export areas:

Central African countries, UK.

Export price policy:

Company exports only 7% of its production. In order to maintain existing export markets frequently only recovery of variable production costs possible.

VII. ANNUAL CONSUMPTION

(1968)	Quantity consumed		% import	Average import duties	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					304
TOTAL:					
- Electricity	000 kWh	9,200	-	-	114
- Fuel oil	t	5,540	-	-	145
- Propane gas	t	1,180	-	-	45
2. Production materials (*)					551
TOTAL:					
- Quartz sand (SiO ₂)	t	13,900	100	-	147
- Soda (Na ₂ CO ₃)	"	4,000	-	-	221
- Lime stone (CaCO ₃)	"	3,100	-	-	23
- Glimmer's salt (Na ₂ SO ₄)	"	280	-	-	4
- Saltpeter (NaNO ₃)	"	160	-	-	18
- Feldspar	"	1,450	-	-	31
- Dolomite	"	650	-	-	4
- Glass granulate	"	3,900	-	-	97
- Dyeing, decolouring and refining materials	"	11	-	-	6

(*) Due to melting process applied, production materials lose about 20% of their weight.

3. Other materials & supplies	413
TOTAL:	213
- Packaging material (paper and cartons)	
- Parts, supplies & services (*)	196
- Other materials & supplies	4
4. Business services purchased	497
TOTAL:	128
- Transportation, storage & insurance	
- Communication, advertising & other business services	35
- Sales overhead costs	334
5. Work performed by subcontractors	-
TOTAL:	-
TOTAL VALUE OF CONSUMPTION:	1,765

(*) Including costs for repair of machinery and melting furnace amounting to US \$ 39,000.

V. ANNUAL PRODUCTION

(1968)	Yr. of first prod.	Quantity produced		Av. unit price ex factory (US \$)	Total output value (000 US\$)
		Unit	Quantity		
Products for group of products					
Portland cement	1933	000 t	650	17.4	11,326
Clinker	1933	000 t	100	13.8	1,381
Discounts granted to customers					(-) 1,925
TOTAL VALUE OF PRODUCTION:					10,782

VI. VALUE ADDED

(1968)	Total value (000 US \$)
1 Annual wages & salaries	900
- Operative workers	650
(200 persons)	
- Non-operative workers	250
(41 persons)	
2 Other payments for employees	124
3 Annual depreciation	1,101
- Machinery & equipment	1,133
- Buildings & other facilities	127
- Non-physical capital assets	-
4 Rentals paid	-
5 Interests & royalties	20
6 Sales tax	1,208
7 Other indirect business taxes	-
8 () Subsidies	-
9 Corporate income before tax	2,412
TOTAL VALUE ADDED: 6,132	

DESCRIPTION OF MAJOR PRODUCTS:

3 types of standard cement of superior quality than that set by national standards.

MARKET ASPECTS:

Consumers of products:

Construction industry, concrete products and ready-mixed concrete manufacturing establishments.

Sales organization:

Own sales department. Since 1967 member of a cartel which regulates sales by a quota system.

Share in the domestic market:

Nationally: 1.9.. Regionally: 15..

Competition in the market:

Competition with other regional cement manufacturing establishments.

EXPORT:

Total annual export No exports.

Major products	To Western countries	To Eastern countries	To Developing countries

VII. ANNUAL CONSUMPTION

(1968)	Quantity consumed		% import	Average import value (000 US\$)	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL:					2,227
- Electricity	000 kWh	63,243	-	-	254
- Heavy oil	t	64,409	-	-	1,273
2. Production materials					
TOTAL:					247
- Limestone	000 t	1,122 (*)	-	-	-
- Gypsum	000 t	200	100	-	190
- Slag	000 t	40	-	-	57

(*) Self-supplied.

	Total consumption value (000 US \$)
3. Other materials & supplies	
TOTAL:	1,158
- Packaging material (paper sacks)	254
- Parts, supplies & services	696
- Other materials & supplies	208
4. Business services purchased	
TOTAL:	1,041
- Transportation, storage & insurance	319
- Commission, advertising & other business services	122
5. Work performed by subcontractors	
TOTAL:	-

TOTAL VALUE OF CONSUMPTION: 4,673

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (I.I.):	Number	Original Purchase Value (000 US \$)	Replacement value (000 US \$)	Av. Age (yrs)	Remarks	Supplier country	Year of installation	Daily running time	Capacity output
Large hole drilling machines	3	34	43	9		Germany, F.R.	..	8 hrs	..
Jaw crushers	2	308	378	9		Germany, F.R.	..	16 hr	240 t/hr
Raw mills (200 t)	2	480	630	8		Germany, F.R.	..	16 hrs	200 t/hr
Kilns	3	2,238	2,683	7		Germany, F.R.	..	16 hrs	200 t/hr
Cement mills (80 t)	2	1,474	1,800	5		Germany, F.R.	..	16-24 hrs	80 t/hr
Excavators (2.5 m3 scoop)	4	272	305	5		Germany, F.R.	..	..	..
Cranes	2	169	195	6		Germany, F.R.	..	..	..
Transformer	1	30	42	9	SI	-	..	..	..
Central switchboard	1	442	553	3		Germany, F.R.	1956	..	..

CAPACITY POWER:
 Process equipment:
 - electric motors kW 14,000
 Generating equipment:
 installed capacity kVA 630

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization:		Automation:		Further details
		Mechan.	Autom.	Mechan.	Autom.	
Quarry		B	II			
Preparation of raw materials		A	I			
Kilns		A	I			
Cement milling department		B	II			
Packing department		B	II			

CAPACITY UTILIZATION:

Full capacity output: 12,500,000
 Current utilization: base on 2- and 3-shift operation.

Major products (in process)	Approximate %									
	up to 20	20-40	40-60	60-70	70-80	80-90	90-100			
Quarry (1 shift)	x									
Preparation of raw materials (2 shifts)	x									
Kilns (2 shifts)	x									
Cement milling department (2-3 shifts)	x									
Packing department (2 shifts)	x									

Establishment operates at full-capacity. Process equipment will have to be expanded soon.

IX. HISTORY & PLAN

1. Performance in the past:	Total output (000 US \$)	No. of persons employed	Total output (000 US \$)
Year: 1963	9,120	220	-
1964	10,080	232	-
1965	12,250	241	-
1966	12,970	245	-
1967	12,970	230	-
1968	12,710	241	-

2. Investments in the past:	Approximate amount (000 US \$)	Type of investment
From 19 55 to 1968 :	17,350	Machinery and buildings
to 1968 :	650	Machinery and buildings

3. Future Plan:	Approximate amount (000 US \$)	Type of investment
From 19 69 to 19 70 :	2,500	Expansion and rationalisation of machinery and auxiliary facilities.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C = confidential; figures of these size groups are included in total.

(1963)

Industry: Manufacture of cement (HS Code: 334)

1. Size groups by number of persons employed:						2. Size groups by annual sales of sales (000 US \$):					
No. of estab.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. sales per pers. (US \$)	Av. value added/sales ratio (%)		No. of estab.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. sales per pers. (US \$)	Av. value added/sales ratio (%)	
up to 19	-	-	-	-		up to 1,250	4	236	2,398	15,971	40
20 - 99	1	C	C	C		1,250 - 2,500	17	1,766	2,426	17,388	51
100 - 199	21	1,994	2,435	19,445	53	2,500 - 6,250	17	3,517	2,439	19,646	54
200 - 499	16	5,767	2,429	19,333	53	6,250 - 12,500	9	3,675	2,459	20,568	58
500 - 999	3	2,516	2,466	18,164	60	12,500 - 25,000	3	2,516	2,466	18,164	60
over 1,000	3	C	C	C	C	over 25,000	3	10,443	2,460	16,945	55
TOTAL:	53	22,153	2,454	18,138	55	TOTAL:	53	22,153	2,454	18,138	55

III. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|---|---------------------------------------|-------------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Imports and exports transactions |
| 2. Financial assistance | 6. Industrial training | 9. Acquisition of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of services	Country or region	No. of projects	Field of industry	Description of projects
2				Company seems to be interested in a joint venture.
5				Provision of experts and other skilled personnel.

IV. SUPPLEMENTS & NOTES

Inventories policy:

On the average the value of the stock of finished products amounts to 0.3% of the total value of production. Cement is sold immediately after completion of the production process.

Depreciation policy:

The enterprise applies both the straight line method and the declining balance method as well.

Bottlenecks in the past:

Lack of production capacity could partly be solved.

Current problems:

Company complains about decreasing profits caused by an unfavourable cost-price relationship. Due to keen competition prices cannot be increased. Therefore, further investments required to rationalise the production process in order to save, e.g. personnel costs.

Training courses:

Company maintains a considerable programme to train its staff: electronic data processing, cost accounting, management development.

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (1):

Equipment	Number	Original Purchase Value (1968 US \$)	Replacement value (1968 US \$)	Av. Age (yrs)	Remarks	Supplier country	Year of installation	Daily running time	Capacity output
Large hole drilling machines	3	34	43	9		Germany, F.R.	..	8 hrs	..
Jaw crushers	2	308	378	9		Germany, F.R.	..	16 hr	240 t/hr
Raw mills (200 t)	2	480	630	8		Germany, F.R.	..	16 hrs	200 t/hr
Kilns	3	2,238	2,683	7		Germany, F.R.	..	16 hrs	200 t/hr
Cement mills (80 t)	2	1,474	1,800	5		Germany, F.R.	..	16-24 hrs	80 t/hr
Excavators (2.5 cu scoop)	4	272	305	5		Germany, F.R.	..	..	..
Cranes	2	169	195	6		Germany, F.R.	..	..	..
Transformer	1	30	42	9	SH	-	..	..	..
Central switchboard	1	442	553	3		Germany, F.R.	1956	..	..

CAPACITY POWER:

Process equipment:
- electric motor kW 14,000

Generating equipment:
- installed capacity kVA 630

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Situation	Action	Particular details
Quarry		B	II	
Preparation of raw materials		A	I	
Kilns		A	I	
Cement milling department		B	II	
Packaging department		B	II	

CAPACITY UTILIZATION:

Full-capacity output: US \$ 12,500,000.

Current utilization: based on 2- and 3-shift operation.

Major products (in process)	Approximate %									
	up to 20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	100
Quarry (1 shift)										
Preparation of raw materials (2 shifts)										
Kilns (2 shifts)										
Cement milling department (2-3 shifts)										
Packaging department (2 shifts)										

Establishment operates at full-capacity. Process equipment will have to be expanded soon.

III. HISTORY & PLAN

Year	Total output (1968 US \$)	No. of persons employed	Total capacity (1968 US \$)
1963	7,120	220	-
1964	10,880	238	-
1965	12,250	241	-
1966	12,970	245	-
1967	12,970	230	-
1968	12,710	241	-

2. Investments in the past:

Period	Approximate amount (1968 US \$)	Type of investment
From 19 55 to 1968 :	17,350	Machinery and buildings
In 1968 :	650	Machinery and buildings

3. Future Plan:

Period	Amount (1968 US \$)	Description
From 19 69 to 19 70:	2,500	Expansion and rationalization of machinery and auxiliary facilities.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C = confidential; figures of these size groups are included in total.

(1968)

Industry: Manufacture of cement

(HSIC Code: 334 1)

1. Size groups by number of persons employed	No. of estab.	No. of empl.	Av. W. & B. per pers. (1968 US \$)	Av. sales per pers. (1968 US \$)	Av. value added/sales ratio (%)	2. Size groups by amount sale of sales (1968 US \$)	No. of estab.	No. of empl.	Av. W. & B. per pers. (1968 US \$)	Av. sales per pers. (1968 US \$)	Av. value added/sales ratio (%)
up to 19	-	-	-	-	-	up to 1,250	4	238	2,358	15,971	40
20 - 99	10	C	C	C	C	1,250 - 2,500	17	1,766	2,426	17,382	51
100 - 199	21	2,694	2,435	19,445	53	2,500 - 6,250	17	3,517	2,439	19,646	54
200 - 499	16	5,767	2,429	19,333	53	6,250 - 12,500	9	3,675	2,459	20,568	52
500 - 999	3	2,516	2,466	18,164	60	12,500 - 25,000	3	2,516	2,466	18,164	60
over 1,000	3	C	C	C	C	over 25,000	3	10,443	2,460	16,945	55
TOTAL:	53	22,153	2,454	18,138	55	TOTAL:	53	22,153	2,454	18,138	55

XII. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|---|---------------------------------------|---------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export assistance |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial contracts | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of services	Country or region	No. of projects	Field of industry	Description of projects
2				Company seems to be interested in a joint venture.
5				Provision of experts and other skilled personnel.

XIII. SUPPLEMENTS & NOTES

Inventory policy:

On the average the value of the stock of finished products amounts to 0.3% of the total value of production. Cement is sold immediately after completion of the production process.

Depreciation policy:

The enterprise applies both the straight line method and the declining balance method as well.

Bottlenecks in the plant:

Lack of production capacity could partly be solved.

Current problems:

Company complains about decreasing profits caused by an unfavourable cost-price relationship. Due to keen competition prices cannot be increased. Therefore, further investments required to rationalize the production process in order to save, e.g. personnel costs.

Training courses:

Company maintains a considerable programme to train its staff: electronic data processing, cost accounting, management development.

Major Products:

Cement and mortar binding agents.

Total annual output amounted to about 220,000 t based on 2- and 3-shift operation. Full-capacity output approximates US \$ 4 million.

Reporting Unit:

A one-establishment enterprise; privately owned; founded in 1936; 125 employees.

Company is of regional significance only. Member of a cartel which regulates sales by a quota system. No exports.

I. FIXED CAPITAL ASSETS

(End of 1968)	Original purchase value (1000 US \$)	Replacement value (1000 US \$)	Average age (Yrs)
1 Primary process equipment (including installation cost)			
TOTAL	3,955	5,403	
- Process equipment *	3,875	5,303	12
- Hand tools & apparatuses	80	100	5
2 Buildings			
TOTAL	200	267	
- Primary industrial buildings (total floor space: 5,200 m ²)	96	119	8
- Auxiliary buildings	34	41	6
- Warehouses	-	-	-
- Office administration buildings	70	107	12
- Housing	-	-	-
3 Auxiliary facilities (excl. buildings)			
TOTAL	186	234	
- Internal power equipment	-	-	-
- Laboratory facilities	28	35	4
- Means of transportation	137	171	4
- Office equipment	21	28	7
TOTAL PHYSICAL FIXED ASSETS (excluding land)	4,341	5,904	
4 Other fixed capital assets			
TOTAL	323	534	
- Land (total acreage: 620 m ²)	39	116	-
- Land improvements (t. acc. 3,180 m ²)	237	350	-
- Others	47	68	-

*NB Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII).

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1968 monthly average)	up to 175 US\$	175 - 250 US\$	250 - 375 US\$	375 - 500 US\$	500 - 1,000 US\$	over 1,000 US\$
1. Local non-operatives						
- Managerial staff	-	-	-	-	1	1
- Technical staff	-	-	5	5	2	-
- Commercial staff	-	4	4	4	1	-
2. Local operatives						
- Foremen	-	-	4	1	-	-
- Skilled operatives	-	8	39	-	-	-
- Semi-skilled operatives	-	7	13	-	-	-
- Unskilled operatives	-	11	5	-	-	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	3	-	-	-
- Unskilled operatives	-	2	1	-	-	-
- Semi-skilled operatives	-	1	3	-	-	-

EXTERNAL CONDITIONS:

Transport:	external long distance	fair
	internal long distance	poor
	local and city	insignificant
Utilities:	electricity	poor
	water	excellent
	gas	insignificant
Community:	residence	fair
	health and recreation	fair
	education	poor
Own Welfare Facilities:	Canteen, rented holiday facilities.	

III. INVENTORIES

(End of 1968)	Actual value (1000 US \$)	Number of months
Inventories		
TOTAL:	97	
- Production materials	2	0.1
- Other input materials	25	0.3
- Work-in-process	50	0.5
- Finished products	20	0.2

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift hours/day (a)	9	9	9	hours
Actual hours/year	2,580	2,360	2,345	hours
Actual days/year	287	287	287	days

(a) Actual; normal shift hours: 8 hrs./day

IV. MANNING TABLE

(Number of persons)

Shift categories: A Supervisory staff and foremen (for all shifts)
 B Skilled operatives
 C Semi-skilled operatives (machine operators)
 D Unskilled operatives

(1968 average)	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	A-B	B-C
ALL SHOPS & UNITS:	125	27	75	-	-	11	12
1. Primary operative shops	56	4	3	18	8	11	12
- Quarry	11	1	2	6	2	-	-
- Preparation of raw materials	14	2	-	5	3	2	2
- Kilns	13	1	-	2	-	5	5
- Cement milling department	8	-	1	2	1	2	2
- Packing and shipping dept.	10	-	-	3	2	2	3
2. Auxiliary operative units	48	2	-	46	-	-	-
- Repair & maintenance	18	1	-	17	-	-	-
- Mechanical shop	-	-	-	-	-	-	-
- Tooling shop	-	-	-	-	-	-	-
- Utilities control	3	1	-	2	-	-	-
- Product & material storage	6	-	-	6	-	-	-
- Off-site transport	5	-	-	5	-	-	-
- Guards, cleaners, etc.	7	-	-	7	-	-	-
- Others	9	-	-	9	-	-	-
3. Auxiliary non-operative units	21	21	-	-	-	-	-
- Production management	3	3	-	-	-	-	-
- Research & development	1	1	-	-	-	-	-
- Sales unit	6	6	-	-	-	-	-
- Accounting	4	4	-	-	-	-	-
- General administration	7	7	-	-	-	-	-

V. ANNUAL PRODUCTION

(1968)	Yr. of first prod.	Quantity produced		Avg. unit price as factory (US \$)	Total output value (000 US\$)
		Unit	Quantity		
Portland cement	1935	t	212,000(*)	15.6	3,156
Mortar binding agent	1966	t	16,800	12.3	208

(*) Including internal consumption of 60 t.

TOTAL VALUE OF PRODUCTION: 3,364

VI VALUE ADDED

(1968)	Total value (000 US \$)
1. Annual wages & salaries	111
- Operative workers (98 persons)	
- Non-operative workers (27 persons)	
2. Other payments for employees	14
3. Annual depreciation	330
- Machinery & equipment	37
- Buildings & other facilities	11
- Non-physical capital assets	1
4. Rentals paid	1
5. Interests & royalties	36
6. Sales tax	374
7. Other indirect business taxes (*)	1
8. () Subsidies	-
9. Corporate income before tax	411

(*) Motor vehicle tax. TOTAL VALUE ADDED: 1,086

DESCRIPTION OF MAJOR PRODUCTS:

3 different types of standard Portland cement.
Iron Portland cement and blast-furnace cement.
Mortar binding agents.
All products are of superior quality than that determined by national standards.

MARKET ASPECTS:

Consumers of products:

Construction industry, ready-mixed concrete and concrete product manufacturing establishments.

Sales organization:

Own sales department. Since 1967 also member of a cartel which regulates sales by a quota system.

Share in the domestic market:

Competition with other regional cement manufacturing establishments.

EXPORT: No exports.

Total annual export

Major products	To Western countries	To Eastern countries	To Developing countries

VII. ANNUAL CONSUMPTION

(1968)	Quantity consumed		% import	Average import duties	Total consumption value (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity				
1. Energy and water						
TOTAL					792	
- Electricity	000 kWh	23,228	-	-	149	
- Coke breeze	t	6,647	-	-	104	
- Heavy oil	t	18,400	-	-	320	
- Light oil	t	594	-	-	19	
2. Production materials						
TOTAL					250	
- Limestone (*)	t	..	-	-	-	
- Roasted pyrites	t	1,292	-	-	12	
- Gypsum	t	12,443	-	-	55	
- Slag	t	8,303	-	-	62	
- Clinker	t	11,112	-	-	116	
- Others	..	..	-	-	5	
3. Other materials & supplies						
TOTAL					471	
- Packaging material (paper sacks)					111	
- Parts, supplies & services					341	
- Other materials & supplies					18	
4. Business services purchased						
TOTAL					166	
- Transportation, storage & insurance					79	
- Communication, advertising & other business services					77	
5. Work performed by subcontractors						
TOTAL					-	
TOTAL VALUE OF CONSUMPTION:						1,678

(*) Internal supply.

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (I.I.):

Number	Original Purchase Value (USD US \$)	Replacement value (USD US \$)	Av. Age (yrs)	Remarks	Supplier country	Daily running time	Output capacity	
								SH Purchased second-hand	OB Obsolete	R Rebuilt	SK Self-constructed
Jaw crushers	2	205	275	8	SH	Germany, F.R.	2 shifts	200 t/hr
Raw mills	2	150	200	30	OB	Germany, F.R.	2-3 shifts	240 t/hr
Shaft kilns	3	100	2,500	30	OB	Germany, F.R.	2 shifts	180 t/hr
Cement mills	4	620	1,025	18	SH	Germany, F.R.	2 shifts	120 t/hr
Rotary kiln	1	700	840	8	SH		{ 2 shifts 2-3 shifts	200 t/hr
Crushing plant	1	540	600	2	-			
Mixing plant	1	135	163	2	-			
Filters	16	400	525	4	SH			
Silos and hoppers	12	258	380	10	SH			
Cranes	2	46	77	15	SH			
Excavators	5	64	96	10	SH			
Electrical motors	131	67	76	8	SH			
Others	..	591	795	8	SH			

CAPACITY POWER:

Process equipment:

electr. motors	kW	7,092
-others	"	1,672

Generating equipment:

installed capacity	kVA	-
--------------------	-----	---

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization	Automation	Further details
Quarry		C	II	
Preparation of raw materials		R	II	
Kilns		A	I	
Cement milling department		A	I	
Packing and shipment		B	II	Capacity: 1,600 paper sacks of 50 kg per hour.

CAPACITY UTILIZATION:

Full capacity output: 100% 3,400 t/hr.

Current utilization: based on 2- and 3-shift operation.

Major products (or processes)	Approximate %					
	to 20	40	60	80	90	100
Quarry (1 shift)			X			
Preparation of raw materials (2-3 shifts)				X		
Kilns (2 shifts)					X	
Cement milling department (2-3 shifts)						X
Packing and shipment						X

The establishment could not fully utilize its capacity due to lack of skilled labour. In order to reach full-capacity output based on 3-shift operation the following labour requirements have to be met:

1st shift: 3 non-operatives, 12 operatives;

2nd and 3rd shifts: 4 operatives each.

IX. HISTORY & PLAN

	Total output (USD US \$)	Nb. of persons employed	Total square (USD US \$)
1. Performance in the past:			
Year: 1963	2,370	102	-
1964	3,010	128	-
1965	3,340	141	-
1966	3,740	139	-
1967	2,990	128	-
1968	3,360	125	-
2. Investments in the past:			
From 1961 to 1967:	3,710		Rotary kiln, cement-mill, shaft kiln
in 1967:	90		Machinery and buildings.
3. Future Plan:			
From 1969 to 1972:	2,000		Rationalisation and expansion of machinery and equipment, primary and auxiliary production facilities, expansion of welfare facilities.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C = confidential; figures of these size groups are included in total.

(1962)

Industry: Manufacture of cement (NHC-Code: 334)

1. Size groups by number of persons employed	No. of estab.	No. of empl.	Av. value added per emp. (USD US \$)	Av. sales per emp. (USD US \$)	Av. value added/sales ratio (%)	2. Size groups by annual value of sales (USD US \$):		Av. value added per emp. (USD US \$)	Av. sales per emp. (USD US \$)	Av. value added/sales ratio (%)
						No. of estab.	No. of empl.			
up to 19	-	-	-	-	-	up to 250	-	-	-	-
20 - 99	10	C	C	C	C	250 - 500	-	-	-	-
100 - 199	21	2,094	2,435	19,445	53	500 - 1,250	4	236	2,395	40
200 - 499	16	5,767	2,429	19,333	53	1,250 - 2,500	17	1,766	2,486	51
500 - 999	3	2,516	2,466	18,164	60	2,500 - 6,250	17	3,517	2,439	54
over 1,000	3	C	C	C	C	over 6,250	15	16,634	2,460	55
TOTAL	53	22,153	2,454	18,138	55	TOTAL	53	22,153	2,454	18,138

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service

- | | | |
|---|---------------------------------------|----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export transaction |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
5				No possibility to provide experts and skilled workers since the company's own labour resources are too scarce.
6, 9				The establishment is prepared to employ as well as to train foreign workers.

XII. SUPPLEMENTS & NOTES

Depreciation policy:

The establishment applies both the straight-line and accelerated methods of depreciation.

Current problems:

Lack of labour force especially in the preparation, packing and shipping departments.

Training courses:

Occasionally technical and commercial staff members attend management development courses.

Inventory policy:

On the average the value of the stock of finished products amounts to 0.6% of the total value of production. Current is sold immediately after completion of the production process.

Major Products: Sintered magnesite (refractory material and mortars) and magnesite bricks. In 1967 annual output amounted to about 245,000 t of magnesite products based on 3-shift operation.

Reporting Unit: A decentralized five-establishment enterprise, 4 branches being engaged in the same line of activities (study summarizes all 5 establishments); privately owned; about 3,000 employees; largest employer in this region; partly licensed production; own research activities (20 employees); 90% exports.

I. FIXED CAPITAL ASSETS

(End of 1967)

	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average age (Yrs.)
1 Primary production equipment (including installation cost)			
TOTAL	11,857	11,411	
- Process equipment *	7,677	7,378	
- Hand tools & apparatus	4,180	4,033	
2 Buildings			
TOTAL	1,100	1,100	
- Primary industrial buildings (total floor space: ...)	1,050	1,050	
- Auxiliary buildings	50	50	
- Warehouses	0	0	
- Office administration buildings	0	0	
- Housing	0	0	
3 Auxiliary facilities (excl. buildings)			
TOTAL	1,100	1,100	
- Internal power equipment	50	50	
- Laboratory facilities	0	0	
- Means of transportation	0	0	
- Office equipment	0	0	
TOTAL PHYSICAL FIXED ASSETS (excluding land)	14,057	13,511	
4 Other fixed capital assets			
TOTAL	14,057	13,511	
- Land (total acreage: ...)	0	0	
- Land improvements	0	0	
- Others	0	0	

*NR Details of process equipment and assets of primary operators shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1967 monthly average)

	up to 100 US\$	100-140 US\$	140-200 US\$	200-250 US\$	250-300 US\$	over 300 US\$
1. Local non-operatives						
- Managers	-	-	-	-	-	17
- Engineers	-	-	-	30	51	-
- Technicians	-	-	-	1	22	2
- Accountants	-	-	-	31	0	-
- Sales officers	-	-	13	0	3	-
- Clerks and typists	-	-	-	11	75	-
- Supervisors and foremen	-	-	-	-	-	-
2. Local operatives						
- Supervisors (*)	-	-	-	699	-	-
- Foremen (*)	-	-	-	1,084	-	-
- Skilled operatives	-	-	-	-	-	-
- Machine operators	-	-	-	-	-	-
- Craftsmen	-	-	-	-	-	-
- Truck drivers	-	-	-	-	-	-
- Unskilled operatives	-	64	6	107	-	-
- Other full-time operatives	-	-	-	333	-	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

(*) Company considers them as local non-operatives.

EXTERNAL CONDITIONS:

Transport	external long distance	fair
	internal long distance	"
	local and city	"
Utilities	electricity	excellent
	water	"
	gas	fair
Community	residence	excellent
	health and recreation	fair
	education	poor
Own Welfare Facilities:		-

III. INVENTORIES

(End of 1967)

	Actual value (000 US \$)	Number of months
Inventories		
TOTAL	1,162	
- Production materials	1,162	4
- Other input materials	0	4
- Work-in-process	1,163	1
- Finished products	0	1.3

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift hours/day	8	-	-	hours
Actual hours/year	1,933	-	-	hours
Actual days/year	241	-	-	days

IV. MANNING TABLE

(number of persons) (*)

Skill categories: A Supervisory staff and foremen (for all shifts)
B Skilled operatives
C Semi-skilled operatives (machine operators)
D Unskilled operatives

(1967 average)

	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	B-D	B-D
ALL SHOPS & UNITS:	2,868	481		2,387			
1. Primary operative shops	1,532	116	224	1,148	44	-	-
Mining	313	26	135	136	16	-	-
Flotation	47	6	3	38	-	-	-
Shaft works	161	13	9	139	-	-	-
Preparation of ores	36	4	1	31	-	-	-
Mortars and other refractory material manufacturing	20	1	15	4	-	-	-
Brick manufacturing	145	35	60	633	17	-	-
Loading	206	31	1	163	11	-	-
Accumulator shop	4	-	-	4	-	-	-
2. Auxiliary operative units	905	74		831			
- Repair & maintenance	460	21		439			
- Mechanical shop	-	-		-			
- Tooling shop	-	-		-			
- Utilities control	142	21		121			
- Product & material storage	49	14		35			
- Off-site transport	30	1		29			
- Guards, cleaners, etc.	127	2		125			
- Others (forestry and wood processing dept.)	37	15		82			
3. Auxiliary non-operative units	431	291		140			
- Production management	16	16		-			
- Research & development	83	45		38			
- Sales unit	71	71		-			
- Accounting	26	26		-			
- General administration	215	133		102			

(*) Break-down into shifts not possible due to different working hours in individual establishments.

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT N.1.:

	Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Avg. Age (yrs)	Remarks	Supplier country	Year of installation	Daily running time	Capacity output/day
Melting furnaces	1	329	387	3	-	Germany, F.R.	1965	24 hrs	75 t
Mixing and weighing plant	1	97	116	5	-	"	1964	24 "	150 t
Automatic glass producing machines	5	581	735	7	-	Sweden	1960-1964	24 "	..
Cooling furnaces	6	251	279	6	-	Germany, F.R. Belgium	1960-1965	24 "	max. 30 t
Feeding machines	5	97	147	7	-	Sweden	1960-1964	24 "	..
Conveyor belts	4	39	39	3	-	Switzerl.	1965	24 "	..
Shrink oven	1	0	8	-	-	Germany, F.P.	1968	24 "	..
Screen printing machines	3	12	14	4	-	Italy	1964	8-16 "	30,000 bottles
Glory hole	1	46	46	3	-	Germany, F.R.	1966	24 "	50,000 bottles
Grinding machine	1	25	25	-	-	France	1968	16 "	..
Lathes	4	..	39	10	-				
Killing machines	2	..	19	10	-				
Compressors	7	..	74	10	-				
Stacker trucks	5	39	50	3	-				

Remarks:
 01: Purchased second-hand
 02: Obsolete
 R: Rebuilt
 R.C: Self-constructed

CAPACITY POWER:
 Process equipment:
 - electric motors kW 1,500
 Generating equipment:
 installed capacity kVA -

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization: A. most advanced B. considerably high standard	Automation: C. modern standard D. appreciably short of today's standard E. almost outdated	Further details:	Capacity/day:
Glass melting department	Melting and refining of glass at a temperature of 1,500° C	B	II		75 t
Glass processing department	Pressing, blowing and cooling of hollow glass ware	C	I		75 t
Grinding and screen printing department		C	II		
Grinding and packing dept.		C	III		75 t

CAPACITY UTILIZATION:

Full-capacity output: 25,000 t of glass products.

Current utilization: Based on 3-shift operation.

Major products (in process)	Approximate %									
	up to 20	20-40	40-50	50-60	60-70	70-80	80-90	90-100	100	
Glass melting department										X
Glass processing department										X
Grinding and screen printing department					X					

Glass grinding and screen printing are only minor activities of the company. Since not all products have to be treated that way, only 60% of the existing capacity could be utilized. Seasonal fluctuations of sales account for varying utilization of the melting furnaces as well as the automatic glass producing machines. In order to reach full-capacity output an additional operative has to be employed.

IX. HISTORY & PLAN

1. Performance in the past:

Year:	Total output (1000 US \$)	No. of persons employed	Total output (1000 US \$)
1963	2,740	405	150
1964	3,010	466	170
1965	2,910	419	180
1966	3,280	388	210
1967	3,530	359	240
1968	3,930	358	270

2. Investments in the past:

From	To	Approximate amount (1000 US \$)	Type of investment
From 19 55 to 19 59:		580	Replacements
" 1960 " 1963:		1,350	Melting furnace, automatic glass producing machines, cooling furnaces, compressors
" 1964 " 1965:		1,470	Automatic glass producing machines, cooling furnaces, glory hole, compressor
" 1966 " 1967:		620	Transportation and control equipment, warehouse

3. Future Plan:

From	To	Approximate amount (1000 US \$)	Type of investment
From 19 69 to 19 71:		1,160	Increase of melting capacity

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C = confidential; figures of these size groups are included in the underlined figures.

(1964)

Industry Glass and glass products manufacturing (ISIC Code: 332)

1. Size groups by number of persons employed:	No. of estab.	No. of empl.	Av. W & S. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)	2. Size groups by annual value of production (1000 US \$):	No. of estab.	No. of empl.	Av. W & S. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)
up to 19	10	25	1,881	6,704	68	up to 20	8	6	1,050	3,495	60
20 - 99	5	181	1,398	8,411	43	20 - 40	1	C	C	C	C
100 - 499	10	6,187	1,920	5,370	68	40 - 200	3	135	1,437	8,005	52
500 - 999	3	C	C	C	C	200 - 400	2	C	C	C	C
over 1,000	1	C	C	C	C	400 - 2,000	8	1,779	1,829	4,605	65
						over 2,000	7	4,473	1,950	5,725	68
TOTAL:	29	6,393	1,905	5,461	67	TOTAL:	29	6,393	1,905	5,461	67

V. ANNUAL PRODUCTION

(1967)	Yr. of first prod.	Quantity produced		Av. unit price ex factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Products for group of products					
Sintered magnesite, refractory material, and mortars	..	t	120,913	56.3	6,812
Magnesite bricks	..	t	123,814	178.1	22,057
Others					717
TOTAL VALUE OF PRODUCTION:					29,586

VI. VALUE ADDED

(1967)	Total value (000 US \$)
1. Annual wages & salaries	7,612
- Operative workers (2,438 persons)	5,200
- Non-operative workers (484 persons)	2,412
2. Other payments for employees	2,606
3. Annual depreciation	2,610
- Machinery & equipment	1,243
- Buildings & other facilities	1,367
- Non-physical capital assets	10
4. Rentals paid	32
5. Interests & royalties	294
6. Sales tax	116
7. Other indirect business taxes	218
8. (-) Subsidies	-
9. Corporate income before tax	848
TOTAL VALUE ADDED:	
	14,392

DESCRIPTION OF MAJOR PRODUCTS:

Sintered magnesite, refractory material: Transportation in bulk and in sacks of 50 kg.
Time of delivery: 2 - 3 months.

Mortars and magnesite bricks: Packed on pallets and in cases of 250 - 1,000 kg.
Time of delivery: 2 - 3 months.

MARKET ASPECTS:

Staple products for re-sales:

Magnesite bricks, magnesite chrome bricks, special compounds, containing magnesite, magnesite sinter.

Consumers of products:

Steel, metalworking, cement and glass industries.

Sales organisation:

Direct selling in the domestic market; general agent in a neighbouring state; representatives in potential buyer countries.

Market and competition:

- (a) Extent of the market: Enterprise is capable of supplying consumers all over the world. Company considers itself unfavourably located with regard to proximity of markets.
- (b) Share in the domestic market: second-largest company in this line.
- (c) Share in the foreign market: no indication can be given.
- (d) Competition with imported products: no serious competition, because of top quality of own products.

EXPORT:

Total annual export: US \$ 29 million

Major products	To Western countries	To Eastern countries	To Developing countries
----------------	----------------------	----------------------	-------------------------

No data available.

Governmental policies:

The government subsidises exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under VI.6. has been adjusted accordingly.

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import duties	Total consumption value (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity				
1. Energy and water						
TOTAL:					1,999	
- Electricity	000 kWh	31,408			479	
- Fuel oil	t	16,015			446	
- Diesel oil	t	566			58	
- Gas	m3	43,493			1,016	
2. Production materials						
TOTAL:					4,099	
- Crude magnesite (out of own mines)	t	514,617	-	-	-	
- Chrome ore	t	19,927	100	-	1,112	
- Sheet metal	t	4,118	-	-	725	
- Sintered magnesite	t	14,723	100	-	1,133	
- Special magnesite	t	22,963	82	-	641	
- Others	..	..	53	-	488	
3. Other materials & supplies						
TOTAL:					2,093	
- Packaging material					471	
- Parts, supplies & services					674	
- Other materials & supplies					938	
4. Business services purchased						
TOTAL:					7,008	
- Transportation, storage & insurance					3,424	
- Communication, advertising & other business services					3,584	
5. Work performed by subcontractors						
TOTAL:					-	
TOTAL VALUE OF CONSUMPTION:					15,189	

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (1.1):

Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Av. Age (yrs)	Remarks:		Year of installation	Daily running time	Capacity output per month
				III: Purchased second-hand	IV: Other			
Magnetite furnace (pit furnace and 2 rotary kilns)	18	3,785	5,027	..	partly SC	FR, Germ., 1950-65	24 hrs	1,200 t 3,600 "
Flotation plant	1	1,413	1,376	5		FR, Germ., 1962	16 "	5,000 "
Briquetting plant	1	863	1,146	..		" 1962-67	16 "	5,000 "
Presses	25	1,272	1,689	..		Austria, FR, Germ., 1930-68	24 "	500 "
Tunnel kilns	3	1,580	2,098	..	SC	USA 1956, 1951, 1967	24 "	5,300 "
Crude magnetite crushing equipment	2	316	421	5		Austria, FR, Germ., 1962	12 "	27,000 "
Cable car	1	337	48	..				10,000 "

CAPACITY POWER:
 Process equipment:
 electric motors kW 24,731
 - other prime movers for generating equ. 3,074
 Generating equipment:
 installed capacity kVA 378

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization:		Further details:
		Station.	Autom.	
Mining		A	III	
Flotation		B	III	
Shaft works		C	III	
Preparation of ores		A	III	
Mortars and refractory material manufacturing		C	III	
Brick manufacturing		C	III	
Loading		C	III	
Accumulator		D	III	

CAPACITY UTILIZATION:

Full capacity output: approx. 300,000 t

Current utilization: based on 4-shift operation

Major products (in process)	Approximate %						
	up to 30	40	50	60	70	80	100
80 - 90% of the existing capacity is utilized.							

No mention was made as to whether full-capacity output would require any additional employees or not.

IX. HISTORY & PLAN

1. Performance in the past:	Total output (1000 US \$)	No. of persons employed	Total exports (1000 US \$)
Year: 1963	22,910	3,124	..
1964	30,460	3,148	..
1965	35,220	3,127	..
1966	33,090	3,015	..
1967	29,530	2,869	..
1968	-	-	-

2. Investments in the past:	Approximate amount (1000 US \$)	Type of investment
From 19 66 to 19 67:	17,400	Flotation plant, mining equipment, tunnel kiln, brickmaking presses, storage facilities for production material, crushing plants, building and instruments for research activities.

3. Future Plan:	Approximate amount (1000 US \$)	Type of investment
From 19 68 to 19 73:	10,500	Rationalisation of process equipment and processing methods. Reduction of operatives employed by 5 - 10%.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C - confidential: figures of this size group are included in the underlined figures.

(1967) Manufacture of non-metallic mineral products
 Industry not elsewhere classified (ISIC Code: 339)

1. Size groups by number of persons employed:	No. of estab.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)	2. Size groups by annual value of production (1000 US \$):		Av. W. & S. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)		
						No. of estab.	No. of empl.					
up to 19	1,039	4,017	1,666	5,300	59	up to 20	20	571	1,219	6,729	58	
20 - 99	149	5,943	1,761	7,000	61	20 - 40	40	198	783	1,383	7,007	60
100 - 499	24	4,665	1,979	6,881	63	40 - 200	200	310	3,922	1,765	7,135	63
500 - 999	2	0	0	0	0	200 - 400	400	74	2,626	1,771	7,621	60
over 1,000	3	7,220	2,506	11,442	57	400 - 2,000	2,000	51	5,241	2,082	8,041	60
						over 2,000	2,000	9	9,098	2,408	10,902	57
TOTAL:	1,217	22,390	2,073	8,923	59	TOTAL:	1,217	22,350	2,073	8,923	59	

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|--|---------------------------------------|----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 7. Import and export transaction |
| 2. Financial assistance | 6. Industrial training | 8. Admission of foreign labour |
| 3. Industrial services | 9. Technical consultancy | |
| 4. Equipment supply installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of services	Country or region	No. of projects	Field of industry	Description of projects
No information available.				

XII. SUPPLEMENTS & NOTES

The company consists of one head-office and 5 establishments, 3 of which engage in mining and processing of domestic and imported manganese ore (establishment no.1-3). One establishment (no. 4) produces packing material (wooden boxes, pallets and crates), another one (no. 5) is solely responsible for company-conducted research activities. The study summarizes all 5 establishments. Additional data about the individual establishments are available only to a limited extent:

1. Fixed capital assets (in 000 US \$)

	No.1	No.2	Establishment			Central office	Total
			No.3	No.4	No.5		
1. Land	134	100	94	1	29	60	414
2. Buildings	2,120	4,251	1,641	110	333	61	8,454
3. Primary process equipment	3,242	7,433	2,660	104	386	31	13,856
4. Auxiliary facilities and other fixed capital assets	1,433	2,710	1,632	37	505	6,308	12,790
TOTAL	6,929	14,494	6,027	252	1,253	6,403	30,493

2. Working capital (in 000 US \$)

A. Inventories	No.1	No.2	Establishment			Central office	Total
			No.3	No.4	No.5		
1. Production materials	388	726	-	48	-	-	1,162
2. Other materials and supplies	234	237	112	11	-	-	594
3. Work-in-process	377	517	169	142	-	-	1,098
4. Finished products	272	302	69	10	-	-	653
TOTAL	1,271	1,782	348	271	-	-	3,672
B. Liquid assets							
1. Cash-on-hand	-	6	3	1	1	71	82
2. Checks and bills	-	-	-	-	-	130	130
3. Marketable securities and bonds	-	-	-	-	-	610	610
4. Accounts receivable	-	-	-	-	-	6,376	6,376
5. Advance payments made by the company	-	-	-	-	-	320	320
TOTAL	8	6	3	1	1	11,167	11,199

3. Value added (in 000 US \$)

	No.1	No.2	Establishment			Central office	Total
			No.3	No.4	No.5		
1. Annual wages and salaries (operatives)	2,034	2,319	1,054	118	65	29	5,519
" " " " (non-)	403	397	223	10	207	732	1,992
2. Other payments for employees	830	796	374	39	65	501	2,605
3. Annual depreciation	484	1,372	468	18	114	155	2,611
4. Rentals paid	4	4	1	-	5	78	92
5. Interests and royalties	-	-	-	-	37	262	299
6. Sales tax	-	-	-	-	-	116	116
7. Other indirect business taxes	75	81	34	3	5	14	214
8. Corporate income before tax	-	-	-	-	-	848	848
TOTAL	3,830	4,971	2,154	208	498	2,735	14,396

Depreciation policy:

Both the straight line method and the accelerated method are applied.

Inventories policy:

About 30% of primary production material is imported from overseas. Due to this fact large stocks of raw materials have to be kept.

Major Products: Concrete products.
Capable of producing annually 44,000 m³ of concrete products based on 1-shift operation.
Full-capacity output amounts to US \$ 920,000.

Reporting Unit: A two-establishment enterprise, privately owned. Founded in 1920; 107 employees; no exports.
One establishment manufactures concrete products, the other one is a construction company.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average (Yrs.)
1. Primary process equipment (including installation cost)			
TOTAL	324	384	
- Process equipment *	295	349	3
- Hand tools & apparatus	29	35	..
2. Buildings			
TOTAL	149	176	
- Primary industrial buildings (total floor space: 3,600 m ²)	145	165	..
- Auxiliary buildings	-	-	..
- Warehouses	3	4	..
- Office administration buildings	-	-	..
- Housing	-	-	..
3. Auxiliary facilities (excl buildings)			
TOTAL	82	75	
- Internal power equipment	-	-	-
- Laboratory facilities	-	-	-
- Means of transportation	70	81	3
- Office equipment	12	14	4
TOTAL PHYSICAL FIXED ASSETS (excluding land):	554	655	
4. Other fixed capital assets			
TOTAL	71	133	
- Land (total acreage: 43,000 m ²)	69	131	-
- Land improvements	2	2	-
- Others	-	-	-

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(196 monthly average)	Number of persons				
	up to	over	over	over	over
	US\$	US\$	US\$	US\$	US\$
1. Local non-operatives					
- Managers					
- Engineers					
- Technicians					
- Accountants					
- Sales officers					
- Clerks and typists					
2. Local operatives					
- Supervisors					
- Foremen					
- Skilled operatives					
- Machine operators					
- Craftsmen					
- Truck drivers					
- Unskilled operatives					
- Other full-time operatives					
- Part-time operatives					
3. Foreign employees					
- Managerial staff					
- Technical staff					
- Other skilled operatives					
- Unskilled operatives					

No data available.

EXTERNAL CONDITIONS:

Transport:	external long distance	fair
	internal long distance	fair
	local and city	fair - poor
(*)		
Utilities:	electricity	fair
	water	fair
	gas	insignificant
(*)		
Community:	residence	insignificant
	health and recreation	fair
	education	insignificant
Own Welfare Facilities:		-
(*)	Only referring to concrete product manufacturing establishment.	

III. INVENTORIES

(End of 1967)	Actual value (000 US \$)	Number of months
Inventories		
TOTAL	347	
- Production materials	17	0.5
- Other input materials	-	-
- Work-in-process	370	4
- Finished products	-	-

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	
Shift hours/day	9	-	-	hours
Actual hours/year	1,955	-	-	hours
Actual days/year	217	-	-	days

IV. MANNING TABLE

(End of 1967)	Total	Shift categories				
		A	B	C	D	E
ALL SHOPS & UNITS:	107	21	86	-	-	-
1. Primary operative shops	86	5	37	25	-	-
- Concrete blocks			4	15	3	-
- Pre-fabricated elements and ceiling beams	29	2	2	2	1	-
- Construction department	56	3	12	20	21	-
2. Auxiliary operative units	8	2	6	-	-	-
- Repair & maintenance	6	-	6	-	-	-
- Mechanical shop	-	-	-	-	-	-
- Tooling shop	-	-	-	-	-	-
- Utilities control	2	2	-	-	-	-
- Product & material storage	-	-	-	-	-	-
- Off-site transport	-	-	-	-	-	-
- Guards, cleaners, etc.	-	-	-	-	-	-
3. Auxiliary non-operative units	14	14	-	-	-	-
- Production management	3	3	-	-	-	-
- Research & development	-	-	-	-	-	-
- Sales unit	2	2	-	-	-	-
- Accounting	9	9	-	-	-	-
- General administration	-	-	-	-	-	-

Shift categories: A: Supervisory staff and foremen (for all shifts)
B: Skilled operatives
C: Semi-skilled operatives (machine operators)
D: Unskilled operatives

V. ANNUAL PRODUCTION

(1967) Products (or group of products)	Wt. of net prod.	Quantity produced		Av. unit price ex factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Concrete products:	1946	m ³	35,500 (*)	22.1	796
Solid and hollow blocks, form stones, partition wall bricks, ceiling beams, slip tubings, sidewalk pavement, fence posts, auxiliary binders, sewage-treatment plants;					
Construction work					325
(*) Not including 800 m ³ supplied to other branch establishment.					
TOTAL VALUE OF PRODUCTION:					1,121 *****

VI. VALUE ADDED

(1967)	Total value (000 US \$)
1. Annual wages & salaries	135
- Operative workers	
(86 personal)	144
(21 personal)	16
- Non-operative workers	
(21 personal)	
2. Other payments for employees	
3. Annual depreciation	56
- Machinery & equipment	
- Buildings & other facilities	
- Non-physical capital assets	
4. Rentals paid	3
5. Interests & royalties	34
6. Sales tax	54
7. Other indirect business taxes	
8. (-) Subsidies	
9. Corporate income before tax	13
TOTAL VALUE ADDED: 395 *****	

DESCRIPTION OF MAJOR PRODUCTS:

- 1. Production department:** Concrete blocks (solid and hollow), partition wall bricks, auxiliary binders, slip tubings, fence posts and ceiling beams: serial production. Ceiling beams are produced under license.
- 2. Construction department:** Company maintains an own construction department which partly utilizes the concrete products manufactured by the production department.

MARKET ASPECTS: (Only referring to concrete product manufacturing establishment).

Consumers of products:

Construction companies.

Sales organization:

The owner (75%) as well as 2 regional representatives (25%) are in charge of sales.

Sales area:

Due to large weight of final products only limited sales area.

Competition in the market:

Leading position in a regionally limited market.

EXPORT:

Total annual export: No exports.

Major products	To Western countries	To Eastern countries	To Developing countries

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% input	Average input costs	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					21
TOTAL:					
- Electricity	..	-	-	-	7
- Coal and coke	..	-	-	-	7
- Petrol, diesel and liquid fuels	..	-	-	-	6
- Water	..	-	-	-	1
2. Production materials					383
TOTAL:					
- Cement, balast material and gravel	..	-	-	-	297
- Building material (*)	..	-	-	-	86

(*) Not including internal supply of 800 m³.

	Total consumption value (000 US \$)
3. Other materials & supplies	42
TOTAL:	
- Packaging material (timber, etc.)	8
- Parts, supplies & services	30
- Other materials & supplies	4
4. Business services purchased	170
TOTAL:	
- Transportation, storage & insurance	66
- Communication, advertising & other business services	104
5. Work performed by subcontractors	-
TOTAL:	
TOTAL VALUE OF CONSUMPTION: 616 *****	

VII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT B.1.1:

Number	Original Purchase Value 1966 US \$	Replacement value 1966 US \$	Av. Age (yrs)	Remarks	Supplier country	Year of installation	Daily running time	Output capacity
1	7	10	4		Germany, F.R.	1961	..	(*)450 lifts per shift
1	5	6	3		Germany, F.R.	1964	5 hrs	700 lifts per shift
1	5	6	3					
..	2	3	2					
..	14	15	4					
..	12	15	3					
..	10	12	2					
..	9	10	2					
1	4	5	3					
1	6	7	2					
1	16	19	2					
1	14	16	2					
..	25	31	-					
..	173	203	3					

CAPACITY POWER:
 Process equipment:
 - electric motors kW ..
 - other motors " 368
 Generating equipment:
 - installed capacity kVA 46

(* Year of installation: 1966; daily running time: 6 hrs; output capacity: 1,500 liftings per shift
 For further technological characteristics see page 4/Supplements.

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization:		Further details
		Man. Autom.	Man. Autom.	
Concrete blocks		A	III	
Prefabricated elements and ceiling beams		D	III	

CAPACITY UTILIZATION:

Full-capacity output: Approximately US \$ 924,000 (Only referring to concrete product manufacturing establishment)

Current utilization: Based on 1-shift operation.

Major products (or process)	Approximate %						
	up to 20	20-40	40-60	60-70	70-80	80-90	90-100
Concrete blocks							x
Prefabricated elements and ceiling beams							x

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output 1966 US \$	No. of persons employed	Total capacity 1966 US \$
1963	670	..	-
1964	680	..	-
1965	950	160	-
1966	870	148	-
1967	1,110	107	-
1968	1,200	135	-

2. Investments in the past:

From 19 64 to 19 67:(*)	Approximate amount 1966 US \$	Type of investment
1967:	190	New plant
in 1967:	60	

(* Only referring to establishment manufacturing concrete products.

3. Future Plan:

From 19 67 to 19 71: 190 Additional process equipment, rationalization of product-mix as well as of production methods; 25 operatives will then be employed less.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C = confidential; figures of these size groups are included in those underlined.

(1964 (Only referring to manufacturing branch of enterprise.)

Industry Other non-metallic mineral building materials (NSC-Code: 339) manufacturing

1. Size groups by number of persons employed	No. of estab.	No. of empl.	Avg. W. & S. per pers. (1966 \$)	Avg. gross prod. val./per pers. (1966 \$)	Avg. value added/gross prod. ratio (%)
up to 19	681	2,541	1,668	8,973	57
20 - 99	99	3,781	1,894	8,502	59
100 - 499	11	4,381	2,115	2,987	56
500 - 999	1	C	C	C	C
over 1,000	1	C	C	C	C
TOTAL:	793	10,703	1,931	9,222	57

2. Size groups by annual value of production 1966 US \$:

	No. of estab.	No. of empl.	Avg. W. & S. per pers. (1966 \$)	Avg. gross prod. val./per pers. (1966 \$)	Avg. value added/gross prod. ratio (%)
up to 20	397	403	1,192	6,748	57
20 - 40	111	420	1,471	7,328	59
40 - 200	188	2,296	1,775	7,832	61
200 - 400	57	1,683	1,807	9,006	58
400 - 2,000	36	5,901	2,110	10,128	56
over 2,000	4	C	C	C	C
TOTAL:	793	10,703	1,931	9,222	57

XII. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service:

- | | | |
|-------------------------|---------------------------------------|---------------------------------|
| 1. Engineering study | 3. Technical and managerial personnel | 5. Import and export management |
| 2. Financial assistance | 4. Industrial training | 6. Admission of foreign labor |
| 3. Industrial services | 7. Technical consultation | |
| 4. Equipment supply | 8. Installation & maintenance | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
-----------------	-------------------	-----------------	-------------------	-------------------------

No information available.

XIII. SUPPLEMENTS & NOTES

History of investment:

The enterprise was originally founded in 1920 as a construction company. Production of concrete products started in 1946 and accounts now for 65% of total sales. Both plants are operated under one management (owner). Due to constant improvements of the machines utilized the establishment's process equipment still meets modern standards.

Depreciation policy:

Both the straight-line and accelerated methods are applied.

Inventory policy:

Heavy fluctuations in inventories due to seasonally varying building activities.

On the average the value of semi-finished and finished products of the concrete product manufacturing branch amounts to 30% of the total value of production.

Technological features:

The jolting molding machine as well as the automatic proportioning machine are charged by a central concrete-mixer (which is also used by the building company). The moulds are inserted into these two machines, filled with a concrete-mixture and jolted. Thereafter, bricks are manufactured on the ground by a jolting molding machine (machine moves on sliding bars afterwards; lifting!) as well as on wooden panels by an immovable proportioning machine (wooden panels are moved away by a conveyor-belt system). Both, the amount of liftings and of wooden panels filled are indicators of the plant-capacity. The output depends on how frequently moulds are changed and on the size of the blocks.

Major Products:

Rolled, drawn, forged and cast metal products. Annual capacity output amounts to over 35,000 t, on a three-shift operation in primary process shops.

Reporting Unit:

A two-establishment enterprise, founded in 1946; privately owned; foreign capital participation 25.3 %.

I. FIXED CAPITAL ASSETS

(End of 1966)

	Year of installation	Orig. purchase value (1966 US \$)	Replacement value (1966 US \$)
1. Primary process equipment		2,230	..
TOTAL		2,230	..
- Process equipment		incl above	..
- Hand tools & apparatus			
- Cost of installation			
2. Primary industrial building		521	600
TOTAL		521	600
(total floor space: 18,600 m ²)			
3. Auxiliary facilities		218	236
TOTAL:		125	160
- Water, steam, electricity, cooling & storing		47	44
- Transportation facilities		106	32
- Administrative facilities		-	-
- Laboratory facilities		-	-
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		3,029	..
4. Other fixed capital assets		42	424
TOTAL		42	424
- Land (total acreage: 106,550 m ²)			

DETAIL OF PROCESS EQUIPMENT (incl.:

	Supplier country	Year of installation	Orig. purchase value (1966 US \$)	Replacement value (1966 US \$)
Plant 1:				
- Furnace shops		1948-62	398.9	
- Ingots "		1948-65	10.0	
- Casting "		1948-66	367.9	
- Finishing "		1948-66	217.4	
- Maintenance shop		1948-65	32.4	
- Laboratory		1948-66	38.1	
- Social work shop		1949-64	13.7	
- Common service shop		1948-65	154.6	
- Storage shops		1948-56	23.8	
- Machinery not in use		1948-65	53.7	
- Models department		1949-65	9.2	
- Construction department		1951-66	5.1	
- Cast balls "		1952-65	37.8	
- Rolling "		1954-66	247.5	
- Forged balls "		1964-65	38.5	
- Cold drawing "		1963-65	70.4	
- Forging "		1964-65	343.8	
- Yard "		..	35.7	
- Bronze "		1948-53	7.6	
Plant 2:				
- Furnace dept.		1961-65	16.9	
- Ingot "		1961-66	48.7	
- Finishing "		1961-66	47.8	
- Maintenance		1961	18.1	
- Laboratory		1961	1.0	
- Common service shop		1964	1.1	

HISTORY OF INVESTMENT:

The factory was constructed in 1946. Trial as well as commercial production started in 1948. The first profits were made in 1950, when 80% of the capacity was utilized. The different shops have been gradually expanded and renovated; about 50% of the total original purchase value of process equipment represents the installations after 1960.

ADVANTAGES CONNECTED WITH THE PARTICIPATION OF FOREIGN CAPITAL:

- Training of personnel
- Importation of machinery and installation
- Supply of "know-how"

CAPACITY POWER:

Process equipment:	Daily	Generating equipment:	Installed capacity:	-	kVA
- electric motors	24,000	- electric furnaces	87,000		kWh
- other prime movers	3,000				kWh

EXTERNAL CONDITIONS:

Transport: Long distance and local area, excellent.
Utilities: Electricity, (air) water and gas, excellent.
Community: -

II. INVENTORIES AND WORKING CAPITAL

(in 1966 US \$)

(End of 1966)

	Actual value	2. Liquid assets	Actual value
1. Inventories	1,843	TOTAL	1,687
TOTAL:		- Cash (hand/bank)	102
- Production materials	367	- Market. sec. & bonds	19
- Other input materials	457	- Short-term investment	442
- Work-in-process	157	- Prepaid expenses	54
- Finished products	862	- Accounts receivable	1,070
3. Desired working capital			
	Number of months	Value	
TOTAL:		2,086	
- Production materials	2.2	280	
- Other input materials	-	255	
- Finished products	1.5	1,200	
- Wages & salaries	1	160	
- Other special items	1	191	

III. MANNING TABLE

(number of persons)

A - Machine operators
B - Other operators

	Total	1st shift	2nd shift	3rd shift
		A	B	A+B
(1966 average)				
ALL SHOPS & UNITS:	900	303	248	114
1. Primary operative shops	554	128	85	212
Plant 1				
- Foundry	204	54	28	82
- Furnaces	103	14	21	34
- Products for trituration	53	20	-	20
- Rolling, forging, wire drawing	152	40	36	76
Plant 2	37	..	..	..
- * Details not available; but includes auxiliary operative workers.				
2. Auxiliary operative units	148	90	36	22
- Repair and maintenance	94	50	28	16
- Mechanical shop	-	-	-	-
- Utilities control	18	6	6	6
- Product & material storage	6	5	1	-
- Off-site transport	23	23	-	-
- Guards, cleaners, etc.	7	6	1	-
3. Auxiliary non-operative units	198			
- Production management				
- Research & development	198			
- Sales unit				
- General administration				
				(Separately located. Includes sales agents working outside the enterprise's premises)

WORKING TIME PER OPERATIVE WORKER:

- Normal hours/day:	8	hours	- Normal days/year:	300	days
- Actual hours/year:	2,400	hours			

CAPACITY OF OPERATIVE SHOPS:

IV. ANNUAL PRODUCTION

(1965)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price in factory (US \$)	Total production value (1965 US \$)
		Unit	Output			
Products for group of producer						
- Castings	..	t	3,368	6,600	812.6	2,737
- Rolled products	..	t	11,460	18,000	159.0	1,802
- Drawn "	..	t	373	1,200	342.6	128
- Forged "	..	t	273	1,200	519.9	142
- Products for trituration	..	t	5,116	8,400	208.6	1,067
- Other revenue from scrap etc.			..			295

TOTAL VALUE OF PRODUCTION: 6,191

* Unit price (average) excludes sales tax.

Exports: None

Capacity:

The nominal capacity estimates are based on three shifts for the primary processing department and two shifts (partly one shift) for finishing departments. The over-all rate of utilization is approximately 60%. But with allowance for nominal stoppage for maintenance and expansion adjustments, the feasible capacity output would be somewhat less than a 35,000 t/yr level. The enterprise does not seem to consider the current rate of utilization as a serious problem.

VI. VALUE ADDED

(1966)	Value (1966 US \$)
1. Wages & salaries	
- Employees in direct production (700 persons)	910
- Other employees (200 persons)	401
2. Other payments for employees	241
3. Annual depreciation	211
4. Rentals paid	74
5. Interest & royalties	148
6. Sales tax (not incl. in TOTAL)	(74.1)
7. Other ind. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	410
	2,307

VII. MONTHLY EARNING RATES

(End of 1966)	No. of pers. empl.	Average earning rate (US \$)
1. Local non-operative		
TOTAL	70	293
- Managers	2	1,440
- Engineers	-	-
- Technicians	-	-
- Accountants	2	400
- Sales officers	6	800
- Other professional staff	-	-
- Clerks & typists	60	200
2. Local operatives		
TOTAL	766	87
- Supervisors	5	800
- Foremen	40	240
- Machine operators	85	96
- Craftsmen	121	96
- Truck drivers	15	96
- Other full-time operatives	500	64
- Unskilled & part-time operatives	-	-
3. Foreign employees		
TOTAL	2	640
- Managerial staff	2	1,280

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed				Total consumption value (1966 US \$)
	Unit	Purchase	% imported	Yield loss	
1. Energy and water					655
TOTAL:					655
- Electricity	000 kWh	29,456	-		584
- Diesel oil	000 l	428,000	-		12
- Gas	000 m ³	6,727	-		59
2. Production materials					2,076
TOTAL					2,076
- Metal slugs and chips	t	21,779	55		1,600
- Ferro-alloys	t	858	9		476

	Total consumption value (1966 US \$)
3. Other materials & supplies	
TOTAL:	-
- Packagings	
- Repair & maintenance	
- Non-factor service inputs	
4. Business services purchased	1,153
TOTAL:	1,153
- Transport, storage & insurance	
- Commissions, advertisements, etc.	
5. Work performed by sub-contractors	-
TOTAL:	-
	3,884

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)

Industry group: Iron and steel basic industries (NIC: 341)

1. Size groups by number of persons employed	Number of empl.	Number of empl.	Av. ann. prod. val. per pers. (US \$)		Av. emp. rate* (%)
			U. S. & C.	Dom. prod.	
6 - 15	10	113	527	645	438
16 - 25	11	203	1,007	9,808	81
26 - 75	34	1,994	1,237	10,602	68
76 - 100					
101 - 250	30	5,042	1,394	13,850	73
251 - 500	13	4,978	1,630	19,919	67
over 500	17	25,336	2,364	20,632	35
TOTAL	115	37,666	2,046	18,993	81

2. Size groups by value of annual production (1965 US \$)	Number of empl.	Number of empl.	Av. ann. prod. val. per pers. (US \$)		Av. emp. rate* (%)
			U. S. & C.	Dom. prod.	
up to 240	28	749	833	3,572	173
240 - 1,600	39	3,996	1,265	7,611	75
over 1,600	48	32,921	2,168	20,725	81
TOTAL	115	37,666	2,046	18,993	81

* Capital to defined as physical capital assets.

IX. SUPPLEMENTS

GOVERNMENTAL POLICIES:

Rates for electricity are among the highest in the world in this industry branch. The lowering of electricity tariff is believed to be essential for the viability of such industries using electrical furnaces.

MEXICO : 342 - (1)

Major Products:

Production of refined antimonial lead. Capable of producing annually 2,160 t on 3-shift operation.

Reporting Unit:

One-establishment enterprise, founded in 1958; privately owned, no participation of foreign capital.

I. FIXED CAPITAL ASSETS

(End of 1966)

	Year of installation	Orig. purchase value 1000 US \$	Replacement value 1000 US \$
1. Primary process equipment		59	76
TOTAL		59	76
- Process equipment	1958	58	74
- Hand tools & apparatuses		5	5
- Cost of installation		16	20
2. Primary industrial building	1966	10	14
TOTAL		10	14
(total floor space: 5,000 m ²)			
3. Auxiliary facilities		27	26
TOTAL		27	26
- Water, steam, electricity, cooling & storing	1958/60/62	14	16
- Transportation facilities	1957 onwards	1	3
- Administrative facilities	1957 onwards	2	2
- Laboratory facilities		-	-
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		89	116
4. Other fixed capital assets		3	3
TOTAL		92	119
- Land (total acreage: 5,000 m ²)		3	3

DETAIL OF PROCESS EQUIPMENT (no.):

	Supplier country	Year of installation	Orig. purchase value 1000 US \$	Replacement value 1000 US \$
Rotating furnaces	Mexico	1958 1962 1963	3	44
Roller for separation, 10 t	"	1964	1.0	2
Roller for separation, 8 t	"	1967	1.4	1.5
Rollers for separation, 4 t	"	1962	1.3	1.4

HISTORY OF INVESTMENT:

Construction of factory and trial production started in 1958, commercial production in 1958, break-even point was reached in 1959. Following investments were made for expansion:

1957	approx.	US \$	30,000
1960	"	"	10,000
1962	"	"	10,000
1966	"	"	10,000

Other offices:

Location	Kind of activity	Number of persons employed
Mexico City	Purchasing and selling	12
Guadalejara	" " "	3
Coahuilco	" " "	2

CAPACITY POWER:

Process equipment: - Electric motors (15)

kw each

Generating equipment: installed capacity

- 1VA

EXTERNAL CONDITIONS:

Transport: Long distance and local area, excellent.

Utilities: Electricity, water, average; gas, excellent.

Community: Residential, health and recreational, educational, poor.

II. INVENTORIES AND WORKING CAPITAL

In 1000 US \$

(End of 1966)

	Actual value 60	2. Liquid assets TOTAL	Actual value 90
1. Inventories			
TOTAL			
- Production materials	16	- Cash (hand/bank)	19
- Other input materials	2	- Market, sec. & bonds	2
- Work-in-process	16	- Short-term investment	1
- Finished products	26	- Prepaid expenses	4
		- Accounts receivable	64
3. Desired working capital			
TOTAL			
- Production materials	1	17	
- Other input materials	1	2	
- Finished products	1	33	
- Wages & salaries	1	6	
- Other special items	..	9	

III. MANNING TABLE

(number of persons)

A - Shifts operation
B - other operation

(1966 average)

ALL SHOPS & UNITS:

1. Primary operative shops

	Total	1st shift A	2nd shift B	3rd shift A+B	7
TOTAL	60	44	9	7	
1. Primary operative shops	45	16	15	8	6
- Furnaces department	18	6	-	6	6
- Copper boilers	12	10	-	2	-
- Storeroom for production materials	15	-	15	-	-

2. Auxiliary operative units

	Total	1st shift A	2nd shift B	3rd shift A+B	1
TOTAL	10	8	1	1	
- Repair and maintenance	1	1	-	-	-
- Mechanical shop	1	1	-	-	-
- Utilites control	-	-	-	-	-
- Product & material storage	1	1	-	-	-
- Off-site transport	1	1	-	-	-
- Guards, cleaners, etc.	2	-	1	1	-
- Others	2	2	-	-	-

3. Auxiliary non-operative units

	Total	1st shift A	2nd shift B	3rd shift A+B	-
TOTAL	5	5	-	-	
- Production management	1	1	-	-	-
- Research & development	-	-	-	-	-
- Sales unit	2	2	-	-	-
- General administration	2	2	-	-	-

WORKING TIME PER OPERATIVE WORKER:

- Normal hours/day:	8 hours	- Normal days/year:	280 days
- Actual hours/year:	2,240 hours		

CAPACITY OF OPERATIVE SHOPS:

Nominal capacity output of the plant is 2,160 t/year.

69.4% of the capacity is utilized.

Nominal capacity output is calculated on a three-shift operation.

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|----------------------------|---------------------------------------|--------------------------------|
| 1. Engineering study | 6. Technical and managerial personnel | 8. Import and export promotion |
| 2. Financial assistance | 7. Technical training | 9. Admission of foreign labour |
| 3. Industrial services | 4. Industrial training | |
| 4. Equipment supply | 5. Technical consultancy | |
| Installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
1				Pre-feasibility studies, production plans and processing methods could be provided.
3				Know-how contracts, patents and rights could be supplied.
5				Foremen, skilled operatives, technicians and managerial staff could be supplied upon demand.
6				Machine operators, repair and maintenance personnel, etc. could be trained on-the-job.
7				Cost estimates for the production of the company's product-mix in developing countries could be furnished.
9				Admission of foreign labourers is not envisaged except for training purposes.

XII. SUPPLEMENTS & NOTES

History of investment:

The company was founded in 1859. Production started one year thereafter. Re-organisation of the production process as well as of the product-mix in 1939. Continuous modernisation of the whole enterprise ever since. Present process equipment meets modern standards.

Governmental policies:

The government subsidizes exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under VI.6. has been adjusted accordingly.

IV. ANNUAL PRODUCTION

(1966)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price in factory (US \$)	Total production value (1000 US \$)
		Unit	Output			
Products for group of products						
Refined antimonial lead	1958	t	1,500	2,160	240	560
TOTAL VALUE OF PRODUCTION						560

VI. VALUE ADDED

(1966)	Value (1000 US \$)
1. Wages & salaries	
- Employees in direct production (45 persons)	18
- Other employees (15 persons)	23
2. Other payments for employees	10
3. Annual depreciation	11
4. Rentals paid	-
5. Interest & royalties	13
6. Sales tax (not incl. in TOTAL)	(12)
7. Other ind. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	4
	84

VII. MONTHLY EARNING RATES

(End of 1966)	No. of pers. emp.	Average earning rate (US \$)
1. Local non-operative		
TOTAL	5	-
- Managers	1	confidential
- Engineers	1	800
- Technicians	1	200
- Accountants	-	-
- Sales officers	2	400
- Other professional staff	-	-
- Clerks & typists	-	-
2. Local operatives		
TOTAL	50	128
- Supervisors	1	800
- Foremen	-	-
- Machine operators	-	-
- Craftsmen	1	200
- Truck drivers	3	120
- Other full-time operatives	45	112
- Unskilled & part-time operatives	-	-
3. Foreign employees		
TOTAL	-	-

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed				Total consumption value (1000 US \$)
	Unit	Purchase	% imported	Tariff rate	
1. Energy and water					12
TOTAL					
- Electricity	000 KwH	139			4
- Gas	000 m3	900			8
- Water	000 m3	(minimum consumption)			
2. Production materials					226
TOTAL					

	Total consumption value (1000 US \$)
3. Other materials & supplies	
TOTAL	6
- Packagings	5
- Repair & maintenance	1
- Non-factor service inputs	-
4. Business services purchased	
TOTAL	35
- Transport, storage & insurance	8
- Communication, advertisements, etc.	27
5. Work performed by sub-contractors	
TOTAL	-
	279

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)						
Industry group: Non-ferrous metal basic industries (NIC: 342)						
1. Size group by number of persons employed	Number of empl.	Number of empl.	Avg. U. S. \$ per pers. (1000 \$)	Avg. gross prod. val. per pers. (1000 \$)	Avg. emp. gross prod. value* (1000 \$)	
up to 25	72	12,641	1,763	19,945	70	
over 25						
TOTAL	72	12,641	1,763	19,945	70	
2. Size group by value of annual production (1000 US \$)						
up to 1,600	49	1,362	1,003	6,658	67	
over 1,600	27	11,289	1,853	21,532	70	
TOTAL	76	12,651	1,761	19,930	70	

* Capital is defined as physical capital cost.

IX. SUPPLEMENTS

Future plan:

Within a 5-year period, approx. US \$ 160,000 will be invested for expansion of the whole enterprise.

Another 15 persons will be needed then for each of the 3 shifts.

Major Products: Aluminium foils.

Capable of producing annually 5,000 t of rolled aluminium foils. Full-capacity output amounts to US \$ 9,700,000 based on 1- to 3-shift-operation.

Reporting Unit:

A one-establishment enterprise; privately owned; founded in 1912; 540 employees. Largest foil rolling mill in the country. Not very favourable location; own research activity; licensed production; 60% exports.

I. FIXED CAPITAL ASSETS

(End of 1967)

	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average age (Yrs.)
1 Primary process equipment (including installation cost)	1,165	6,449	10
TOTAL	1,165	6,449	
- Process equipment			
- Hand tools & apparatuses			
2 Buildings	659	2,684	
TOTAL			
- Primary industrial buildings (total floor space: 33,000 m ²)	618	..	17
- Auxiliary buildings	41	..	10
- Warehouses	-	-	-
- Office administration buildings	-	-	-
- Housing	-	-	-
3 Auxiliary facilities (excl. buildings)			
TOTAL			
- Internal power equipment			
- Laboratory facilities	***)	***)	3
- Means of transportation			
- Office equipment			
TOTAL PHYSICAL FIXED ASSETS (excluding land)	1,824	9,133	
4 Other fixed capital assets	47	.. **)	
TOTAL			
- Land (total acreage: 96,000 m ²)	20	..	-
- Land improvements (t.a. 33,000 ")	27	..	-
- Others	-	-	-

** Included in 1.2. Buildings
 *** Included in 1.1. Primary process equipment

*NB Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(196 monthly average)

	up to					over
	US\$	US\$	US\$	US\$	US\$	US\$
1. Local non-operatives						
- Managers						
- Engineers						
- Technicians						
- Accountants						
- Sales officers						
- Clerks and typists						
2. Local operatives						
- Supervisors						
- Foreman						
- Skilled operatives						No data available.
- Machine operators						
- Craftmen						
- Truck drivers						
- Unskilled operatives						
- Other full-time operatives						
- Part-time operatives						
3. Foreign employees						
- Managerial staff						
- Technical staff						
- Other skilled operatives						
- Unskilled operatives						

EXTERNAL CONDITIONS:

Transport	external long distance	fair
	internal long distance	fair
	local and city	insignificant
Utilities	electricity	fair
	water	fair
	gas	insignificant
Community	residence	fair
	health and recreation	excellent
	education	fair
Own Welfare Facilities:		-

III. INVENTORIES

(End of 1967)

	Actual value (000 US \$)	Number of months
Inventories	1,240	
TOTAL:		
- Production materials	703	..
- Other input materials	104	..
- Work-in-process	249	..
- Finished products	184	..

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift hours/day: (*)	7	7	7	hours
Actual hours/year	1,862	1,862	1,862	hours
Actual days/year	273	273	273	days

(*) Actual hours excluding holidays and breaks; regular working time: 8 1/2 hrs.

IV. MANNING TABLE

(number of persons)

SKILL category: A Supervisory staff and foremen (for all shifts)
 B Skilled operatives
 C Semi-skilled operatives (machine operators)
 D Unskilled operatives

(End of 1967)

	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	B-D	B-D
ALL SHOPS & UNITS:	540	142		308		80	10
1. Primary operative shops	289	25	20	150	6	79	9
- Aluminium rolling and annealing department	35	1	4	10	2	9	9
- Dyeing and paper coating dept.	30	1	3	14	1	13	-
- Wax coating department	24	1	3	14	-	6	-
- Cross cutting department (coils)	43	1	-	27	-	15	-
- Guillotine cutting dept.	58	4	5	30	1	18	-
- Printing department	39	2	6	20	2	9	-
- Sorting department	23	-	-	23	-	-	-
- Lacquer manufacturing dept.	8	1	1	3	-	3	-
- Production programming	14	14	-	-	-	-	-
- Waste processing and box production	15	-	-	9	-	6	-
	151	18		131		1	1
2. Auxiliary operative units	75	5		70		-	-
- Repair & maintenance	-	-		-		-	-
- Mechanical shop	-	-		-		-	-
- Tooling shop	4	4		-		-	-
- Utilities control	12	1		11		-	-
- Product & material storage	15	1		14		-	-
- Off-site transport	9	-		7		1	1
- Guards, cleaners etc.	36	7		29		-	-
- Laboratory, sawin, mill, carton manufacturing dept.							
	100	99		1		-	-
3. Auxiliary non-operative units	3	3		-		-	-
- Production management	3	3		-		-	-
- Research & development	-	-		-		-	-
- Sales unit	15	14		1		-	-
- Accounting	79	79		-		-	-
- General administration							

V. ANNUAL PRODUCTION

(1967)	Yr. of first prod.	Quantity produced		Avg. unit price ex factory (US \$)	Total output value (1000 US \$)
		Unit	Quantity		
Products (or group of products)					
Aluminium foils ¹					
- Silver; polished and embossed	1927	kg (*)	1,980,340		2,411
- Coloured; polished and embossed	"	"	921,540		1,421
- Silver; polished or embossed and printed	1952	"	35,814		63
- Coloured; polished or embossed and printed	"	"	397,981		923
- Silver; polished or embossed and paper-coated	1936	"	455,708		1,086
- Coloured; polished or embossed and paper-coated	"	"	132,744		405
- Silver; polished or embossed, printed, paper-coated	"	"	20,782		75
- Coloured; polished or embossed, printed, paper-coated	"	"	69,151		290
Revenue from contract and commission work					68
Other revenue					1,048
TOTAL VALUE OF PRODUCTION:					7,720

(*) Not weight of metal.

VI. VALUE ADDED

(1967)	Total value (1000 US \$)
1. Annual wages & salaries	1,020
- Operative workers (398 persons)	656
- Non-operative workers (142 persons)	364
2. Other payments for employees	240
3. Annual depreciation	381
- Machinery & equipment	316
- Buildings & other facilities	54
- Non-physical capital assets	11
4. Rentals paid	26
5. Interests & royalties	189
6. Sales tax	120
7. Other indirect business taxes (*)	15
8. (-) Subsidies	-
9. Corporate income before tax	501
(*) Transport and motor vehicles tax, land tax.	
TOTAL VALUE ADDED:	2,492

DESCRIPTION OF MAJOR PRODUCTS:

The company produces aluminium foils and strips of 0,005 - 0,25 mm thickness and of 5 - 1,200 mm width in silver, coloured, polished, embossed, printed and paper or plastic coated as well as all kinds of compound foils. Embossed foils are manufactured up to 800 mm width.

The company utilizes a 6-colour-flexo-printing press for foils up to 760 mm width and a 6-colour photogravure printing press for foils up to 600 mm width.

Foils and strips are shipped in bundles, maximum weight 3 tons, packed in wooden boxes.

MARKET ASPECTS:

Consumers of products:

The company sells its products to the following industries:

Candy and chocolate, pastry, dairy, food, beverage, electrical, wrapping, chemical, pharmaceutical, tobacco.

Sales organization:

Own domestic sales force. Abroad: 30 representatives.

Share in the domestic market:

Wrapping foils: 50%.

EXPORT:

Total annual export: US \$ 4,703,200.

Major products	To Western countries	To Eastern countries	To Developing countries
Aluminium foils (silver, polished, embossed, coloured)	45%	42%	13%
Aluminium foils (coated)	80%	20%	-

Governmental policies:

The government subsidizes exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under VI.6. has been adjusted accordingly.

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% input	Average input duties (1000 US \$)	Total consumption value (1000 US \$)	Total consumption value (1000 US \$)
	Unit	Quantity				
1. Energy and water						
TOTAL:						
- Electricity	000 kWh	8,608 (*)	-	-	173	173
- Gas	000 m ³	..	-	-	2	2
2. Production materials						
TOTAL:						
- Aluminium	t	5,000 (**)	-	-	3,176	3,176
- Paper	t	1,523 (**)	5	3	421	421
- Chemicals	t	1,006 (**)	90	97	521	521
- Oils					43	43
- Wood					140	140
- Others					41	41
3. Other materials & supplies						
TOTAL:						
- Packaging material						137
- Parts, supplies & services						116
- Other materials & supplies						21
4. Business services purchased						
TOTAL:						
- Transportation, storage & insurance						349
- Communication, advertising & other business services						297
5. Work performed by subcontractors						
TOTAL:						
						8
TOTAL VALUE OF CONSUMPTION:					5,298	5,298

(*) Not including internal supply of 10,677,000 kWh

(**) Not including internal supply of 7,900 t of aluminium, 466 t of paper and 1,006 t of chemicals.

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (1.1):

	Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Avg. Age (yrs)	Remarks
Rolling mill and annealing plant	(a) 16				
Machines of dyeing and paper-coating dept.	(b) 26				
Embossing machines	9				
Winding machines and other devices	36				
Cross-cut machines	6				
Printing presses	(c) 5				
Crosscutters	(d) 3				
Guillotine cutting machines	3				
Perforating attachment	1		No detailed values available	10	
Paper bag machine	1				
Brushing mill	1				
Tarnishing plant	6				
Other specialised machines	10				
Mixers	28				
Presses and other machines	41				
Lathes and drilling machines	31				
Saws and grinding machines	7				
Turbines	25				
Other common type machines					

Remarks:
 SW Purchased second-hand
 OS Obsolete
 R Rented
 SC Self-constructed

Further details:

ad (c): 6-colour-flexo printing press:
 2 units; output capacity: 150 m/minute;
 daily running time: 8 hrs; working
 width: 800 mm.
 6-colour-photogravure printing machine:
 1 unit; output capacity: 150 m/min;
 daily running time: 8 hrs; working width:
 630 mm.
 ad (d): 3 units; daily running time: 8 hrs;
 working width: 800, 1,000, and
 1,250 mm; length of cut: 300 - 1,500 mm.

CAPACITY POWER:

Process equipment:
 - electric motors kW 6,063
 - other motors for " 625
 generating equipm.
 Generating equipment:
 installed capacity kVA 3,316

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanisation:		Further details:
		Machin.	Autom.	
Rolling mill and annealing plant	Rolling, annealing, winding, cutting	A	II	Capacity output: 16 tons/day
Dyeing and paper coating dept.	Lacquering, paper coating (wet or dry)	B	III	..
Wax coating department	Wax coating, embossing	C	III	..
Cross-cutting department	Cutting, winding (coils)	C	III	..
Guillotine cutting dept.	Cutting, weighing, packaging	B	III	..
Printing department	Coloured gum and gravure printing	C	III	..
Sorting department	-	C	III	..
Lacquer manufacturing dept.	-	C	III	..

Mechanisation:
 A most advanced
 D appreciably short of today's standard
 E almost outdated

Automation:
 I fully automated
 II semi-automated
 III non-automated

CAPACITY UTILIZATION:

Full capacity output US \$ 9,675,000.

Current utilization. Partially based on 3-shift operation.

Major products (or processes)	Approximate %									
	up to 20	20-40	40-60	60-70	70-80	80-90	90-100			
Rolling mill and annealing plant (*)										X
Dyeing and paper-coating dept.										X
Wax coating department										X
Cross-cutting dept.										X
Guillotine cutting dept.										X
Printing dept.										X
Sorting dept.										X
Lacquer manufacturing dept.										X

(*) based on 3-shift operation.

IX. HISTORY & PLAN

1. Performance in the past:

Year: 1963
 1964
 1965
 1966
 1967
 1968

Total output (1000 US \$)
 No. of persons employed
 Total exports (1000 US \$)

No data available.

2. Investments in the past:

From 19 55 to 19 67:	Approximate amount (1000 US \$)	Type of investment
" " " "	960	Buildings
" " " "	1,980	Machinery and electromotors
" " " "	1,200	Tools, furniture and fixtures, means of transportation

3. Future Plan:

From 19 69 to 19 71:	Approximate amount (1000 US \$)	Type of investment
" " " "	770	Expansion, rationalisation specialisation and new additions to product-mix methods of production, machinery and equipment.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C - confidential; figures of these size groups are included in the underlined figures.

(1964) Rolling, drawing and casting of non-ferrous metals

(ISIC Code: 342)

1. Size groups by number of persons employed	No. of estab.	No. of emp.	Avg. W & S. per pers. (US \$)	Avg. gross prod. vol. per pers. (US \$)	Avg. value added/gross prod. ratio (%)	2. Size groups by annual value of production (1000 US \$):		Avg. W & S. per pers. (US \$)	Avg. gross prod. vol. per pers. (US \$)	Avg. value added/gross prod. ratio (%)	
						No. of estab.	No. of emp.				
up to 19	78	443	1,718	11,374	36	29	85	1,344	5,199	68	
20 - 99	22	1,014	1,824	9,827	41	19	107	1,718	4,929	65	
100 - 499	18	2,166	2,072	12,891	30	31	490	1,875	6,039	58	
500 - 999	2	C	C	C	C	7	241	1,625	7,838	40	
over 1,000	2	C	C	C	C	19	1,738	1,786	8,884	43	
						15	7,999	2,118	14,014	29	
TOTAL:	120	10,623	2,034	12,536	31	TOTAL:	120	10,623	2,034	12,536	31

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|---|---------------------------------------|-----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export transactions |
| 2. Financial services | 6. Industrial training | 9. Admission of foreign labour |
| 3. Technical services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of services	Country or region	No. of projects	Field of industry	Description of projects
------------------	-------------------	-----------------	-------------------	-------------------------

The company is willing to co-operate with developing countries, however, does not report any particular fields of interest.

XII. SUPPLEMENTS & NOTES

Training:

The company shows great interest to provide in-plant as well as off-plant training courses for its employees. Particular emphasis is put on courses for the further development of technical personnel.

Interpolation policy:

The company applies the straight-line method only.

EAST AFRICA : 350-(1)

MAJOR PRODUCTS: Wire nails. Capable of producing annually 2,000 t based on 3-shift operation.

REPORTING UNIT: A one-establishment enterprise founded in 1958.

I. FIXED CAPITAL ASSETS (in 000 US \$)		Year of compl.	Orig. purchase value	Replacement value
(End of 1966)				
1. Primary process equipment				
total:				
- Process equipment			46	..
- Hand tools and apparatuses			5	..
- Cost of installation			-	-
2. Primary industrial building				
total:				
(total floor space: .. m ²)		1958	18	21
3. Auxiliary facilities				
total:				
- Water, steam, electricity, cooling and storing			6	..
- Transportation facilities (total load: 2 t)			5	..
- Administrative facilities			1	..
- Laboratory facilities			-	-
TOTAL PHYSICAL FIXED CAPITAL ASSETS (excl. land):				
			70	..
4. Other fixed capital assets				
total:				
- Land (total acreage: - m ²)			-	-

DETAIL OF I.I. (supplier):		Year of inst.	Orig. purchase value	Replacement value
Wire nail machine type II/60(1) (PRO)	}	1958	36	..
Wire nail machine type III/46(1) (PRO)		1958		
Wire nail machines type V/31 (2) (PRO)		1958		
Wire nail machines type V/25 (2) (PRO)		1958		
Wire nail machine NTG-P (1) (Japan)		1966		
Grinding machine (1) (PRO)		1958	..	
Centre lathe (1) (Czechoslovakia)		1958	..	

HISTORY OF INVESTMENT

Construction of the factory was started in 1958. The first trial as well as commercial production began in 1959.

POWER SUPPLY:			Generator equipment:	
- Voltage (kV):	60	kV	- installed capacity:	- MVA

CLIMATE: Long distance: poor during long rains. Local area: fair

WATER: Electricity, water, gas: fair

RESOURCES: Residential, health and recreational, educational: fair.

II. INVENTORIES AND WORKING CAPITAL (in 000 US \$)		Actual value	Actual value
1. Inventories (End of 1966)			
total:		42	21
- Production materials		22	-
- Other input materials		7	-
- Work-in-process		13	-
- Finished products		7	-
2. Liquid assets			
total:		-	21
- Cash (hand/bank)		-	0.3
- Market. sec. & bonds		-	-
- Short-term investment		-	-
- Prepaid expenses		-	-
- Accounts receivable		-	21

3. Desired working capital	No. of months	Value
total:		46
- Production materials	3	25
- Other input materials	-	-
- Finished products	3	16
- Wages and salaries	3	5
- Other special items	-	-

* B - Machine operators
* C - Other operatives

III. MANPOWER TABLE (1966 average)	Total	1st shift			2nd shift			3rd shift		
		B*	C*	...	B*	C*	...	B*	C*	...
TOTAL EMPLOYED:	19	19	-	-	-	-	-	-	-	-
1. Primary operative shops	11	5	6	-	-	-	-	-	-	-
Nail shop	5	5	-	-	-	-	-	-	-	-
Packing	6	-	6	-	-	-	-	-	-	-
2. Auxiliary operative units										
- Repair and maintenance	1	1	-	-	-	-	-	-	-	-
- Tooling shop	-	-	-	-	-	-	-	-	-	-
- Mechanical shop	1	1	-	-	-	-	-	-	-	-
- Utilities control	-	-	-	-	-	-	-	-	-	-
- Product and material storage	-	-	-	-	-	-	-	-	-	-
- Off-site transport	1	1	-	-	-	-	-	-	-	-
- Guards, cleaners, etc.	1	1	-	-	-	-	-	-	-	-
3. Auxiliary non-operative units										
- Production management	1	1	-	-	-	-	-	-	-	-
- Research and development	-	-	-	-	-	-	-	-	-	-
- Sales unit	-	-	-	-	-	-	-	-	-	-
- Accounting	-	-	-	-	-	-	-	-	-	-
- General administration	3	3	-	-	-	-	-	-	-	-

CAPACITY OF OPERATIVE SHOPS:	
- Normal hours/day:	8 hours
- Normal days/year:	301 days
- Actual hours/year:	2,408 hours

Processing capacity	
Wire nail machine (1)	500 lbs/hour
Wire nail machine (4)	200 lbs/hour
Wire nail machines (2)	100 lbs/hour

The nail shop is fully automated and mechanized.

IV. ANNUAL PRODUCTION (in 000 US \$)

(1966)

Products (or groups of products)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price ex factory (US \$)	Total production value
		Unit	Output			
Wire nails	1957	t	721	2,000	221.2	159
Total value of production						159

Competing imports

The c.i.f. price without tariff of competing imports amounts to US\$ 224 (incl. duty only from China). The tariff on wire nails is 30 %.

Capacity utilization

Productive capacity is underutilized due to heavy competition and lack of demand. For full utilization there would be required 8 additional man hours on each of the second and third shift.

The capacity of the factory is based on 3 shifts. At present it is working on one shift only due to heavy competition.

VI. VALUE ADDED (in 000 US \$)

(1966)

	Value
1. Wages & salaries	
- Employees in direct production (15 persons)	5
- Other employees (4 persons)	10
2. Other payments for employees (incl. in 1)	
3. Annual depreciation	7
4. Rentals paid	1
5. Interests and royalties	3
6. Sales tax	-
7. Other ind. bus. tax (-) subsidies	-
8. Corporate income before tax	1
TOTAL VALUE ADDED:	27

VII. MONTHLY EARNING RATES (in US \$)

(End of 1966)

	No. of emp.	Average earning rates
1. Local non-operatives		
total:	4	196
- Managers	1	420
- Engineers	-	-
- Technicians	-	-
- Accountants	1	140
- Sales officers	-	-
- Clerks and typists	2	112
2. Local operatives		
total:	15	28
- Supervisors	-	-
- Foremen	-	-
- Machine operators	5	28
- Craftsmen	2	49
- Truck drivers	1	28
- Other fulltime operators	6	21
- Unskilled operat.)	1	28
- Part-time operat.)	-	-
3. Foreign employees		
total:	-	-

V. ANNUAL CONSUMPTION (in 000 US \$)

(1966)

1. Energy and water	Quantity consumed		%	Tariff rate	Total consumption value
	Unit	Purchases			
Electricity	000 Kwh	29.70	-	-	2
Lubricants	galls.	285	-	-	0.3
Water	galls.	95,000	-	-	0.1
2. Production materials					114
total:					114
Nail wire	t	733	100	-	114

	TOTAL consumption value
3. Other materials and supplies	
total:	7
- Packaging (15,000 gunny bags)	2
- Parts etc. for equipm. maintenance	5
4. Business services purchased	
total:	9
- Communio., advertising, etc.	9
5. Work performed by sub-contractors	
total:	-
TOTAL VALUE OF CONSUMPTION:	132

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY (in US \$)

(1965)

1. Size groups by establishments	No. of establs.	No. of empl.	Avr. U.S. emp. per estab.	1958-codes	
				Avr. gross prod. val./ emp.	Avr. emp. / gross prod. value *
10 - 19	10	149	..	..
20 - 49	1	49	..	..
50 - 99	1	64	..	..
100 - 499	7	1,663	..	..
over 500	-	-	-	-	
total	19	1,925	877	3,220	
2. Size groups by scale of production of establishments					
up to 2					
2 - 9					
9 - 49					
49 - 100					
100 - 249					
249 - 499					
499 - 1,000					
1,000 - 4,000					
over 4,000					
total					

No data available.

IX. SUPPLEMENTARY

Future plans

In 1967 - 68 approx. US\$ 14,000 will be invested to manufacture roofing nails.

Another 3 persons will be employed on the first shift.

* Capital is defined as physical capital assets.

EAST AFRICA : 350-(2)

MAJOR PRODUCTS: Manufacture of enameware (household wares), with an annual capacity output of 14 mill.pieces on 3-shift operation.

REPORTING UNIT: A one-establishment enterprise founded in 1964, private limited company, foreign capital participation of 45%.

I. FIXED CAPITAL ASSETS (in 000 US \$)	Year of compl.	Orig. purchase value	Replacement value
(End of 1966)			
1. Primary process equipment total:		61	79
- Process equipment	1963	26	35
- Hand tools and apparatuses		29	38
- Cost of installation		6	6
2. Primary industrial building total:	1942	22	28
(total floor space: .. m2)			
3. Auxiliary facilities total:		14	14
- Water, steam, electricity, cooling and storing		8	8
- Transportation facilities (total land: .. t)	1964	6	6
- Administrative facilities		-	-
- Laboratory facilities		-	-
TOTAL PHYSICAL FIXED CAPITAL ASSETS (excl. land):		97	121
4. Other fixed capital assets total:			
- Land (total acreage: 2,508 m2)			rented
DETAIL OF I.1. (supplier):	Year of inst.	Orig. purchase value	Replacement value
No details available			

History of investment

Construction of the factory as well as trial production started in 1963, the first commercial production is 1964. The firm became profitable for the first time in 1966 when sales reached US\$532,000.

Advantages conncted with participation of foreign capital

Due to a know-how contract the number of technicians could be reduced (from 17 to 7).

II. INVENTORIES AND WORKING CAPITAL (in 000 US \$)		Actual value	Actual value
(End of 1966)			
1. Inventories		216	
total:			182
- Production materials		105	
- Other input materials		-	
- Work-in-process		56	
- Finished products		55	
2. Liquid assets			
total:			0.1
- Cash (hand/bank)			
- Market.ecc. A bonds			
- Short-term investment			
- Prepaid expenses			
- Accounts receivable			182
3. Desired working capital	No. of months	Value	
total:		420	
- Production materials	3	210	
- Other input materials		-	
- Work-in-process		-	
- Finished products	3	210	
- Wages and salaries		-	

* B - Machine operators

* C - Other operatives

III. MANNING TABLE

(1966 average)	Total	1st shift			2nd shift			3rd shift		
		P*	C*	B+C*	P*	C*	B+C*	P*	C*	B+C*
TOTAL EMPLOYED:	156	103	27	24						
1. Primary operative shops	132	25	56	27	24					
Cleaning and washing dept.	12	2	6	4						
Grinding mill dept.	3	3	-	-						
Furnace dept.	82	10	25	23	24					
Decoration dept.	15	10	5	-						
Packing dept.	20	-	20	-						
2. Auxiliary operative units	13	13	-	-						
- Repair and maintenance	1	1	-	-						
- Tooling shop	-	-	-	-						
- Mechanical shop	2	2	-	-						
- Utilities control	1	1	-	-						
- Product and material storage	-	-	-	-						
- Off-site transport	8	8	-	-						
- Guards, cleaners, etc.	1	1	-	-						
3. Auxiliary non-operative units	11	11	-	-						
- Production management	2	2	-	-						
- Research and development	1	1	-	-						
- Sales unit	-	-	-	-						
- Accounting	5	5	-	-						
- General administration	5	5	-	-						
- Others (clerks)	3	3	-	-						

CAPACITY OF OPERATIVE SHOPS:

WORKING TIME PER OPERATIVE WORKER:	
- Normal hours/day:	8 hours
- Normal days/year:	299 days
- Actual hours/year:	2,392 hours

The operations are neither automated nor mechanized. Manual operations only. In 1969 the company intended to invest US\$238,000 to enlarge the stamping capacity. 35 more operators will be required on the 1st and 2nd shifts.

Power supply:		Generation equipment:	
- Electric motors:	17 kw	- installed capacity:	- kVA

Water supply: long distance: poor during long rains; local area: fair.

Drainage: electricity, water: fair.

Community: residential, health and recreational, educational: fair.

IV. ANNUAL PRODUCTION (in 000 US \$)

(1966)

Products (or group of products)	Yr. of first prod.	Quantity produced		Nominal * capacity output	Unit price ex factory (US \$)	Total production value
		Unit	Output			
Household wares	1964	000 pieces	5,308	14,400	..	557
Total value of production						557

* Full capacity equal to 48,000 pieces/day on 3 shifts.

Exports

Part of the production (100 different items) is exported amounting to a total of US\$240,000.

VI. VALUE ADDED (in 000 US \$)

(1966)

	Value
1. Wages & salaries	
- Employees in direct production (145 persons)	90
- Other employees (11 persons)	17
2. Other payments for employees	9
3. Annual depreciation	17
4. Rentals paid	3
5. Interests and royalties	3
6. Sales tax	-
7. Other ind. bus. tax (-) subsidies	-
8. Corporate income before tax	9
TOTAL VALUE ADDED:	138

VII. MONTHLY EARNING RATES (in US \$)

(End of 1966)

	No. of empl.	Average earning rates
1. Local non-operatives total:		
- Managers		
- Engineers		
- Technicians		
- Accountants		
- Sales officers		No details available
- Clerks and typists		
2. Local operatives total:		
- Supervisors		
- Foremen		
- Machine operators		
- Craftsmen		
- Truck drivers		
- Semi-skilled operat.		
- Unskilled operat.		
- Part-time operat.		
3. Foreign employees total:		

V. ANNUAL CONSUMPTION (in 000 US \$)

(1966)

1. Energy and water total:	Quantity consumed		Tariff rate	Total consumption value
	Unit	Purchase		
- Electricity	000 KWH	66	-	17
- Liquid fuels and lubricants (diesel and fuel oil)	000 gallon.	61.5	-	13
- Water	000 gallons	127	-	1
2. Production materials total:				
Frits	000 lbs	820	100	107
Stamps	000 pieces	5,361	100	33 1/3 *
Other minor items (handles)	..	..	100	2
Cleaning chemicals	..	..	100	2

* Duty was only introduced during the latter half of 1966 (total duty paid was US\$31,500, included in above figure).

3. Other materials and supplies total:	35
- Packaging (cartons, strapping**)	19
- Parts for equip. maintenance**	16
4. Business services purchased total:	17
- Commercial advertising etc.	17
5. Work performed by sub-contractors total:	-
TOTAL VALUE OF CONSUMPTION:	419

** 100% imported

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY (in US \$)

(1965)

1. Size groups by establishments	No. of establs.	No. of empl.	Avr. W & S. per emp.	ISIC-code 35	
				Avr. gross prod. val. per emp.	Avr. emp. / gross prod. ratio *
10 - 19	10	149	..	..
20 - 49	1	49	..	..
50 - 99	1	64	..	..
100 - 499	7	1,663	..	..
over 500	-	-	-	-	
total	19	1,925	877	5,220	
2. Size groups by scale of production of establishments:					
up to 2	2				
2 - 8	8				
8 - 40	40				
40 - 120	120				
120 - 240	240				
240 - 400	400				
400 - 1,600	1,600				
1,600 - 4,000	4,000				
total					

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

Governmental policies

The company received refunds of customs duty for half the year 1966. From 31.12.1966, the company had to pay excise duty on frit at US\$0.56/gallon.

EL SALVADOR : 350 - (1)

Major Products: Copper and aluminium wires. Capable of producing annually 3,200 t of wires based on 3-shift operation.

Reporting Unit: A one-establishment enterprise, founded in 1962, public corporation, 50% participation of foreign capital.

I. FIXED CAPITAL ASSETS

(End of 1966)

	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
1. Primary process equipment		835	(*)
TOTAL			
- Process equipment	1965	671	
- Hand tools & apparatuses		92	
- Cost of installation		72	
2. Primary industrial building	1965	314	
TOTAL		314	
(total floor space: 4,600 m ²)			
3. Auxiliary facilities		126	
TOTAL:			
- Water, steam, electricity, cooling & storing		31	
- Transportation facilities		14	
- Administrative facilities		35	
- Laboratory facilities		46	
TOTAL PHYSICAL FIXED CAPITAL ASSETS including land:		1,275	
4. Other fixed capital assets		105	
TOTAL		105	
- Land (total acreage: 54,000 m ²)			
(*) The replacement value is likely to be about 30% higher than the original purchase value.			

DETAIL OF PROCESS EQUIPMENT (no.):	Supplier country	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
- Stranding machine	USA	1965	198	
- Twisting machines	"	1965/1966	194	
- Extruder	"	1965	186	
- Buncher	"	"	9	
- Braiding machines	"	"	15	
- Fractionating machine	"	"	10	
- Twisting machine (by couples)	"	"	10	
- Rewinding machine	"	"	8	
- Furnace	FR.Germ.	"	40	

HISTORY OF INVESTMENT:

Construction of the factory started in 1963, trial production in 1964 and commercial production in 1965. Profits accrued for the first time in November 1965 after utilizing 35% of the capacity. In March 1965 approximately US \$ 262,000 were invested to expand the production of telephone cables.

ADVANTAGES CONNECTED WITH FOREIGN CAPITAL PARTICIPATION:

- Training of personnel;
- Modern equipment and machinery;
- Use of foreign trade-marks and technology of world-wide renown;
- Use of best production materials;
- Use of modern marketing techniques.

CAPACITY POWER:

Process equipment:
- Electric motors: 600 kW
- Electric furnaces: 100 "

Generating equipment:
- Installed capacity: LVA

EXTERNAL CONDITIONS:

Transport: Long distance, fair; local area, excellent.
Utilities: Electricity, excellent; water, fair.
Community: Residential, health and recreational, educational, all poor.

II. INVENTORIES AND WORKING CAPITAL

In 000 US \$

(End of 1966)

	Actual value	2. Liquid assets	Actual value
1. Inventories	1,033	TOTAL:	576
TOTAL		- Cash (hand/bank)	10
- Production materials	362	- Market, sec. & bonds	1
- Other input materials	36	- Short-term investment	90
- Work-in-process	206	- Prepaid expenses	8
- Finished products	429	- Accounts receivable	467
3. Desired working capital			
TOTAL:			
- Production materials			
- Other input materials			
- Finished products			
- Wages & salaries			
- Other special items			

III. MANNING TABLE

(number of persons)

A - Machine operator
B - Other operator

(1966 average)

	Total	1st shift		2nd shift	3rd shift
		A	B	A+B	A+B
ALL SHOPS & UNITS:	149	82		43	24
1. Primary operative shops	79	24	6	30	19
- All shops	79	24	6	30	19
2. Auxiliary operative units	40	22		13	5
- Repair and maintenance	10	4		4	2
- Mechanical shop	4	2		2	1
- Utilities control	4	2		1	1
- Product & material storage	7	7		-	-
- Off-site transport	4	2		1	1
- Guards, cleaners, etc.	5	2		2	1
- Others (gardeners and laborers)	6	3		3	-
3. Auxiliary non-operative units	30	30		-	-
- Production management	1	1			
- Research & development	1	1			
- Sales unit	2	2			
- General administration	26	26			

WORKING TIME PER OPERATIVE WORKER:

- Normal hours/day: 8 hours - Normal days/year: 250 days
- Actual hours/year: 2,000 hours

CAPACITY OF OPERATIVE SHOPS:

EAST AFRICA : 334 - (1)

MAJOR PRODUCTS: Portland cement.
Capable of producing annually 130,000 t based on 3-shift operation.

REPORTING UNIT: A one-establishment enterprise, founded in 1964. Semi-public company as of 1967. Foreign capital participation.

I. FIXED CAPITAL ASSETS (in 000 US \$)				II. INVENTORIES AND WORKING CAPITAL (in 000 US \$)				
	Year of compl.	Orig. purchase value	Replacement value	(End of 1967)	Actual value		Actual value	
(End of 1967)				1. Inventories				
1. Primary process equipment total:				total:				
- Process equipment	1965-66	3,156	..	- Production materials	216	- Cash (hand/bank overdraft)	267	
- Hand tools and apparatuses		..	..	- Other input materials	405	- Market sec. & bonds	-
- Cost of installation		incl.	..	- Work-in-process	12	- Short-term investment	-	
2. Primary industrial building total:				2. Liquid assets total:				
(total floor space: .. m ²)		1,832	..	- Finished products	29	- Prepaid expenses	-	
3. Auxiliary facilities total:				3. Desired working capital total:				
- Water, steam, electricity, cooling and storing		612	..	- Production materials	-	- Machine operators	..	
- Transportation facilities (total load: .. t)		612	..	- Other input materials	-	- Other operatives	..	
- Administrative facilities		..	..	- Other special items (Receivables)	287		
- Laboratory facilities		..	..	- Finished products (or 5,000 t)	112		
TOTAL PHYSICAL FIXED CAPITAL ASSETS (excl. land):				4. Wages and salaries				
		5,600	..		21			
4. Other fixed capital assets total:				III. MANNING TABLE				
- Land (total acreage: 23,300 m ²)		rented	..	(1967 average)				
				Total	1st shift	2nd shift	3rd shift	
	Year of inct.	Orig. purchase value	Replacement value	B*	C*	B+C*	B+C*	
DETAIL OF I.I. (supplier):				TOTAL EMPLOYED:				
Quarry plant (PK)		159	..	369	246	67	56	
Crushing and screening plant (FR, Germ.)		231	..	140	34	47	32	
Raw mill and blending plant (FR, Germ.)		1.1	..	1. Primary operative shops				
silos		Quarry	17	8	2	4
Kiln plant (FR, Germ. and PK)		1,340	..	Crusher	11	2	3	3
Cement mill plant silos (PK)		484	..	Raw mill and blending	23	5	7	6
Packing plant (FR, Germ.)		1.6	..	Kiln	18	3	6	5
Water supply (FR, Germ.)		Cement mill (+ crane)	9	2	3	2
Gantry cranes (FR, Germ.)		1.9	..	Packing plant	62	14	26	12
Gypsum crusher (FR, Germ.)		33	..					
Power supply (FR, Germ.)		275	..					
HISTORY OF INVESTMENT:				2. Auxiliary operative units				
The construction of the factory started in 1964. Trial as well as commercial production began in 1966. First profits accrued in 1966, when production reached 4,000 t per month.				- Repair and maintenance				
				- Tooling shop				
				- Mechanical shop				
				- Utilities control				
				- Product and material storage				
				- Off-site transport				
				- Guards, cleaners, etc.				
				3. Auxiliary non-operative units				
				- Production management				
				- Research and development				
				- Sales unit				
				- Accounting				
				- General administration				
CAPACITY POWER:				CAPACITY OF OPERATIVE SHOPS:				
Prime equipment:				WORKING TIME PER OPERATIVE WORKER:				
- electric motors:	5,105 kW	Generating equipment:		- Normal hours/day:	8 hours			
- other prime movers:	26 kW	- installed capacity: - kVA		- Normal days/year:	.. days			
GENERAL CONDITIONS:				- Actual hours/year:	2,340 hours			
Location:	Long distance, poor; local, fair.							
Utilities:	Electricity and water, fair.							
Community:	Residential, health and recreational, educational facilities, poor.							

All machines and equipment are guaranteed at 130,000 t per annum on a 3-shift basis. Actual utilization is 150,000 t. Fully automated production.

IV. ANNUAL PRODUCTION

(1966)	Yr. of Prod. prod.	Quantity produced		Standard capacity output	Unit price or quantity US \$	Total production value 1966 US \$
		Unit	Output			
Products for group of products						
Copper and aluminium wires	1966	t	1,905	3,200	1,592.40	3,033
TOTAL VALUE OF PRODUCTION						3,033

COMPETITIVE IMPORTS:

The following tariff rates are imposed on imported goods like:

	Tariff rate	
	per gross kg + ad valorem	
Copper wire	US \$ 0.05	15%
Aluminium wire	" " 0.20	15%

EXPORTE:

Copper and aluminium wires are exported at US \$ 1,560 / t.

Trade among the member countries of the Central American Common Market is unrestricted.

CAPACITY UTILIZATION:

In 1966, the company's 2nd year of commercial production, already 60% of the nominal capacity output could be achieved.

VI. VALUE ADDED

(1966)	Value 1966 US \$
1. Wages & salaries	
- Employees in direct production (79 persons)	38
- Other employees (70 persons)	112
2. Other payments for employees	26
3. Annual depreciation	38
4. Rentals paid	-
5. Interests & royalties	114
6. Sales tax	-
7. Other ind. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	144
	602

VII. MONTHLY EARNING RATES

(End of 1966)	No. of pers. emp.	Average earning rates US \$
1. Local non-operative		
TOTAL:	28	237
- Managers	2	560
- Engineers	1	480
- Technicians	2	300
- Accountants	5	240
- Sales officers	1	280
- Other professional staff	-	-
- Clerks & typists	17	180
2. Local operative		
TOTAL:	73	84
- Supervisors	1	600
- Foremen	4	180
- Machine operators	50	60
- Craftsmen	13	120
- Truck drivers	2	80
- Other full-time operatives	-	-
- Unskilled & part-time operatives	-	-
- Other specific category	3	48
3. Foreign employees		
TOTAL:	1	1,000
- Managerial staff	1	1,000

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed				Total consumption value 1966 US \$
	Unit	Purchase	% imported	Tariff rate	
1. Energy and water					44
TOTAL:					44
- Electricity	000 KwH	1,538			38
- Solid fuels	t	1.5			3
- Liquid fuels and lubricants	gallons	4,800			2
- Water	000 m3	300			1
2. Production materials					2,274
TOTAL:					2,274
- Copper	t	1,427	100	0.05	1,858
- Aluminium	t	383	100	0.20	212
- Band steel	t	149	100	0.05	26
- P.V.C.	t	400	100	0.30	155
- Polyethylene	t	53	100	0.15	23

	% imp.	Total consumption value 1966 US \$
3. Other materials & supplies		80
TOTAL:		80
- Packaging	5	59
- Repair & maintenance	50	13
- Non-factor service inputs		8
4. Business services purchased		33
TOTAL:		33
- Transport, storage & insurance		13
- Communication, advertisements, etc.		20
5. Work performed by sub-contractors		-
TOTAL:		-
		2,431

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(196)	Industry group:		(SIC:)
1. Size group by number of persons employed	Number of units	Number of empl.	Avg. ann. prod. val. per unit (US \$)
up to			
No data available.			
TOTAL			
2. Size group by value of annual production 1966 US \$:			Avg. ann. emp. cost per unit (US \$)
up to			
TOTAL			

IX. SUPPLEMENTS

Future plan:

In 1968 approximately US \$ 1,400,000 will be invested to introduce a new line of products. 15 persons are to be employed additionally on the 1st shift, and 10 on the 2nd and on the 3rd shifts each.

* Capital is defined as physical capital assets.

MEXICO : 250 - (1)

Major Products:

Steel angles, bolts, nuts, steel wire rods, tanks, props, etc. Capable of producing 110,000 t of these products on 3-shift operation.

Reporting Unit:

A one-establishment enterprise, founded in 1951, private corporation, percentage of foreign capital unknown.

I. FIXED CAPITAL ASSETS

(End of 1966)

	Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
1. Primary process equipment		23,318	38,310
TOTAL		11,105	18,490
- Process equipment		554	665
- Hand tools & apparatus		11,659	19,155
- Cost of installation			
2. Primary industrial building	1965	2,935	3,399
TOTAL		2,935	3,399
(total floor space: 38,624 m ²)			
3. Auxiliary facilities		258	242
TOTAL		-	-
- Water, steam, electricity, cooling & storing	1965/66	40	24
- Transportation facilities			
- Administrative facilities	1966	218	218
- Laboratory facilities			
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		26,511	41,951
4. Other fixed capital assets		124	1,370
TOTAL		124	1,370
- Land (total acreage: 285,397 m ²)			

DETAIL OF PROCESS EQUIPMENT (no.):

	Supplier country	Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
- Electric furnaces	USA	1952/55/65	1,205	2,202
- Continuous casting equipment	France	1964	1,720	2,580
- Cupola furnace	Mexico	1962	40	60
- Reheating furnaces	Mexico	1952/63	602	1,031
- Other furnaces	various	1965	173	259
- Rolling mills	USA	1952/65	2,503	4,412
- Movable cranes	Mexico	PR, Term.	1952/64/65	1,041
- Galvanizing pans	Mexico	1960/62/65	99	161
- Twisting machines	Belgium	1957/62	137	206
- Forging machines	..	1960	95	83
- Die sinking machines	..	1960	66	99
- Various equipment	various	1953/65/66	3,458	5,188

HISTORY OF INVESTMENT:

Construction of the factory started in 1951. The first trial production as well as commercial production started in 1953. Profits accrued in the same year, after utilizing 5% of capacity. The following investments for expansion purposes were made:

Year	approx.	US \$	Department
1955	"	1,154,000	Steel department
1963	"	1,917,000	Nearly all departments (galvanizing, bolts and nuts, etc.)
1964	"	2,076,000	Nearly all departments and installation of a 2nd line in the continuous casting plant
1965	"	2,344,000	Foundry department, new forges

TECHNICAL ADVANTAGES DUE TO PARTICIPATION OF FOREIGN CAPITAL:

- Training of personnel
- Supply of foreign equipment, machinery, and patents
- Supply of high quality production materials (disadvantage: expensive)
- Credit at low rates of interest

CAPACITY POWER:

Process equipment:	Generating equipment:
Electric motors: 4,608 kW	Installed capacity: - kVA
- Other prime movers: 360 "	- Electric furnaces: 12,255 kW

EXTERNAL CONDITIONS:

Transport: Long distance, fair; local area, excellent.

Utilities: Electricity, water, gas, all excellent.

Community: Residential, health and recreational, fair; educational, poor.

II. INVENTORIES AND WORKING CAPITAL

In 1000 US \$

(End of 1966)

	Actual value	2. Liquid assets	Actual value
1. Inventories	4,741	TOTAL	2,564
TOTAL		- Cash (hand/bank)	49
- Production materials	783	- Market. sec. & bonds	11
- Other input materials	770	- Short-term investment	126
- Work-in-process	1,815	- Prepaid expenses	228
- Finished products	1,373	- Accounts receivable	2,150

3. Deared working capital

	Number of months	Value
TOTAL		4,305
- Production materials	2	891
- Other input materials	2	640
- Finished products	1	2,543
- Wages & salaries	1	178
- Other special items	1	53

III. MANAGING TABLE

(number of persons)

A - Working operators
B - Other operators

(196 average)

	Total	1st shift A	2nd shift B	1st shift A+B	2nd shift A+B
ALL SHOPS & UNITS:	1,685	1,046	412	227	227
1. Primary operative shops	1,034	444	96	321	173
- Foundry	123	48	8	36	31
- Foundry and moulding of iron and steel pieces	26	21	5	-	-
- Continuous casting	66	23	5	19	19
- Rolling	185	58	11	59	57
- Turning shop	137	38	8	46	45
- Traffic and handling	35	11	6	12	6
- Construction of steel structures	130	68	23	38	1
- Production of bolts and nuts	71	38	3	26	4
- Galvanizing	78	24	20	33	1
- Steel wire drawing	61	27	-	25	9
- Fabrication of metal structures	122	88	7	27	-
2. Auxiliary operative units	326	238	58	30	30
- Repair and maintenance	40	30	8	8	2
- Mechanical shop	153	93	38	38	22
- Utilities control	12	5	4	4	3
- Product & material storage	95	87	5	5	3
- Off-site transport	3	3	-	-	-
- Guards, cleaners, etc.	31(*)	11(*)	10(*)	10(*)	10(*)
- Others	23	20	3	3	-
(*) Not included in the total, are considered as governmental service					
3. Auxiliary non-operative units	325	268	33	24	24
- Production management	12	12	-	-	-
- Research & development	31	31	-	-	-
- Sales unit	14(**)	14(**)	-	-	-
- General administration	93	93	-	-	-
- Others	175	118	33	33	24
(**) Not included in "value added"					

WORKING TIME PER OPERATIVE WORKER:

- Normal hours/day:	8.25 hours	- Normal days/year:	298 days
- Actual hours/year:	2,458.5 hours		

CAPACITY OF OPERATIVE SHOPS:

Operative shop	Capacity/month	Shifts	Utilization rate
Foundry department	9,720 t	3	78 %
Ingots "	2,200 t	3	90 %
Continuous casting department	6,000 t	3	93 %
Bolts and nuts dept.:			
- Forging	150 t	3	48 %
- Punching	90 t	3	80 %
- Thread cutting	150 t	3	48 %

In order to process the whole output of the foundry department another casting line will be installed in 1969.

IV. ANNUAL PRODUCTION

(1966) Products (or group of products)	Yr. of first prod.	Quantity produced		Unit price as factory (US \$)	Total production value (US \$ '000)	
		Unit	Output			
- Steel angles, tubes and steel wire rods (normal, Tor 40 and Tor 60)	1953/54	t	60,448	90,500	175.1	10,586
- Moulded gray iron pieces	1966	t	660*	1,500	-	-
- Moulded steel pieces	1963	t	35*	250	-	-
- Galvanized turrets	1961	t	8,111	15,000	341.4	2,769
- Nuts and bolts	1963	t	494	1,750	844.8	418
- Steel wire work	1963	t	1,034	..	280.2	290
- Radial gates	1955	t	81	..	873.6	70
- Subterranean tanks	1962	t	277	..	490.5	136
- Structural posts	1962	t	25	..	474.9	12
- Concrete proportioning plant	1965	pcs	1	..	5,967.5	6
- Metallic structures	1954	t	45	..	432.8	20
- Metallic props for tunnel work	1965	t	416	..	395.2	164
- Other products	..	..	..	..	..	102
- Internally consumed	..	..	1,500	..	..	-
TOTAL VALUE OF PRODUCTION						14,573

* Internally consumed

CAPACITY UTILIZATION:

Under-utilization of existing capacity due to lack of demand. Annual requirements of additional man-hour for full utilization: 1st shift - 28,608; 2nd shift - 226,480; 3rd shift - 417,200.

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed				Total consumption value (US \$ '000)
	Unit	Purchase	% imported	Tariff rate	
1. Energy and water					
TOTAL:					1,275
- Electricity	000 KwH	56,300	-	-	1,033
- Coke	t	234	-	-	9
- Liquid fuels and lubricants	000 m ³	19	-	-	233
- Water	000 m ³	29	-	-	own supply
2. Production materials					
TOTAL					7,168
- Scrap	t	72,652	11	3	3,559
- Raw materials for casting	t	4,148	-	-	318
- Ferrosilicium	t	431	-	-	155
- Ferromanganese	t	591	-	-	172
- Iron alloys	t	11	-	-	17
- Aggregates (aluminum, calcareous stones, etc.)	..	..	-	-	24
- Electrodes and nipples	..	..	-	-	310
- Other production materials (dolomite, refractories, oxygen, acetylene, etc.)	..	..	-	-	1,006
- Various (screws, nuts, profiles, tubes, cables, galvanizing materials, etc.)	..	..	-	-	1,607

VI. VALUE ADDED

(1966)	Value (US \$ '000)
1. Wages & salaries	
- Employees in direct production (1,360 persons)	1,238
- Other employees (311 persons)	891
2. Other payments for employees	644
3. Annual depreciation	830
4. Rentals paid	8
5. Interest & royalties	1,290
6. Sales tax (not incl. in TOTAL)	(239)
7. Other ind. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	743
	5,644

VII. MONTHLY EARNING RATES

(End of 1966)	No. of pers. emp.	Average monthly rate (US \$)
1. Local non-operative		
TOTAL		
- Managers	4	1,160
- Engineers	4	720
- Technicians	26	128
- Accountants	11	288
- Sales officers	14	533
- Other professional staff	55	391
- Clerks & typists	195	147
2. Local operative		
TOTAL		
- Supervisors	-	-
- Foremen	9	94
- Machine operators	522	93
- Craftsmen	152	98
- Truck drivers	14	87
- Other full-time operatives	663	56
- Unskilled & part-time operatives	-	-
3. Foreign employees		
TOTAL		
- Engineers, trainers and other technical control staff	2	1,200

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965) Manufacture of metal products except machinery and transport equipment (HMC: 350)						
1. Size groups by number of persons employed	Number of estab.	Number of emp.	Av. gross prod. val. per pers.		Av. emp. gross prod. rate* (%)	
			US \$	US \$		
up to 5	2,889	8,021	354	1,664	42	
6 - 15	768	6,954	680	3,560	65	
over 15	911	82,507	1,257	5,890	76	
TOTAL	4,568	97,482	1,141	5,377	76	
2. Size groups by value of annual production (US \$ '000)						
up to 2	5,138	8,294	52	557	38	
2 - 8	2,139	5,879	312	1,432	34	
over 8	1,913	90,215	1,207	5,728	77	
TOTAL	9,190	104,388	1,065	5,075	76	

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

Governmental policies:

In case the company extends its production programme, subsidies should also be granted for these new products. So far subsidies are given only for the production of goods which have not been produced nationally.

Future plans:

Between 1969 and 1973 approximately US \$ 2,000,000 will be invested for expansion of the scrap preparation, casting, foundry and rolling departments.

MEXICO : 350 - (2)

Major Products: Cables, wires and wire products. Capable of producing annually 65,000 t of cables and 80,000 t of wire and wire products, on 3-shift operation.

Reporting Unit: A one-establishment enterprise; founded in 1945; private corporation; no participation of foreign capital.

I. FIXED CAPITAL ASSETS

(End of 1966)

	Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
1. Primary process equipment			
TOTAL		6,384	16,800
- Process equipment		6,384	16,800
- Hand tools & apparatuses		-	-
- Cost of installation		-	-
2. Primary industrial building		531	800
TOTAL		531	800
(total floor space: 28,387 m ²)			
3. Auxiliary facilities		170	240
TOTAL		170	240
- Water, steam, electricity, cooling & storing		-	-
- Transportation facilities		-	-
- Administrative facilities		170	240
- Laboratory facilities		-	-
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		7,085	17,840
4. Other fixed capital assets		20	480
TOTAL		20	480
- Land (total acreage: 64,555 m ²)			

DETAIL OF PROCESS EQUIPMENT (no.):

	Supplier country	Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
Foundry			1,177	3,200
Rolling mill			925	3,200
Wire-drawing			2,192	4,800
Wire products			1,455	4,000
Transport equipment			318	800
Various			317	800

HISTORY OF INVESTMENT:

The factory was constructed in 1945. Trial as well as commercial production started in 1948. In the same year profits accrued for the first time. The following investments for expansion purposes were made: (in 1000 US \$)

Year	Approx.	Value	Purpose
1945	approx.	1,200	Rolling of steel ingots
1956	"	4,000	Merger with other companies
1959	"	6,000	Production department
1962	"	8,000	Production department

CAPACITY POWER:

Process equipment:		Generating equipment:	
- Electric motors:	2,453 kW	Installed capacity:	- kVA
- Electric furnaces:	20,800		

EXTERNAL CONDITIONS:

Transport: Long distance, excellent; local area, fair.

Utilities: Electricity, water and gas, excellent.

Community: Residential, health and recreational, educational, fair.

II. INVENTORIES AND WORKING CAPITAL (in 1000 US \$)

(End of 1966)

	Actual value	Actual value	
1. Inventories	4,737	2. Liquid assets	4,266
TOTAL:		TOTAL:	
- Production materials	434	- Cash (hand/bank)	923
- Other input materials	1,056	- Market, sec. & bonds	9
- Work-in-process	1,628	- Short-term investment	-
- Finished products	1,589	- Prepaid expenses	175
		- Accounts receivable	3,159
3. Desired working capital			
TOTAL:			
	Number of months	Value	
- Production materials	2	960	
- Other input materials	-	-	
- Finished products	2	3,200	
- Wages & salaries	2	560	
- Other special items	2	3,280	

III. MANNING TABLE (number of persons)

(1966 average)

	Total	1st shift		2nd shift	3rd shift
		A	B	A+B	A+B
ALL SHOPS & UNITS:	1,979	1,143		532	304
1. Primary operative shops	1,373	417	190	489	277
- Foundry	183	8	69	53	53
- Rolling mill	257	71	44	71	71
- Wire drawing	506	145	55	153	153
- Wire products (nails, screws, wire fabrics, cables)	427	133	22	212	-
2. Auxiliary operative units	235	247		25	13
- Repair and maintenance	53	20		20	13
- Mechanical shop	169	169		-	-
- Utilities control	53	53		-	-
- Product & material storage	10	5		5	-
- Off-site transport	-	-		-	-
- Guards, cleaners, etc.	-	-		-	-
3. Auxiliary non-operative units	321	289		18	14
- Production management	56	24		18	14
- Research & development	-	-		-	-
- Sales unit	6	6		-	-
- General administration	259	259		-	-

WORKING TIME PER OPERATIVE WORKER:

- Normal hours/day: 7.5 hours - Normal days/year: 291 days

- Actual hours/year: 2,182.5 hours

CAPACITY OF OPERATIVE SHOPS:

Capacity of rolling mill department is 65,000 t, utilization rate of capacity is 100%. Moderate automation. Grinder produces 65,000 t, but there exists demand for 80,000 t.

IV. ANNUAL PRODUCTION

(1966) Products for group of products	Yr. of first prod.	Quantity produced		Unit price in factory US \$	Total production value 1000 US \$
		Units	Standard capacity output		
Cables	1948	t	53,764 65,000	142,61	7,667
Wire and wire products	1956	t	78,393 80,000	252,36	19,818
TOTAL VALUE OF PRODUCTION					27,485

VI. VALUE ADDED

(1966)	Value 1000 US \$
1. Wages & salaries	
- Employees in direct production (1,668 persons)	1,111
- Other employees (371 persons)	1,367
2. Other payments for employees	530
3. Annual depreciation	422
4. Rentals paid	230
5. Interests & royalties	133
6. Sales tax	1,113
7. Other ind. bus. taxes	374
8. (-) Subsidies	-
9. Corporate income before tax	2,500
	9,477

CAPACITY UTILIZATION:

Production capacity of wire and wire products is restricted due to lack of capacity in the foundry and lamination department. Additional 5,000 man-hours on 1st shift and 6,600 man-hours on 2nd shift would be required for full utilization.

VII. MONTHLY EARNING RATES

(End of 1966)	No. of pers. emp.	Average earning rate US \$
1. Local non-operative		
TOTAL:	24	357
- Managers	1	1,111
- Engineers	-	-
- Technicians	-	-
- Accountants	6	480
- Sales officers	7	543
- Other professional staff	2	1,600
- Clerks & typists	7	168
2. Local operative		
TOTAL:	1,452	131
- Supervisors	3	155
- Foremen	77	240
- Machine operators	1,055	139
- Craftsmen	16	131
- Truck drivers	10	90
- Other full-time operatives	-	-
- Unskilled & part-time operatives	-	-
3. Foreign employees		
TOTAL:		

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed			Total consumption value 1000 US \$
	Unit	Purchases	% imported	
1. Energy and water				1,636
TOTAL:				1,636
- Electricity	000 Kwh	78,610		1,394
- Coal and fire wood	t	2,858		10
- Liquid fuels and lubricants		..		85
- Gas	000 m3	16,835		147
- Steam, water (self-supply)	000 m3	123		-
2. Production materials				17,717
TOTAL:				17,717
- Copper scrap	t	122,000	50 US\$1.4/t	16,207
- Fittings	t	1,110		1,019
- Lead	t	870		184
- Zinc	t	1,179		316
- Copper and aluminium wire	t	7		11

3. Other materials & supplies

TOTAL:	Total consumption value 1000 US \$
TOTAL:	193
- Packaging	246
- Repair & maintenance	267
- Non-factor service inputs	93
4. Business services purchased	
TOTAL:	40
- Transport, storage & insurance	5
- Communication, advertisements, etc.	35
5. Work performed by sub-contractors	
TOTAL:	

20,008

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965) Manufacture of metal products, except Industry group: machinery and transport equipment (BNC: 350)					
1. Size groups by number of persons employed:	Number of estab.	Number of emp.	Avg. W. & S. per pers. US \$	Avg. gross prod. val. per pers. US \$	Avg. emp. gross prod. value* US \$
up to 5	2,889	8,021	354	1,664	42
6 - 15	768	6,954	680	3,560	65
over 15	911	82,507	1,257	5,890	76
TOTAL	4,568	97,482	1,141	5,377	76
2. Size groups by value of annual production 1000 US \$:					
up to 2	5,138	8,294	52	557	38
2 - 8	2,139	5,879	312	1,432	34
over 8	1,913	90,215	1,207	5,728	77
TOTAL	9,190	104,388	1,065	5,075	76

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

Future plant:

In 1967 - 1968, approx. US \$120,000.- will be invested for purchasing a new rolling mill and machinery for the production of different kinds of wire products.

MEXICO : 350 - (3)

Major Products: Tin cans. Capable of producing annually 195 million tin cans on 3-shift operation.

Reporting Unit: A one-establishment enterprises founded in 1944, privately owned, 1/3 foreign, 2/3 national capital of which 2/3 are public investment.

I. FIXED CAPITAL ASSETS

(End of 1966)		Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
1 Primary process equipment				
TOTAL				
- Process equipment			1,659	2,221
- Hand tools & apparatuses			-	-
- Cost of installation			-	-
2 Primary industrial building				
TOTAL				
(total floor space: 17,622 m ²)		1959	499	599
			499	599
3 Auxiliary facilities				
TOTAL				
- Water, steam, electricity, cooling & storing		1962-1966	15	16
- Transportation facilities			-	-
- Administrative facilities		1966	41	50
- Laboratory facilities			-	-
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):				
			2,220	2,886
4 Other fixed capital assets				
TOTAL				
- Land (total acreage: 30,529 m ²)			20	38
			20	488

DETAIL OF PROCESS EQUIPMENT (no.):	Supplier country	Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
Automatic production lines		7		
Semi-automatic production lines		2		
Automatic dies for tin sizing		6		
Sets of dies of different sizes		20		
Equipment for lithographic work (presses, coating and drying machines)	USA	1945-1966	1,659	2,221
Line for manufacture of high vacuum can top stock				
Mechanical shop:				
Lathes		8		
Compressors		4		
Laboratory equipment				

HISTORY OF INVESTMENT:

Construction of the factory started in 1946. The first trial as well as commercial production started in 1948. By the end of 1949 the factory became profitable. In 1956 approx. US \$ 720,000 were invested to expand the production of sanitary containers, the automatic lines and ware-houses. In 1962 approx. US \$ 160,000 were invested to expand the high vacuum covers department and to introduce a new lithographic line.

TECHNICAL ADVANTAGES DUE TO PARTICIPATION OF FOREIGN CAPITAL:

- Training of operatives
- Protection of processing methods

CAPACITY POWER:

Process equipment:	Generating equipment:
Electric motors: 580.0 kW	Installed capacity: - kVA
- Other prime movers: 1.0 "	- Electric furnaces: 28.2 kW
	- Other furnaces (drier): 98.0 "

EXTERNAL CONDITIONS:

Transport: Long distance, excellent; local area, fair.
 Utilities: Electricity, water, gas, all excellent.
 Community: Residential, health and recreational, educational, all fair.

II. INVENTORIES AND WORKING CAPITAL

In 1000 US \$

(End of 1966)		Actual value	Actual value
1. Inventories		1,781	946
TOTAL			
- Production materials	493	- Cash (hand/bank)	128
- Other input materials	339	- Market. sec. & bonds	-
- Work-in-process	498	- Short-term investment	115
- Finished products	451	- Prepaid expenses	226
		- Accounts receivable	477
2. Liquid assets			
TOTAL			
3. Deared working capital			
TOTAL			
	Number of months	Value	
- Production materials	3	960	
- Other input materials	3	147	
- Finished products	2	480	
- Wages & salaries	2	160	
- Other special items	3	1,000	

III. MANNING TABLE

(number of persons)

(1966 average)	Total	1st shift		2nd shift	
		A	B	A+B	A+B
ALL SHOPS & UNITS:	509	288		139	82
1. Primary operative shops	337	71	108	96	62
- Lithographic printing shop	32	6	5	11	10
- Cutters	45	15	20	8	2
- Automatic assembling	103	24	24	34	21
- Tin sizing	71	6	20	25	20
- Die-making	41	20	6	11	4
- Quality control	45	-	33	7	5
2. Auxiliary operative units	123	62		42	19
- Repair and maintenance	18	11		5	2
- Mechanical shop	23	10		8	5
- Utilities control	29	16		11	2
- Product & material storage	18	8		6	4
- Off-site transport	3	3		-	-
- Guards, cleaners, etc.	23	10		9	4
- Others	9	4		3	2
3. Auxiliary non-operative units	49	47		1	1
- Production management	7	5		1	1
- Research & development	2	2		-	-
- Sales unit	3	3		-	-
- General administration	30	30		-	-
- Others (programmer, indust. engineer)	7	7		-	-

WORKING TIME PER OPERATIVE WORKER:

- Normal hours/day:	7.73 hours	Normal days/year:	302 days
- Actual hours/year:	2,334 hours		

CAPACITY OF OPERATIVE SHOPS:

Operative shops (Capacity)	Description of process	Shifts	Automation and mechanization
Lithographic printing shop (3 machines)	Tin-plate printing	3	Moderate
Assembly (7 machines)	Assembly	2 and 3	"
Cutting (15 machines)	Cutting of strips	2 " 3	"
Die-making (30 machines)	Forming of covers	2 " 3	"

IV. ANNUAL PRODUCTION

(1966)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price in factory (US \$)	Total production value (000 US \$)
		Unit	Output			
Products for group of products						
Pin cane	1948	000pcs.	122,764	195,000	..	3,804
Other products	"				..	614
Scrap					..	134
TOTAL VALUE OF PRODUCTION						4,557

CAPACITY UTILIZATION:

Capacity under-utilised due to technological reasons and to insufficient supply of raw material, which on account of governmental policies cannot be imported.

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed				Total consumption value (000 US \$)
	Unit	Purchase	% imported	Tariff rate	
1. Energy and water					41
TOTAL					
- Electricity	000 Kwh	756			33
- Lubricants	000 l	10,5			2
- Gas	t	109			4
- Water	000 m ³	120			4
2. Production materials					3,233
TOTAL					
- Tinned sheet iron	000 boxes	262			3,038
- Compounds		..			95
- Tints and varnishes		..			80
- Solder		..			20

VI. VALUE ADDED

(1966)	Value (000 US \$)
1. Wages & salaries	
- Employees in direct production (500 persons)	291
- Other employees (115 persons)	208
2. Other payments for employees	-
3. Annual depreciation	178
4. Rentals paid	-
5. Interests & royalties	133
6. Sales tax (not incl. in D.T.A.)	111
7. Other ind. bus. taxes	1
8. (-) Subsidies	-
9. Corporate income before tax	108
	416

VII. MONTHLY EARNING RATES

(End of 1966)	No. of pers. emp.	Average earning rate (US \$)
1. Local non-operatives		
TOTAL	55	223
- Managers	2	1,040
- Engineers	4	440
- Technicians	-	-
- Accountants	2	400
- Sales officers	4	160
- Other professional staff	2	160
- Clerks & typists	51	175
2. Local operatives		
TOTAL	535	102
- Supervisors	1	400
- Foreman	1	160
- Machine operators	133	101
- Craftsmen	29	101
- Truck drivers	2	120
- Other full-time operatives	367	101
- Unskilled & part-time operatives	-	-
3. Foreign employees		
TOTAL	1	1,000
- Engineers, trainers and other technical control staff	1	1,000

3. Other materials & supplies

	Total consumption value (000 US \$)
TOTAL	361
- Packagings	82
- Repair & maintenance	269
- Non-factor service inputs	12
4. Business services purchased	
TOTAL	2
- Transport, storage & insurance	1
- Communication, advertisements, etc.	1
5. Work performed by sub-contractors	
TOTAL	-
	3,641

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965) Manufacture of metal products, except machinery and transport equipment (ISIC: 350)						
1. Size groups by number of persons employed		Number of estab.	Number of emp.	Avg. gross prod. vol. per pers. (000 \$)	Avg. gross prod. vol. per pers. (000 \$)	Avg. emp. gross prod. rate* (%)
up to	5	2,589	8,021	354	1,664	42
6 -	15	768	6,954	680	3,560	65
over	15	911	82,507	1,257	5,890	78
TOTAL		4,568	97,482	1,141	5,377	76
2. Size groups by value of annual production (000 US \$):						
up to	2	5,138	8,294	52	557	38
2 -	8	2,139	5,879	312	1,432	34
over	8	1,913	90,215	1,207	5,728	77
TOTAL		9,190	104,388	1,065	5,075	76

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

Government policies:

Imports of production materials are prohibited.

Future plan:

Within a period of 6 years approx. US \$ 1,600,000 will be invested in a new plant and in a production line for beer cans.



7 4.09.12

IV. ANNUAL PRODUCTION (in 000 US \$)

(1967)

Products (or group of products)	Yr. of first prod.	Quantity produced Unit	Nominal capacity output	Unit price ex factory (US \$) (avr.)	Total production value
Portland cement	1967	t 146,137	120,000	26.2	2,352
Aggregate (crushed limestone)	1967	t 49,252	..	2.5	123
Total value of production					3,075

* based on 3-shift operation

VI. VALUE ADDED (in 000 US \$)

(1967)

	Value
1. Wages & salaries	
- Employees in direct production (113 persons)	333
- Other employees (56 persons)	133
2. Other payments for employees	27
3. Annual depreciation	199
4. Rentals paid	3
5. Interests and royalties	221
6. Sales tax	-
7. Other ind. bus. tax (-) subsidies	-
8. Corporate income before tax	818
TOTAL VALUE ADDED:	1,113

COMPETITIVE IMPORTS:

C.I.f. price of imported cement amounts to US \$ 22.90. A customs duty of US \$ 0.49 is charged.

V. ANNUAL CONSUMPTION (in 000 US \$)

(1967)

1. Energy and water	Quantity consumed		Tariff rate	Total consumption value
	Unit	Purchase		
total:				467
- Electricity	000 kWh	15,025		262
- Fuel oil	gallon	2,954,515		139
- Lubricants	gallon	2,100		2
- Water	gallon	7,215		5
2. Production materials				255
total:				255
Cement production:				
- Limestone	t	210,106		91
- Clay (red earth)	t	16,699		9
- Gypsum	t	15,883	30%	134
Aggregate production:				
- Limestone	t	49,252		21

VII. MONTHLY EARNING RATES (in US \$)

(End of 1967)

	No. of empl.	Average earning rates
1. Local non-operatives total:		
- Managers		
- Engineers		
- Technicians		
- Accountants		
- Sales officers		
- Clerks and typists		
2. Local operatives total:		
- Supervisors		By details
- Foremen		
- Machine operators		available
- Craftsmen		
- Truck drivers		
- Semi-skilled operat.		
- Unskilled operat.		
- Part-time operat.		
3. Foreign employees total:		12% of skilled staff are foreign employees

	Total consumption value
3. Other materials and supplies total:	261
- Packaging (bags, 1,425, 400 per)*	240
- Parts, etc. for equipment maintenance	21
4. Business services purchased total:	150
- Communications, advertising, etc.	150
5. Work performed by sub-contractors total:	-
TOTAL VALUE OF CONSUMPTION:	1,113

* 100% imported

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY (in US \$)

(1965)

1. Size groups by establishments	No. of establs.	No. of empl.	Avr. M. & S.	ISIC-codes	
				252, 253	251, 252, 253
10 - 19	3	40	..	..	..
20 - 49	3	110	..	..	..
50 - 99	3	278	..	..	..
100 - 499	-	-	-	-	-
over 500	-	-	-	-	-
total	9	428	479	7,477	..

2. Size groups by scale of production of establishments:

up to 2		No data available.
2 - 8		
8 - 40		
40 - 120		
120 - 240		
240 - 400		
400 - 1,600		
1,600 - 4,000		
total		

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

Future Plan:

The original planning and design of the factory provided for duplication and triplication of the plant and buildings. Work is now in hand for the second stage of development (1969-1971). Estimated cost of the expansion programme is US \$ 4,200,000. Duplication of all processes will increase production by 250,000 t of cement per year. Additional labour will be employed: 1st shift 40 persons, 2nd shift 30 and 3rd shift 20 persons (estimate).

Major Products:

Cement.
Capable of producing 180,000 tons of Portland cement on 3-shift operation. Electricity is internally generated and partly sold.

Reporting Unit:

A one-establishment enterprise, wholly government owned; founded in 1932. No foreign capital participation. Until 1949 the enterprise had been subsidized by the government. The first break-even point was reached in 1949 but in 1965 the enterprise had a substantial operating loss at an output level of about US \$ 3,000,000. No exports.

I. FIXED CAPITAL ASSETS

(End of 1968)

	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average (Yrs.)
1. Primary process equipment (including installation cost)	3,418	(2,270) ^{1/}	..
TOTAL	2,936	(2,257)	..
- Process equipment *	58	(13)	..
- Hand tools & apparatuses	424	(..)	..
- Cost of installation			
2. Buildings	126	2,779	..
TOTAL	62	1,268	..
- Primary industrial buildings (total floor space: 23,674 m ²)	14	282	..
- Auxiliary buildings	39	1,143	..
- Warehouses	11	86	..
- Office administration buildings	-	-	-
- Housing	-	-	-
3. Auxiliary facilities (excl buildings)	179	(159) ^{1/}	..
TOTAL	-	-	-
- Internal power equipment	-	-	-
- Laboratory facilities	-	-	-
- Means of transportation	114	(100)	..
- Office equipment	65	(59)	..
TOTAL PHYSICAL FIXED ASSETS (excluding land):	3,723	..	..
4. Other fixed capital assets	159	297	
TOTAL	159	297	
- Land (total acreage: 112,340 m ²)	-	-	-
- Land improvements	-	-	-
- Others	-	-	-

^{1/} Book value

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII).

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1968 monthly average)

	US\$	US\$	US\$	US\$	US\$	US\$
1. Local non-operatives						
- Managers ^{1/}			330	-		395
- Engineers ^{1/}			330	-		395
- Technicians ^{2/}			265	-		330
- Accountants			130	-		265
- Sales officers			200	-		240
- Clerks and typists			105	-		130
2. Local operatives			330	-		395
- Supervisors			90	-		120
- Foremen			-	-		-
- Skilled operatives			65	-		90
- Machine operators			65	-		90
- Craftsmen			65	-		100
- Truck drivers			65	-		80
- Unskilled operatives			60	-		80
- Other full-time operatives			60	-		80
- Part-time operatives			-	-		-
3. Foreign employees						
- Managerial staff						
- Technical staff						
- Other skilled operatives						
- Unskilled operatives						

^{1/} General and assistant manager
^{2/} Assistant engineers

EXTERNAL CONDITIONS:

Transport:	external long distance	fair
	internal long distance	excellent
	local and city	fair
Utilities:	electricity	fair
	water	excellent
	gas	-
Community:	residence	excellent
	health and recreation	excellent
	education	excellent
Own Welfare Facilities:	-	-

III. INVENTORIES

(End of 1968)

	Actual value (000 US \$)	Months of months
Inventories	1,215	..
TOTAL	1	..
- Production materials	950	..
- Other input materials	79	..
- Work-in-process	185	..
- Finished products	-	-

(See III. for liquid assets and desired working capital).

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift hours/day	8	8	8	hours
Actual hours/year	2,824	2,824	2,824	hours
Normal days/year:	353	353	353	days

IV. MANNING TABLE

(Number of personnel)

Shift categories: A. Supervisory staff and foremen (for all shifts)
B. Machine operators
C. Other operatives
D.

(1968 average)

	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	B-C	B-C
ALL SHOPS & UNITS:	742	148				79	79
			436				
1. Primary operative shops	486	17	169	142	79	79	
- Total primary operatives (including quarrying)	486	17	169	142	79	79	
2. Auxiliary operative units	146	21		125	-	-	
- Repair & maintenance	55	13		42	-	-	
- Mechanical shop	-	-		-	-	-	
- Tooling shop	8	1		7	-	-	
- Utilities control	7	2		5	-	-	
- Product & material storage	58	3		55	-	-	
- Off-site transport	16	2		14	-	-	
- Quarts, cleaners, etc.	2	-		2	-	-	
3. Auxiliary non-operative units	110	110					
- Production management	1	1					
- Research & development	11	11					
- Sales unit	21	21					
- Accounting	2	2					
- General administration	42	42					
- Other departments	33	33					

V. ANNUAL PRODUCTION

(1968)	Yr. of first prod.	Quantity produced		*) Av. unit price on factory (US \$)	Total output value (1000 US \$)
		Unit	Quantity		
Products (or group of products)					
Portland cement	1933	t	155,000	21.4	3,312
Terrasse cement	1937	t	3,800	17.8	68
Electricity	1935	kWh	3,000,000	0.04	133
*) approximate					
TOTAL VALUE OF PRODUCTION:					3,513

VI. VALUE ADDED

(1968)	Total value (1000 US \$)
1. Annual wages & salaries	1,077
- Operative workers (632 persons)	908
- Non-operative workers (110 persons)	169
2. Other payments for employees	133
3. Annual depreciation	403
- Machinery & equipment	299
- Buildings & other facilities	104
- Non-physical capital assets	-
4. Rentals paid	-
5. Interests & royalties	-
6. Sales tax	-
7. Other indirect business taxes	42
8. (-) Subsidies	-
9. Corporate income before tax	181
TOTAL VALUE ADDED:	2,138

DESCRIPTION OF MAJOR PRODUCTS:

MARKET ASPECTS:

Consumers of products:
Mainly government agencies (public works).

Sales organization:
Own sales department.

Share in the domestic market:
10%.

Competition with imported products:
None.

EXPORT:

Total annual export: None.

Major products	To Western countries	To Eastern countries	To Developing countries

Prospects of exports:

Good, if prices could be reduced to a competitive level.

VII. ANNUAL CONSUMPTION

(1968)	Quantity consumed		% import	Average import duties	Total consumption value (1000 US \$)
	Unit	Quantity			
1. Energy and water					719.7
TOTAL:					719.7
- Coal		796	-	-	13
- Coke		16.7	-	-	0.5
- Kerosene oil		31.2	-	-	1.2
- Masout	t	32,000	-	-	634
- Fuel oil		752	-	-	30
- Gasoline		75	-	-	9
- Lubricants		100	-	-	32
2. Production materials					30
TOTAL:					30
- Lime stone		170,000 1/2	-	-	..
- Plaster		5,944	-	-	12
- Terrasse stone		854	-	-	2
- Clay		60,000 1/2	-	-	..
- Iron ball		70	-	-	15
- Other materials		4	-	-	1

1/2 Internally supplied and not counted in the total.

	Total consumption value (1000 US \$)
3. Other materials & supplies	96.8
TOTAL:	96.8
- Packaging material	80
- Parts, supplies & services	96
- Other materials & supplies	192
4. Business services purchased	257
TOTAL:	257
- Transportation, storage & insurance	189
- Communication, advertising & other business services	68
5. Work performed by subcontractors	-
TOTAL:	-
TOTAL VALUE OF CONSUMPTION:	1,375

VII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (1.1):

Mainly old type of machinery being gradually replaced by new types; only the machinery of repair shop is completely modern.

Remarks:
 SW Purchased second-hand
 (X) Owned
 R Rented
 S Self-constructed

Number	Original Purchase Value (USD US \$)	Replacement value (USD US \$)	Avg. Age (yrs)	Remarks	Further details
--------	-------------------------------------	-------------------------------	----------------	---------	-----------------

CAPACITY POWER:

Process equipment:
 electric motors kW -

Generating equipment:

installed capacity kVA 6,600
 - actual production in 1968 kWh 3,500

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Mechanization:
 A most advanced
 B considerably high standard
 C medium standard
 D appreciably above of today's standard
 E almost modern

Automation:
 I fully automated
 II semi-automated
 III unautomated

Major primary operative shops	Kind of process involved	Mechan.	Autom.	Further details
Primary operative shop	Manufacture of cement	B	II	

CAPACITY UTILIZATION:

Full-capacity output: approximately US \$ 4.0 million.

Current utilization:

Major products (or processes)	Approximate %									
	up to 20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	
Portland cement										X
Electricity										X

The over-all capacity utilization rate is considered to be about 90% (due to insufficient demand).

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output (USD US \$)	No. of persons employed	Total capacity (USD US \$)
1963	-	-	-
1964	2,350	738	-
1965	2,990	738	-
1966	3,620	738	-
1967	3,120	738	-
1968	3,510	742	-

2. Investment in the past:

From 19 to 19 : No significant expansion or replacement investment since 1955. (The factory had a nominal capacity of 160,000 t prior to 1955).

3. Future Plan:

From 19 to 19 : In the next five years no major capital investments are planned.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1967)

Industry: Manufacture of cement (hydraulic)

(SIC-Code: 334)

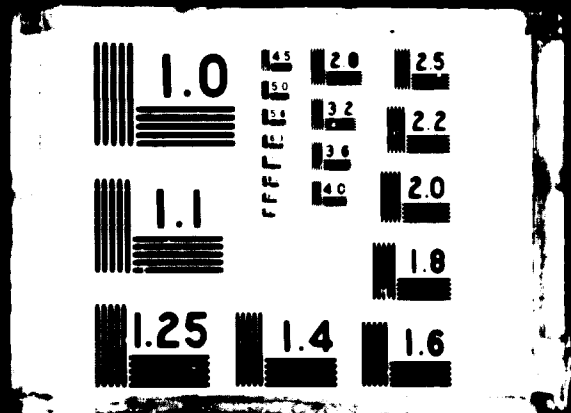
1. Size groups by number of persons employed	No. of estab.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. gross prod. vol. per pers. (US \$)	Av. value added/gross prod. ratio (%)	Capital assets per pers. (US \$)	No. of estab.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. gross prod. vol. per pers. (US \$)	Av. value added/gross prod. ratio (%)
up to 250	3	598	1,899	5,048	26	45,744					
251 - 350	2	603	1,357	7,633	69	11,928					
over 350	3	1,675	2,046	6,554	60	17,660					
TOTAL:	8	2,876	1,871	9,680	64	22,297	TOTAL:				

9

OF

11

02919



Major Products:

Steel mould-shots (produced from steel wire); annual capacity output with continuous three-shift operation is rated to be about 200 t.

Reporting Unit:

A new single-factory enterprise, founded in 1965; privately owned, no participation of foreign capital. (The year of reference is that of the first commercial production below the break-even point).

I. FIXED CAPITAL ASSETS

(End of 1966)	Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
1 Primary process equipment			
TOTAL	1966	97	97
- Process equipment		79	79
- Hand tools & apparatuses		-	-
- Cost of installation		14	14
2 Primary industrial building			
TOTAL			
(total floor space: 2,144 m ²)			
3 Auxiliary facilities			
TOTAL		5	5
- Water, steam, electricity, cooling & storing		-	-
- Transportation facilities		-	-
- Administrative facilities	1966	5	5
- Laboratory facilities		-	-
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land: (Equipment only))		100	100
4 Other fixed capital assets			
TOTAL		14	14
- Land (total acreage: .. m ²)			

DETAIL OF PROCESS EQUIPMENT (incl.)	Supplier country	Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
- Forges	U.S.A.	1966	0	9
- Brake	"	1966	15	15
- Furnaces	U.S.A.	"	14	14
- Polishers	U.S.A.	"	6	6
- Various equipment	Mex	"	14	14

HISTORY OF INVESTMENT:

The factory was constructed in 1965. Commercial production started in 1966. The firm made its first profits in 1967, when production amounted to some 10 t - 5% of the estimated full-capacity output.

CAPACITY POWER:
Process equipment: 150 kW
Electric motors: 150 kW

Generating equipment: installed capacity - kVA

EXTERNAL CONDITIONS:

Transport: Long distance and local area, excellent.
Utilities: Electricity, water and gas, fair.
Community: Residential and educational, fair; health and recreational, poor (recreation centres have to be built)

II. INVENTORIES AND WORKING CAPITAL

In 1000 US \$

(End of 1966)	Actual value	2. Liquid assets	Actual value
1 Inventories		TOTAL	33.1
TOTAL	14.1		
- Production materials	7	- Cash (hand/bank)	21
- Other input materials	2	- Market. sec. & bonds	-
- Work-in-process	5	- Short-term investment	-
- Finished products	0.1	- Prepaid expenses	0.1
		- Accounts receivable	12
3. Devised working capital			
	Number of months	Value	
TOTAL		16	
- Production materials	5	15	
- Other input materials	1	2	
- Finished products	1	7	
- Wages & salaries	1	4	
- Other special items	1	2	
- Training	12	1	

III. MANNING'S TABLE

(1966 average)	Number of persons			A - Machine control B - Other operatives	
	Total	1st shift A B	2nd shift A+B	3rd shift A+B	
ALL SHOPS & UNITS:	29	16	9	5	
1. Primary operative shops	15	6	7	3	
- Forging	3	1	1	1	
- Melting and dressing	3	1	1	1	
- Polishing	3	1	1	1	
- Control and packing	6	3	3	-	
2. Auxiliary operative units	8	4	2	2	
- Repair and maintenance	1	1	1	1	
- Mechanical shop	1	-	-	-	
- Utilities control	3	1	1	1	
- Product & material storage	1	1	-	-	
- Off-site transport	-	-	-	-	
- Guards, cleaners, etc.	1	1	-	-	
3. Auxiliary non-operative units	6	6	-	-	
- Production management	1	1	-	-	
- Research & development	-	-	-	-	
- Sales unit	1	1	-	-	
- General administration	4	4	-	-	

WORKING TIME PER OPERATIVE WORKER:

Normal hours/day	3	hours	Normal days/year:	297	days
Actual hours/year	2,176	hours			

CAPACITY OF OPERATIVE SHOPS:

The control department employs an ocular method of inspection. It can handle 308 kg per 8 hours. This facility is fully utilized.

IX. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service

- 1. Engineering study
- 2. Financial assistance
- 3. Industrial services
- 4. Equipment supply
- 5. Maintenance & repair
- 6. Technical and managerial personnel
- 7. Industrial training
- 8. Technical consultation
- 9. Import and export management
- 10. Education of foreign labor

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
-----------------	-------------------	-----------------	-------------------	-------------------------

In close co-operation with a subsidiary company the reporting enterprise would be able to plan an enamelled-wire factory. Enamelling furnaces could be supplied and put into operation. The necessary technical personnel could be trained on the job. Technical assistance could be provided for some years. Foreign operatives from developing countries are already employed on a seasonal basis.

XI. SUPPLEMENTARY NOTES

Commission work:

The company engages in mordanting, varnishing, and some drawing of copper wire as well as in varnishing of constantan wire on commission basis.

Total commission received amounted to US \$ 254,000.

and VIII. TECHNOLOGICAL CHARACTERISTICS (page 3):

The enamelling department consists of four furnaces each of which is utilized for wires of a specific range of diameters. The output depends upon how fast the varnished wires can be treated in the furnaces, which again depends upon the diameter of the wires, the kind of varnish used and the number of layers applied.

Group "0"	(for diameter 0.03 - 0.15 mm)	9 machines	output 120 kg/machine/day
Group "I"	(for diameter 0.16 - 0.40 mm)	4 machines	output 220 kg/machine/day
Group "II"	(for diameter 0.30 - 1.00 mm)	5 machines	output 360 kg/machine/day
Group "III"	(for diameter 0.80 - 4.00 mm)	1 machine	output approx. 230 kg/day

Depreciation policy:

The company applies the straight-line method of depreciation only.

Major Products: Steel structurals of various types, resonance vibrating machines, tube conveyors, belt conveyors and conveyor-rollers. Also constructs plants for gravel preparation. 1-shift operation. The capacity revenue output is about US \$ 3.5 million.

Reporting Unit: A one-establishment medium-sized enterprise; privately owned, founded in 1894 and reconstructed in 1961 - 1963. Internationally known for production of vibration machines and gravel preparation plants. Steel construction programme offers technical specialities such as circular halls, conical inverted roof shells, mobile slab-forms for bridges, etc. Partly patented production. The business year ends for Oct. 1967 - Sept. 1968.

I. FIXED CAPITAL ASSETS

(End of 1968)

	Original purchase value (1000 US \$)	Replacement value (1000 US \$)	Avg age (Yrs.)
1 Primary process equipment (including installation cost)	347	417	
TOTAL	329	395	
- Process equipment *	15	22	
- Hand tools & apparatus			
2 Buildings	495	643	
TOTAL	271	352	6
- Primary industrial buildings (total floor space: 6,500 m ²)			
- Warehouses	220	290	
- Auxiliary buildings			
- Office administration buildings	4		
- Housing			
3 Auxiliary facilities (incl buildings)	189	..	
TOTAL	98	..	4
- Internal power equipment	2	2	
- Electr. and water installations	58	69	
- Laboratory facilities	14	..	
- Means of transportation			
- Office equipment			
TOTAL PHYSICAL FIXED ASSETS (excluding land):	1,104	..	
4 Other fixed capital assets	14	..	
TOTAL	1,118	1,104	
- Land (total acreage: (**))	90	104	
- Land improvements (t. agr. (**))	565	..	
- Others (research and development)			

(* Another 10,000 m² coated with asphalt or ballast stone, is not counted here.)

(**) Provided by the government

**NB Details of process equipment and aspects of primary operations, help are given on Page three (Section VIII)

EXTERNAL CONDITIONS

Category	Internal	External	Notes
Transport	external long distance	poor (*)	needs a better railway system
	internal long distance	fair	
	local and city	insignificant	
Utilities	electricity	fair	
	water	fair	
	gas	insignificant	
Community	residence	excellent	
	health and recreation	excellent	
	education	fair	
Own Welfare Facilities: kitchen and cafeteria, sitting-room, library, tennis court.			
(*) Freight cost for exports within Europe is about 10% higher than the domestic transp. cost.			

III. INVENTORIES

(End of 1968)

	Actual value (1000 US \$)	Number of months
Inventories	615	
TOTAL	251	2
- Production materials	58	2
- Other input materials	244	
- Work-in-process	61	
- Finished products		

WORKING TIME PER OPERATIVE WORKER

	1st shift	2nd shift	3rd shift
Shift hours/day (*)	9	-	-
Actual hours/year	2,120	-	-
Normal hours/year	226	-	-

(*) Normal, actually 9.3 hrs due to the overtime work needed to compensate for the loss of two workers during the year considered.

II. MONTHLY GROSS WAGES AND SALARIES

Number of persons

(1968 monthly average)

	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1. Local non operatives						
- Managers	-	-	-	7	12	2
- Engineers	-	2	4	-	-	-
- Technicians	-	1	1	1	-	-
- Accountants	-	2	5	4	-	-
- Sales officials	-	4	6	3	1	-
- Clerks and typists	-	-	1	2	6	-
2. Local operatives						
- Supervisors	-	-	-	19	-	1
- Foremen	-	-	-	-	-	-
- Skilled operatives	-	70	-	-	-	-
- Machine operators	-	-	4	-	-	-
- Craftsmen	-	-	1	-	-	-
- Truck drivers	-	-	-	-	-	-
- Unskilled operatives	11	-	-	-	-	-
- Other full-time operatives	2	57	-	-	-	-
- Part-time operatives	2	-	-	-	-	-
- Others (apprentices)	28	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

Not applicable

IV. EMPLOYMENT TABLE

Number of persons

Shift categories: A Supervisory staff and foremen (for all shifts)
B Skilled operatives
C Semi-skilled operatives (machine operators)
D Unskilled operatives

(1968 average)

ALL SHOPS & UNITS:

	Total	1st Shift				2nd Shift	
		A	B	C	D	A-D	B-D
TOTAL	333	62	168				
1. Primary operative shops	161	24	96	36	5	-	-
- Cutting shop	11	-	5	5	1	-	-
- Mechanical shop	14	1	11	1	1	-	-
- Locksmith's shop and assembly	31	3	55	21	2	-	-
- Sand blasting shop	1	-	1	-	-	-	-
- Painting shop	4	-	1	2	1	-	-
- External assembly shop	29	1	24	4	-	-	-
- Construction and static shop	19	19	-	-	-	-	-
2. Auxiliary operative units	51	3	28	-	-	-	-
- Repair & maintenance	6	-	6	-	-	-	-
- Mechanical shop: see above)	-	-	-	-	-	-	-
- Tooling shop	-	-	-	-	-	-	-
- Utilities control	-	-	5	-	-	-	-
- Product & material storage	-	2	-	-	-	-	-
- Off-site transport	1	-	8	-	-	-	-
- Guards, cleaners, etc.	2	1	1(+ 28 apprentices)	-	-	-	-
3. Auxiliary non-operative units	41	34	1	-	-	-	-
- Production management	10	7	3	-	-	-	-
- Research & development	1	1	-	-	-	-	-
- Sales unit	13	13	-	-	-	-	-
- Accounting	3	3	-	-	-	-	-
- General administration	9	9	-	-	-	-	-

V. ANNUAL PRODUCTION

(1968)	Yr of first prod.	Quantity produced		Avg unit price on factory gate (US \$)	Total output value (1000 US \$)
		Unit	Quantity		
Steel structurals of various types (*)	1944	t	4,000	(Million avr.)	1,440
Travel preparation plant	1948	..	..	1,15	148
Resonance vibrating machines	1948	no.	5	..	115
Resonance tube conveyors	1949	"	11	1,140	116
Belt conveyors and belt conveyor-rollers	1950	"	11	2,36	11
Revenue from licensing contracts				..	60
TOTAL VALUE OF PRODUCTION:					1,607

(*) Hall constructions, circular halls, bridges made from steel, lattice towers, strain portals, bunkers and large scale mill works, etc.

(**) Includes sales tax.

VI. VALUE ADDED

(1968)	Total value (1000 US \$)
1 Annual wages & salaries	507
- Operative workers (168 persons)	377
- Non-operative workers (67 persons)	130
2 Other payments for employees	11
3 Annual depreciation	133
- Machinery & equipment	11
- Buildings & other facilities	64
- Non-physical capital assets	58
4 Rentals paid	48
5 Interest & royalties	16
6 Sales tax (US \$ 0.10 per unit)	11
7 Other indirect business taxes	11
8 () Subsidies	11
9 Corporate income before tax	11
(*) Employment tax, property tax, etc.	1,000
TOTAL VALUE ADDED	

DESCRIPTION OF MAJOR PRODUCTS:

Steel structurals: All kinds of light and heavy steel shapes for construction; single production; high quality standard; terms of delivery 1-4 months.

Vibrating screens: Partly serial production; the proper mass balancing of the machine enables both troughs to be used for screening purposes; terms of delivery 2,5-2 months; world-wide protection of patents.

Vibration conveying plant: Partly serial production; masses or troughs are fully used for working purposes and by such the capacity is doubled and the dead weight is reduced to a minimum; terms of delivery 2-2 months; world-wide protection of patents and license contracts.

Belt conveyors: Partly serial production; portable, mobile and stationary types; terms of delivery 1-3 months.

Sand and gravel preparation plants: Single production; for grading and washing of raw gravel in 6 grain sizes; terms of delivery 2-3 months.

MARKET ASPECTS:

Re-sales: Only spare-parts (ball bearings, wire netting, etc.) for the sold machines are supplied to customers. But these re-sales are treated here as an integral part of the production programme.

Consumers of products: Steel structurals: All industry branches, power plants, public authorities and municipal enterprises. Vibration machines, belt conveyors and plants: Mining industry, stone working industry, iron and steel industry, chemical industry, building firms.

Sales organization: Through employees (7 technicians, 1 architect, 2 persons organizing projects).

Market and competition: Steel structurals: This firm's share is 5% of total production in the country; keen competition with other larger firms for heavy steel structurals; competition with a number of smaller firms for light steel structurals. Preparation plant: 80% of total production in the country (8-10 units per year). Vibration machines: 80-90% of total production in the country (65-70 units per year). Belt conveyors: Large scale belt conveyors only. The domestic market can be satisfied by this firm's production alone.

EXPORT:

Total annual export: 1000 US \$ 104,000

Major products	To Western countries	To Eastern countries	To Developing countries
Vibration machines and spare parts	90	10	0
Preparation plants	80	0	0
Others	20	0	0

Export prices: The prices of exports are kept a little lower than those of domestic sales. The exports take place normally in connexion with licensing and know-how contracts because the weight value ratio is high and high duties are charged for exports of individual machines.

VII. ANNUAL CONSUMPTION

(1968)	Quantity consumed		% Import	Average import price (US \$)	Total consumption value (1000 US \$)
	Unit	Quantity			
1. Energy and water					
FFPA:					
- Electricity	000 kWh	588			14
- Coke	t	5			0,2
- Fuel oil	t	260			8
- Petroleum	t	19	(domestic refinery)		5
- Water	000 m3	1			1
2. Production materials					
FFPA:					
- Rolled material: plates	t	2,15			117
- profiles	t	1,450			28
- tubes	t	100			24
- Screws and small standard parts	..	..			110
- Electrodes and welding rods	pcs	4X			2
- Welding gas	kg	4			11
- Other materials: rubber	-	-			28
- steel wires	-	-			22
- other	-	-			63
- Motors, gears, and other parts for machines	-	-			118

	Total consumption value (1000 US \$)
3 Other materials & supplies	18
FFPA:	
- Packaging material (wood, cardboard, paper)	3
- Parts, supplies & services	19
- Other materials & supplies	12
4 Business services purchased	228
FFPA:	
- Transportation, storage & insurance	57
- Commission, advertising & other business services	171
5 Work performed by subcontractors	64
FFPA:	
TOTAL VALUE OF CONSUMPTION:	

TOTAL VALUE OF CONSUMPTION: 1,551

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (1):

	Number	Original Purchase Value (1960 US \$)	Replacement value (1960 US \$)	Avg. Age (yrs)	Remarks
Grinders	10	11.5		7	SC
Welders, transformers	64	43.0		5	SC
Presses, cutters, punches	29	64.5		6	SC
Metal saws	5	5.3		3	
Drillers	16	28.0	Approx.	10	
Turning machines and fixtures	12	38.0	120% of	14	
Other machining machinery (milling cutters, planing machines, etc.)	15	13.3	original	4	
Fixtures for conveyor belts	3	2.2	purchase	1	
Fixtures for machines	1	2.3	value	2	
Fixtures for bridge building	1	0.4		1	
Fixtures for circular halls	1	7.2		5	
Misc. assembling equipment	6	90.7		5	
Cranes	14	3.6		3	
Compressors	3	10.7		4	
Lift trucks					

Remarks:
 SC: Purchased second-hand
 OS: Owned
 R: Rented
 SL: Self-constructed

Further details:

- Grinders and welders for belt conveyor-rollers; both self-constructed and constitute the core process for the patented rollers; capacity approx. 100 rollers per shift; different running time according to orders in hand.
- Power presses: for belt conveyor framing.
- Turning machines and fixtures: for handling heavy railway bridges during welding and assembly operations in the factory.
- Circular halls: with conical inverted roof shell and rotating cranes.

Rented machinery: 1 mobile crane (supplied from FR)
 1 electronic computer (supplied from The Netherlands)

CAPACITY POWER:

- Process equipment: electric motors 160 kW
- others 17 "

Generating equipment

- installed capacity 11 kVA

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Shop	Automat.
Cutting shop	Only for plates and steel profiles	C	III
Mechanical shop	Turning, drilling, milling, planing, etc.	C	II
Welding shop and assembly	Electric welding, drilling, flattening, etc.	B	II
Painting and spraying shop	Manual painting and also mechan. process	A	II
Sandblasting shop	Pneumatic blasting with steel pellets	A	III

Mechanization:
 A: most advanced
 B: considerably high standard
 C: moderate standard
 D: appreciably short of today's standard
 E: almost outdated

Automation:
 I: fully automated
 II: semi-automated
 III: non-automated

Further details:

- Capacity 4,000 t/yr; 90% utilized.
- Incl. production of special parts for belt conveyor and machine construction. (*)
- Capacity 11,000 h/yr; 75% utilized.
- Capacity 11,000 h/yr; 60% utilized.
- Capacity 4,100 h/yr; 50% utilized.
- (*) Capacity 25,000 h/yr; 90% utilized.
- (Each machine is of a rather conventional type)

CAPACITY UTILIZATION:

Full capacity output Estimated at some 100 \$ 1.1 million per year. Steel structure production limited by the capacity of the cutting shop.

Current utilization

Major products (or processes)	Approximate %					
	up to 20	20-40	40-60	60-70	70-80	80-100
Steel structures						X
Vibration machines		X				
Conveyor belts			X			
Preparation plants				X		

The different rates of capacity utilization in different shops in terms of capacity of installed process equipment do not strain the corresponding employment pattern, since many operatives can work for different shops as required. Between the above four product groups, the productive capacity is interchangeable as required. The demand for the building-industrial machine has been weak due to the current depression in the construction industry, but improvement is foreseen.

For full capacity operation, additional 30 operatives will be required on the 1st shift.

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output (1960 US \$)	No. of persons employed	Total output (1960 US \$)
1963	2,210	353	425
1964	1,940	354	420
1965	2,130	308	425
1966	2,380	315	389
1967	2,740	285	325
1968	2,950	261	525

2. Investments in the past:

From 1961 to 1968: 60%
 Reconstruction of buildings due to change in location. These investments involved expansion with an increased degree of standardization of the main products.

The annual investment expenditures during the reporting year (1967/68) were US \$ 4,000.

3. Future Plan:

From 1969 to 1974: 145% (or 50% annually)
 Perhaps for a new primary industrial building and regular research and development expenditures.
 An increase of number of employees is envisaged.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1964)

Industry	Industrial machinery		(ISIC Code 360)		
	No. of estab.	No. of empl.	Avg. W & S. per pers. (US \$)	Avg. gross prod. val. per pers. (US \$)	Avg. value added/gross prod. ratio (%)
1. Size groups by number of persons employed:					
up to 19	1,302	5,536	1,260	5,945	51
20 - 99	262	11,451	1,770	7,224	54
100 - 499	93	19,866	1,770	8,540	50
500 - 999	9	5,776	2,161	6,460	54
over 1,000	4	12,569	2,322	6,492	53
TOTAL	1,675	55,198	1,885	7,511	51

2. Size groups by annual value of production (1960 US \$):	No. of estab.	No. of empl.	Avg. W & S. per pers. (US \$)	Avg. gross prod. val. per pers. (US \$)	Avg. value added/gross prod. ratio (%)
up to 200	137	995	885	5,351	57
200 - 400	276	1,330	1,146	5,667	54
400 - 2000	40	5,781	1,435	5,981	54
2000 - 4000	102	4,198	1,745	6,569	55
4000 - 20,000	135	14,177	1,894	7,555	54
over 20,000	53	28,717	2,061	8,095	49
TOTAL	1,675	55,198	1,885	7,511	51

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service

- | | | |
|---|---------------------------------------|--------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export promotion |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
3	any			The company is greatly interested in offering know-how contracts for the whole product-mix, especially for vibrating screens, vibration conveying plants, belt conveyor-rollers, mobile slab forms for bridges, circular halls with conical inverted shell roofs, sports alleys; such contracts would include provision of technical assistance by supplying drawings, training and spare-parts. But the company is not interested in selling its patent rights.
4	"			Possibility of supplying screen and transport equipment for bulk materials (minerals, coke, chemicals) and washing and classifying equipment for minerals.
6	"			Possibility of industrial training in the own plant, only in connection with delivery of ordered equipment and know-how contracts.
7	"			Trouble-shooting advisory service and provision of pre-investment studies (especially for belt conveyors, screens, and preparation plants).

XII. SUPPLEMENTS & NOTES

Cost-revenue relationships:

- Annual production value (as well as product prices) is given inclusive of sales taxes which are an integral part of it.
- Net accumulation of inventories of finished products (which is included in the value of annual production) was: (+) 10% for steel structurals, (+) 1.5% for gravel preparation plant (components), and (-) 4% for resonance vibrating machines, respectively, in relation to the annual production values.
- The annual operating cost do not include the cost elements affecting the balance sheet of the enterprise, such as: devaluation of inventories (which actually amounted to nearly US \$ 4,000 during the year considered), additional indemnity insurance (US \$ 32,000), expenses carried over from the previous year, tax adjustments, etc.

Depreciation policies:

The straight-line method is applied to the original purchase value. For some items, special accelerated depreciation, as legally permitted, is applied to facilitate the enterprise's research and development activities.

Inventory policies and inventory pricing:

A considerable part of production takes place according to orders (specific designs as ordered) and the enterprise often suffers bottlenecks in the supply of production materials as orders fluctuate (especially in the turning points of business fluctuations).

Research and development:

An amount equal to 2.5% of the total value of production was spent on research and development.

Governmental policies:

The government subsidizes exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under VII.6. has been adjusted accordingly.

Major Products:

Boilers, steel bridges, hydraulic steel superstructures, theatrestage equipment, apparatuses, tanks, penstocks, pressure vessels, cranes, ropeways, inclined lifts, steel and grey iron castings, etc. The enterprise is capable of producing annually about 40 mill. US \$ primarily on one-shift operation. Almost 60% of the annual production, and 21.9 mill. US \$ respectively, are exported to all continents.

Reporting Unit:

A five-establishment enterprise, joint-stock company with a share capital of 4 mill. US \$; 4,000 employees. The individual establishments are very favourably located to the sources of raw material. Designs are exclusively programmed to order; license agreements are given to companies throughout the world. Research and development in the field of nuclear energy. The enterprise was originally founded in 1884, but most of the production facilities are not older than 10 years. This study summarizes all 5 establishments.

I. FIXED CAPITAL ASSETS

(End of 1967)

	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average age (Yrs.)
1 Primary process equipment (including installation cost)			
TOTAL	1,142	1,174	
- Process equipment *	1,142	1,174	11
- Plant tools & apparatuses	-	-	-
2 Buildings			
TOTAL	1,151	1,600	
- Primary industrial buildings	1,151	1,600	18
Total floor space: 111,490 m ²			
- Auxiliary buildings	-	-	-
- Warehouses	-	-	-
- Office administration buildings	-	-	10
- Housing	-	-	1
3 Auxiliary facilities (ext. buildings)			
TOTAL	94	- (*)	
- Internal power equipment	-	-	-
- Laboratory facilities	94	-	1
- Means of transportation	-	-	3
- Office equipment	-	-	-
TOTAL PHYSICAL FIXED ASSETS (excluding land):	2,387	2,774	
4 Other fixed capital assets			
TOTAL	4,222	4,222	
- Land (total acreage: 11,100 m ²)	4,222	4,222	-
- Land improvements (1,100 m ²)	-	-	-
- Others (mostly auxiliary facilities)	-	-	-

(*) This replacement value is included in 1.4. "Tools".

*NB: Details of process equipment and capacity of primary operative shops are given on Page three, Section VIII.

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(As per Sept. 1967)

	up to 100 US\$	100-140 US\$	140-160 US\$	160-200 US\$	over 200 US\$
1. Local non-operatives					
- Managers	-	-	-	-	10
- Engineers	4	152	103	146	22
- Technicians	-	20	24	10	-
- Accountants	-	20	62	68	5
- Sales officers	15	40	104	21	2
- Clerks and typists	-	-	-	-	-
2. Local operatives					
- Supervisors	-	-	7	60	18
- Foremen	-	-	-	140	-
- Skilled operatives (*)	-	16	1068	309	50
- Machine operators	-	504	236	-	-
- Craftmen (*)	-	-	-	-	-
- Truck drivers	-	-	21	-	-
- Unskilled operatives	127	118	-	-	-
- Other full-time operatives	-	-	-	-	-
- Part-time operatives	-	-	-	-	-
3. Foreign employees					
- Managerial staff	-	-	-	-	-
- Technical staff	-	-	3	-	-
- Other skilled operatives	-	-	-	-	-
- Unskilled operatives	-	17	-	-	-
- Semi-skilled operatives	-	17	-	-	-

(*) Craftmen are included in "skilled operatives".

EXTERNAL CONDITIONS:

Transport	external long distance	excellent
	internal long distance	good
	local and city	good
Utilities	electricity	good
	water	good
	gas	good
Community	residence	good
	health and recreation	good
	education	good
Own Welfare Facilities:	The company has several social and recreational facilities.	

III. INVENTORIES

(End of 1967)

	Actual value (000 US \$)	Number of months
Inventories		
TOTAL	16,107	
- Production materials	1,314	1
- Other input materials	1,173	1
- Work-in-process	-	-
- Finished products (*)	-	-

(*) The company produces exclusively to order.

WORKING TIME PER OPERATIVE WORKER

	1st shift	2nd shift	3rd shift	
Shift hours/day	8	-	-	hours
Actual hours/year	2,100	-	-	hours
Actual days/year	210	-	-	days

IV. MANNING TABLE

(Number of persons)

Shift categories: A: Supervisory staff and foremen (for all shifts)
B: Skilled operatives
C: Semi-skilled operatives (machine operators)
D: Unskilled operatives

(1967 average)

	Total	1st Shift (*)					2nd Shift	3rd Shift
		A	B	C	D	B-C		
ALL SHOPS & UNITS:	4,009	1,261	-	2,748	-	-	-	-
1 Primary operative shops	2,207	152	1,467	527	61	-	-	
- Steel superstructures	96	16	-	270	-	-	-	
- Mechanical engineering	150	10	-	140	-	-	-	
- Boiler department	345	15	-	320	-	-	-	
- Welding department	208	15	-	193	-	-	-	
- Light structures	21	3	-	18	-	-	-	
- Grey-iron casting	23	4	-	20	-	-	-	
- Steel casting	24	5	-	46	-	-	-	
- Auxiliary casting	30	5	-	25	-	-	-	
- Corrosion unit	47	4	-	33	-	-	-	
- Assembly	42	17	-	350	-	-	-	
- Training department and others	146	6	-	140	-	-	-	
2 Auxiliary operative units	741	58	-	683	-	-	-	
- Repair & maintenance	109	11	-	98	-	-	-	
- Mechanical shop	-	-	-	-	-	-	-	
- Tooling shop	-	-	-	-	-	-	-	
- Utilities control	19	11	-	34	-	-	-	
- Product & material storage	36	11	-	65	-	-	-	
- Off-site transport	240	-	-	240	-	-	-	
- Guards, cleaners, etc.	87	-	-	87	-	-	-	
- Cafeteria, technical department laboratory, etc.	159	2	-	157	-	-	-	
3 Auxiliary non-operative units	1,061	1,051	-	10	-	-	-	
- Production management	65	65	-	-	-	-	-	
- Research & development	46	46	-	10	-	-	-	
- Sales unit	195	195	-	-	-	-	-	
- Accounting	33	33	-	-	-	-	-	
- General administration	12	12	-	-	-	-	-	
- Engineering and design(**)	602	602	-	-	-	-	-	

(*) The figures under column "0" include all skilled categories.
(**) Both engineering and design are organized according to the primary operative shops.

V. ANNUAL PRODUCTION

(1967)	Yr of prod.	Quantity produced		Avg unit price in factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Boilers	1954	t	1,000	100	100,000
Steel bridges	1954	"	1,000	100	100,000
Hydraulic steel structures	1904	"	1,000	100	100,000
Theatre stage equipment	1900	"	1,000	100	100,000
Apparatuses, tanks, pen stocks and pressure vessels	1901-1912	"	1,000	100	100,000
Steel superstructures	1904	"	1,000	100	100,000
Cranes	1904	"	1,000	100	100,000
Pipeways and inclined lifts	1900	"	1,000	100	100,000
Dust collecting, gas cleaning and ash removal plants	1947	"	1,000	100	100,000
Wiring equipment	1935	"	1,000	100	100,000
Lightweight structures	1965	"	1,000	100	100,000
Steel and grey-iron castings	1954	"	1,000	100	100,000
Other revenue (*)					
TOTAL VALUE OF PRODUCTION:					1,000,000

(*) Consist of revenue from contract and commission work, scrap and other prod.

VI. VALUE ADDED

(1967)	Total value (000 US \$)
1. Annual wages & salaries	100,000
- Operative workers	80,000
- Non-operative workers	20,000
2. Other payments for employees	10,000
3. Annual depreciation	10,000
- Machinery & equipment	5,000
- Buildings & other facilities	5,000
- Non physical capital assets	0
4. Rentals paid	10,000
5. Interests & royalties	10,000
6. Sales tax	10,000
7. Other indirect business taxes	10,000
8. () Subsidies	0
9. Corporate income before tax	10,000
TOTAL VALUE ADDED	

DESCRIPTION OF MAJOR PRODUCTS:

Bridges: According to the company's on any desired lesion for steel and railways in world, covered steel, concrete, and pipe supported bridges of patented design. Detachable bridges. Rascals, lift and swing bridges.
Hydraulic steel structures: Sluice gates of all types and according to company's patents for river and lake dams, lock gates, regulating gates with automatic control and turbine emergency gates. Trash-racks and rack cleaning machines.
Steel superstructures: Sheds for factories and rolling mills, station platform roofing, fruit farmac frames, roof for houses, large open hall, conveyor bridges, towers, masts for antennas, light masts, steel structures for lime kilns, towers for transmission lines, etc.
Lightweight structures: Aluminum structural elements. Curtain walls, windows, doors, gates. Automatic doors and water.
General mechanical engineering: Various patented electromechanical and hydraulic systems and equipment of all kinds for mining and clothing. Turbine spirals, draft turbine linings, welded parts of giant turbines, such as blades, turbine covers and support frames. All kinds of welded structures of standard structural steel.
Theatre stage equipment: For electromechanical or hydraulic operation, revolving stages, lifting and moving platforms, arm-train systems, floating bridges, iron safety curtains, complete film and TV studios.
Inclined lifts and pipeways: For passengers and goods transport. Funiculars, railway, hoists, rope systems.

For information, please see page 1-111.

MARKET ASPECTS:

Consumer of products:

The products are sold to heavy and small scale industry as well as to thermal and nuclear power stations. Major contractors are various national and international public authorities, organizations and private companies.

Sales organization:

The enterprise has an own centralized sales organization with approximately 1000 members. The company is represented in 10 countries.

Extent of the market:

The company supplies a considerable proportion of its production to European countries.

Share in the domestic market:

Presently the company holds a market share in boilers of 10%, in structural steel works of 20% and on mechanical engineering of 40% of the total annual national production, including imports.

Competition in the market:

Long-lived production goods usually require considerable investments which have to be financed partly by the manufacturer by means of export credits or even extended term of payment. International competitors with access to capital markets with low rates of interest or with own liquid funds can be more successful bidders to begin with.

EXPORT

Total annual export (in 1000 US \$) of the total annual production

Major products	To Western countries	To Eastern countries	To Developing countries
Boilers	100	100	100
Steel structures	100	100	100
General mechanical engineering	100	100	100
Hydraulic steel structures	100	100	100
Lightweight structures	100	100	100
Other mechanical engineering	100	100	100

The enterprise mainly exports to Germany, France, Italy, Sweden, Denmark, Norway, Austria, Yugoslavia, Czechoslovakia, Italy, Hungary.

Export promotion credits are granted by the government.

Governmental guarantees

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import duties (1000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL					
- Electricity	000 kWh	14,500	-	-	14,500
- Coal and coke	t	900	-	-	900
- Diesel and fuel oil	"	600	-	-	600
- Gasoline	"	120	-	-	120
- Steam	000 m3	10,900	-	-	10,900
- Water	000 m3	330	-	-	330
2. Production materials					
TOTAL					
- Rolled steel					
- Boiler tubes					
- Fittings					
- Iron castings					
- Others					
- Electric appliances and supplies	t	31,050	8	10 - 39	4,908
- Special fittings	t	1,950	20		1,157

	Total consumption value (000 US \$)
3. Other materials & supplies	1,500
TOTAL	
- Packaging material (iron, steel, lead foil, etc.)	1,500
- Parts, supplies & services	
- Other materials & supplies	
4. Business services purchased	1,500
TOTAL	
- Transportation, storage & insurance	1,500
- Communication, advertising & other business services	
5. Work performed by subcontractors	1,500
TOTAL	
TOTAL VALUE OF CONSUMPTION	

VIII. TECHNOLOGICAL CHARACTERISTICS

(*) Due to the complex and different production processes utilized in the 5 establishments, the process equipment could only be grouped in aggregate.

(*)

DETAIL OF PROCESS EQUIPMENT N 1.1:

	Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Avg Age (yrs)	Remarks
Steel superstructure department:					
Strip levellers					
Folding machines					
Drilling machines (wall type radial)				over 10	
Piercing stamping machines				years	
Profile rolling machines					
Plate-edge planing machines					
Punch and shaping machines					
Boiler department:					
Boring machines (vertical radial)	10 units	..	1,000	4	
Rolling machines					
Tube bending machines					
Mechanical engineering department:					
Drilling machines (wall type radial)					
Lathes of various kinds					
Milling machines for cog-wheels					
Grinding machines (cylindrical)	150 units	..	1,000	5	
Threading machines					
Pushing and shaping machines					
Planing machines (1.5m)					
Drilling machines (100-220 mm Ø)	6 units	..	100	5	
Light structure department:					
Plate shears					
Folding machines					
Corrosion unit dept.:					
Sand-blasting apparatuses	3 units	..	400	3	
Equipment for anti-corrosion treatment					
General service: Annealing furnace	2 units	..	240	1	
Other machines			2,000	3-4	

Further details:

A note on the fixed capital assets of the enterprise:

According to the enterprise's balance sheet, as at the beginning of 1967, the book value (after depreciation) amounted to US \$ 5.5 million annual physical "losses and retirements" about US \$ 300,000 (mostly machinery, equipment and tools) while annual depreciation amounts to approx. US \$ 235,000 and annual new acquisition US \$ 640,000. The "original purchase value", as indicated in "II" of this Profile, reflects mostly the post-1945 acquisition and retirements in the subsequent years.

CAPACITY POWER

Process equipment:

electric motors kW 1,100

Generating equipment:

installed capacity kVA -

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Mechanization: C moderate standard, D appreciably short of today's standard, E almost nonexistent, F considerably high standard, G. almost 100%.

Automation: I fully automated, II semi-automated, III non-automated.

Major primary operative shops	Kind of process involved	Mechan.	Automat.
Steel superstructures	The company utilizes normal mechanical metal working processes		
Boiler			
Mechanical engineering			
Iron-ore and steel refining		B	III
Assemble		B	II

Further details:

CAPACITY UTILIZATION:

Full capacity output approx. 100,000 units/year. This estimate is based primarily on one-shift operation with a large additional capacity being employed.

Current utilization

Major products (or processes)	up to 30	40	50	60	70	80	90	100
Boiler department								X
Steel superstructure department								X
Mechanical engineering department								X

In order to utilize the capacity of the manufacturing and assembly facilities to a larger extent, the enterprise is prepared to programme the production even with fluctuations. Nevertheless, the 1967 total output was about 100,000 units/year with 110 persons being less employed.

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total sales (1000 US \$)	No. of persons employed	Total exports (1000 US \$)
1963	15,245	4,000	19,200
1964	44,770	4,000	26,730
1965	35,410	4,000	21,900
1966	32,760	4,100	14,600
1967	31,400	4,000	21,000
1968	34,200	3,400	11,110

2. Investments in the past:

From 19... to 19...	Approximate amount (1000 US \$)	Type of investment
1955 to 1960	4,700	Primary industrial buildings and land
" " " "	4,900	Process equipment
" " " "	6,100	Auxiliary facilities
1967	60	..

3. Future Plan:

From 1970 to 1975: 1,500 Process equipment and primary industrial buildings. The company tries to increase its productivity through continuous rationalization in order to ensure improved technological standards and international competitiveness as well.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

Confidential; figures of these size groups are included in those underlined.

(1964) Manufacture of metal products excl. machinery and transport equipment (ISIC Code 350)

1. Size groups by number of persons employed:	No. of establ.	No. of empl.	Avg. W & S. per pers. (US \$)	Avg. gross prod. val. per pers. (US \$)	Avg. value added/gross prod. ratio (%)
up to 10	100	412	1,403	1,117	79
20 - 99	21	874	1,692	1,748	90
100 - 999	9	4,250	1,348	1,267	94
500 - 999	2	0	0	0	0
over 1,000	1	0	0	0	0
TOTAL	133	5,445	1,441	1,451	96

2. Size groups by amount sold of production (1000 US \$):

	No. of establ.	No. of empl.	Avg. W & S. per pers. (US \$)	Avg. gross prod. val./per pers. (US \$)	Avg. value added/gross prod. ratio (%)
up to 20	55	82	933	5,006	64
20 - 10	10	57	1,488	1,244	57
40 - 200	20	351	1,452	6,164	53
200 - 400	11	381	1,505	1,339	51
400 - 2,000	10	1,102	1,834	8,245	48
over 2,000	6	3,472	2,104	9,289	44
TOTAL	133	5,445	1,941	8,657	46

XI DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|-------------------------|---|----------------------------------|
| 1. Engineering study | 3. Technical and managerial personnel | 6. Import and export trade fairs |
| 2. Financial assistance | 4. Industrial training | 7. Advancement of foreign labour |
| 5. Industrial services | 8. Technical consultation and maintenance & repair services | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

1. Services performed during the past five years: International projects in the important areas of power, steel, iron and steel, and other industries.

Type of service	Country or region	No. of projects	Field of industry	Description of projects
1,1,5	Asia	25	Power plant	Hydraulic steel structures, boiler houses, radiation boilers, waste heat boilers, radiators, etc.
			Oil refinery	Steel structures, oil tanks, etc.
			Agriculture	Irrigation schemes, water towers, etc.
			Harbour	Harbour equipment, electric cranes, etc.
			Mining industry	Boiler houses, etc.
	Africa	3	Power plant	Boiler houses, etc.
			Thermal power plant	Special waste heat boilers, etc.
	America	6	Agriculture	Irrigation schemes, water towers, etc.
			Power plant	Hydraulic steel structures, boiler houses, radiation boilers, etc.
			Thermal power plant	Boiler houses, etc.
	Europe	2	Thermal power plant	Boiler houses, etc.
			Oil refinery	Special waste heat boilers, etc.
	Western Europe, Japan, USA	-	Steel industry	Steel structures, boiler houses, etc.

XII. SUPPLEMENTS & NOTES

In principle the company is prepared to offer the following services for co-operation with developing countries:

Engineering study:

Type of industry: Oil, gas, paper, cellulose, cement, magnesite, food, chemical, mining, steel, thermal and nuclear power.
To some extent the company could supply its products to all industries.
Form of study: Experience in all kinds of studies, e.g. overall studies for complete plants and contracts for the design of processing and heat treatment equipment made of metal could be provided upon request. Investigation and studies can be prepared as well.

Patents and licences:

Licence agreements could be signed for the manufacture of elevated water tanks, apparatus for the treatment of dust, dust collecting and gas cleaning equipment, wet scrubbers, heat exchangers for nuclear power plants.

Industrial training:

The company conducts own training programmes and possesses facilities to train welders, boilermakers, fitters, painters, boiler operators, etc. Practical experience can be gathered on the job.

Technical consultancy:

Trouble shooting advisory service for repair and maintenance of equipment could be supplied.

Export transactions:

The company offers its production programme at world market prices.

CONTRACT AND COMMISSION WORK:

The company performed all kinds of material detaching work for some 400 companies on commission basis. Total commission received amounted to US \$ 9,7 million. The commission work is based on short-term agreements.
On the other hand, 50 subcontractors received orders from the company to line boilers with bricks and to mount electrical installations. Total commission paid was close to US \$ 2 million.

DESCRIPTION OF MAJOR PRODUCTS (cont'd):

Steam boiler plants: Steam boilers of all systems, for all capacities and pressures, for natural circulation and forced flow, and for all kinds of fuel. Heavy duty vertical tube boilers, radiation boilers, waste heat boilers, once-through (Benson) boilers, five tube boilers, locomotive boilers, low pressure boilers, etc.
Nuclear power plants: Primary and secondary circuit pressure parts of reactors; steam generators and heat exchangers for all nuclear coolants (gases, liquids, liquid metals), equipment for nuclear reactor hydrodynamic and for turbine power plants such as high temperature recuperators.

Major Products: Irrigation equipment, agricultural equipment, steel profiles.

In 1968 total value of production amounted to about US \$ 6.4 million based on 1-shift operation.

Reporting Unit: A one-establishment enterprise; privately owned; founded in 1946; 550 employees; about 33% exports; no licensed production.**I. FIXED CAPITAL ASSETS**

(End of 1968)	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average age (Yrs.)
1 Primary process equipment (including installation cost)			
TOTAL	1,257	3,262	
- Process equipment *	1,216	3,216	10
- Hand tools & apparatuses	41	46	4
2 Buildings			
TOTAL	1,157	1,431	
- Primary industrial buildings (total floor space: 15,000 m ²)	155	193	10
- Auxiliary buildings	351	464	10
- Warehouses	73	116	10
- Office administration buildings	347	387	10
- Housing	231	271	20
3 Auxiliary facilities (excl. buildings)			
TOTAL	348	469	
- Industrial power equipment	8	13	15
- Laboratory facilities	17	23	10
- Means of transportation	142	162	4
- Office equipment	181	271	10
TOTAL PHYSICAL FIXED ASSETS (excluding land)	2,762	5,162	
4 Other fixed capital assets			
TOTAL	241	438	
- Land (total acreage: 114,150 m ²)	97	221	-
- Land improvements (t. acc. 51,476 ")	72	101	-
- Others	72	116	..

*NB: Details of process equipment and capacity of primary operative shops are given on Page three, Section VIII.

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1968 monthly average)	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1. Local non-operatives						
- Managers	-	-	-	-	-	3
- Engineers	-	-	-	3	15	-
- Technicians	-	-	8	29	3	-
- Accountants	-	-	-	1	1	-
- Sales officers	-	6	6	9	9	7
- Clerks and typists	3	21	17	8	3	-
- Apprentices	2	-	-	-	-	-
2 Local operatives						
- Supervisors	-	-	-	1	3	-
- Foremen	-	-	2	13	-	-
- Skilled operatives						
- Machine operators	15	124	42	34	-	-
- Craftsmen	-	3	17	17	20	-
- Truck drivers	-	1	1	5	-	-
- Unskilled operatives	4	15	6	-	-	-
- Other full-time operatives	6	43	2	2	-	-
- Part-time operatives	-	-	-	-	-	-
- Apprentices	25	-	-	-	-	-
3. Foreign employees						
- Managerial staff						
- Technical staff						
- Other skilled operative						not applicable
- Unskilled operatives						

EXTERNAL CONDITIONS

Transport	external long distance	fair
	internal long distance	"
	local and city	"
Utilities	electricity	fair
	water	"
	gas	-
Community	residence	fair
	health and recreation	"
	education	"
Own Welfare Facilities	Recreation home, cafeteria.	

III. INVENTORIES

(End of 1968)	Actual value (000 US \$)	Number of months
Inventories		
TOTAL	1,706	
- Production materials		
- Other input materials	524	3
- Work-in-process	494	2
- Finished products	688	1.5

WORKING TIME PER OPERATIVE WORKER.

	1st shift	2nd shift	3rd shift	hours
Shift hours/day	9	-	-	hours
Actual hours/year	2,250	-	-	hours
Actual days/year	250	-	-	days

IV. MANNING TABLE

(number of personnel)

Skill categories: A Supervisory staff and foremen (for all shifts)
B Skilled operatives
C Semi-skilled operatives (machine operators)
D Unskilled operatives

(End of 1968)	Total	1st Shift			2nd Shift	3rd Shift
		A	B	C	D	B-C
ALL SHOPS & UNITS:	555	158	397			-
1. Primary operative shops	238	19	60	97	62	-
- Pipe manufacturing department	79	7	13	20	39	-
- Pump and sprinkler manufacturing department	115	9	35	53	18	-
- Tank manufacturing department	23	1	12	8	2	-
- Profile manufacturing department	21	2	-	16	3	-
2. Auxiliary operative units	144	10	134			-
- Repair & maintenance	46	1	45			-
- Mechanical shop	-	-	-			-
- Tooling shop	-	-	-			-
- Utilities control	10	1	9			-
- Product & material storage	20	4	16			-
- Off-site transport	10	1	9			-
- Oards, cleaners, sto.	44	1	43			-
- Others	14	2	12			-
3. Auxiliary non-operative units	173	129	44			-
- Production management	4	4	-			-
- Research & development (*)	49	15	34			-
- Sales unit	79	69	10			-
- Accounting	23	23	-			-
- General administration	18	18	-			-

(*) including 25 apprentices

IV. ANNUAL PRODUCTION

(1966)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price on factory (US \$)**	Total production value (1000 US \$)
		Unit	Output			
(Average)						
Steel mould shots:						
- 3,175 m/m (1/8")	1966	t	26	60	211.5	5,500
- 3,969 m/m (5/32")	"	"	5	60	19,845	78,000
- 4,763 m/m (3/16")	"	"	16	60	11,412	44,000
- 6,350 m/m (1/4")	"	"	1	24	658.25	2,500
TOTAL VALUE OF PRODUCTION:						130,000

* The nominal capacity output is estimated on the basis of 3 shifts and 7 working days a week.

** Without sales tax

Exports:

Exports are made at the following unit prices:

Steel mould shots - 3,175 m/m (1/8")	US \$ 1,439/t
- 3,969 m/m (5/32")	" " 313/t
- 4,763 m/m (3/16")	" " 672/t

No specific collateral benefits are connected with the exports.

Capacity utilization:

The factory is only in its first year of operation; although the "nominal capacity output" indicated in the above table may be an over-estimate by some 20-30 %, the 1966 level of operation is considered as being significantly lower than that of full capacity operation. The delivery system for materials and products is rather imperfect.

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed				Total consumption value (1000 US \$)
	Unit	Purchase	% imported	Tariff rate	
1. Energy and water					
TOTAL					
- Electricity	000 Kwh	227	-		1
- Gas	000 l	35	-		1
2. Production materials					
TOTAL					
- Steel wire for 3,175 m/m (1/8")	t	35	69		11
" " 3,969 m/m (5/32")	"	13	49		4
" " 4,763 m/m (3/16")	"	61	50		19
" " 6,350 m/m (1/4")	"	4	-		1
(Inventory accumulated: 1,200)					

* The quantity and value of specific production materials relate to the purchase during the year. The actual consumption amounts to \$ 26,000 after deduction of the inventory accumulation.

VI. VALUE ADDED

(1966)	Value (1000 US \$)
1. Wages & salaries	
- Employees in direct production (15 persons)	11.2
- Other employees (11 persons)	11.2
2. Other payments for employees	
3. Annual depreciation	1.0
4. Rentals paid	
5. Interests & royalties	
6. Sales tax (not included in P.V.A.)	1.0
7. Other ind. bus. taxes	
8. () Subsidies	
9. Corporate income before tax	1.0
TOTAL	

VII. MONTHLY EARNING RATES

(End of 1966)	No. of emp.	Average earning rates (US \$)
1. Local non operatives		
TOTAL		
- Managers	1	1,000
- Engineers	1	1,000
- Technicians	1	1,000
- Accountants	1	1,000
- Sales officers	1	1,000
- Other professional staff	1	1,000
- Clerks and typists	1	1,000
2. Local operatives		
TOTAL		
- Supervisors	1	1,000
- Foremen	1	1,000
- Machine operators	1	1,000
- Craftsmen	1	1,000
- Truck drivers	1	1,000
- Other full-time operatives	1	1,000
- Unskilled & part-time operatives	1	1,000
3. Foreign employees		
TOTAL		
- Municipal staff	1	1,000

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965) Manufacture of metal products except machinery and transport equipment (HSIC: 350)						
1. Size groups by number of persons employed	Number of estab.	Number of emp.	Avg. W. & S. per pers. (US \$)	Avg. gross prod. val. per pers. (US \$)	Avg. exp. gross prod. ratio* (%)	
up to 5	5	2,889	8,021	354	1,664	42
6 - 15	768	6,954	680	3,560	65	
over 15	911	82,507	1,257	5,890	74	
TOTAL						
4,568	97,482	1,141	5,377	76		
2. Size groups by scale of annual production (1000 US \$)						
up to 2	2	5,139	8,294	52	571	39
2 - 8	8	5,139	5,879	312	1,432	34
over 8	8	1,913	90,215	1,207	5,728	77
TOTAL						
3,190	104,388	1,065	5,075	76		

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

GOVERNMENT POLICIES:

The importation of production materials and materials of high quality is forbidden by the federal government. Nationally-produced materials often do not meet the desired standard.

FUTURE PLAN:

Within 2 or 3 years, approximately U.S. \$ 40,000 will be invested mainly for the expansion of the forging department and then for a corresponding expansion of the other departments. The additional operatives to be employed will be 2 persons for each of the three shifts: 6 persons in total.

DEPRECIATION:

Of the total allowance US \$ 12,000, the depreciation of machinery and equipment amounts to US \$ 6,400, the rest being for the amortization of non-physical capital.

V. ANNUAL PRODUCTION

(1968)	Yr. of first prod.	Quantity produced		Av unit price ex factory (US \$)	Total output value (1000 US\$)
		Unit	Quantity		
Irrigation equipment					
Quickcoupling pipe	1947	m	1,160,000		2,641
Fittings	1947	pieces	..		..
Pumps and pumping units	1947	pieces	2,565	(*)	459
Sprinklers	1953	pieces	67,020	(*)	693
Agricultural equipment					
Vacuum tanks	1967	pieces	1,069	(*)	1,304
Stable equipment	1967	pieces	..		255
Steel profiles	1960	pieces	..		1,042
Other revenue					104
(*) The average unit price ex factory cannot be given, since the total output value includes unidentified amounts of spare parts and extras.					TOTAL VALUE OF PRODUCTION: 6,398

VI. VALUE ADDED

(1968)	Total value (1000 US \$)
1. Annual wages & salaries	1,800
- Operative workers	645
- 397 personnel	
- Non-operative workers	665
- 158 personnel	
2. Other payments for employees	969
3. Annual depreciation	146
- Machinery & equipment	112
- Buildings & other facilities	31
- Non-physical capital assets	3
4. Rentals paid	26
5. Interests & royalties	132
6. Sales tax	201
7. Other indirect business taxes (*)	120
8. (-) Subsidies	-
9. Corporate income before tax	199
(*) Trade tax, etc.	
TOTAL VALUE ADDED	2,683

DESCRIPTION OF MAJOR PRODUCTS:

Irrigation pipes can be installed practically everywhere and can be utilised for all kinds of plantations

Advantages of light steel pipe versus aluminium pipe: more rugged, less deflecting, high working pressure, easy to repair, high bending angle (30°). The pipe coupling system can be installed quickly and easily.

Serial production.

Terms of delivery: within 1 month.

MARKET ASPECTS:

Re-sales:

Asbestos-cement pipes, various agricultural accessories.

Sales organization:

Own domestic sales organisation and own representatives in 3 foreign countries; in 78 other countries represented by agencies.

Share in the domestic market:

Irrigation plants: 80%.

Major export areas:

South and North-America, Asia.

Competition in the market:

Irrigation plants: no competition on the domestic market, however, heavy competition on the world market.

Consumers of products:

Agricultural establishments as well as industrial plants (for compressed-air pipes, etc.).

EXPORT:

Total annual export US \$ 2,324,000

Major products	To Western countries	To Eastern countries	To Developing countries
Irrigation plants	40	15	45

Export price policy: Price policy depending on market situation.

Government policy:

The government subsidises exports by way of repaying the export tax on value added tax reported within during the present and previous financial years. The amount of the indicated taxes is also determined automatically.

VII. ANNUAL CONSUMPTION

(1968)	Quantity consumed		% Import	Average import duties	Total consumption value (1000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL					
- Electricity	000 kWh	2,383			42
- Coal, coke	t	1,150			9
- Fuel oil	t	150			5
- Petrol and diesel oil	t	137			20
- Water	000 m ³	65 (*)			4
(*) 35,000 m ³ are self-supplied and not counted in the total consumption value.					
2. Production materials					
TOTAL					
- Cold rolled strip steel	t	3,580			408
- Other production material	..	..			1,609
- Welding material, paints, and lubricants	..	..			50

	Total consumption value (1000 US \$)
3. Other materials & supplies	
TOTAL	
- Packaging material	44
- Parts, supplies & services	28
- Other materials & supplies	62
4. Business services purchased	
TOTAL	
- Transportation, storage & insurance	308
- Communication, advertising & other business services	714
5. Work performed by subcontractors	
TOTAL	
	408
TOTAL VALUE OF CONSUMPTION:	3,715

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (11):

Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Av. Age (yrs)	Remarks:		Supplier country	Year of installation	Daily running time	Capacity output
				20 Purchased second-hand (0) Obsolete	25 A used EC Self-constructed				
Rolling mill	4	215	232	13	0b	Austria	1964	20 hrs	2,500 m/day
Pipe manufacturing plant	..	70	1,122	12	-	Germany, F.R. Austria	1956	9 hrs 24 "	36 t/shift 9 t/shift
Pickling plant	..	82	135	12	-				
Strip cutting machine	1	42	132	12	-	Germany, F.R.	1956	9 hrs	9 t/shift
Profile manufacturing equipment	..	72	136	15	-				
Turning lathes	46	136	348	10	-				
Drilling machines	35	39	66	10	-				
Presses	26	119	310	10	-	Austria	1959	16 hrs	1,200 pcs/day
Cutters and saws	45	29	50	10	-				
Welders	37	40	66	10	-				
Transport equipment	..	105	178	10	-				
Electrostatic painting equipment	7	41	54	7	-	Austria, Ger.	1964	9 hrs	..
Others	..	226	387	10	-				

CAPACITY POWER
Process equipment:
electric motors kW 900

Generating equipment:
installed capacity kVA -

CAPACITY OF PRIMARY OPERATIVE SHOPS

Major primary operative shops	Kind of process involved	Mechanization:		Capacity output
		A most advanced B considerably high standard	C moderate standard D appreciably short of today's standard E almost outdated	
Pipe manufacturing department	Cold-rolling of strip iron, bending, automatic pipe welding, preceeing, punching, completing, welding of fittings	C	II	11,000 m/day
Pump and sprinkler manufacturing department	Turning, milling, drilling, grinding, founding, assembling, painting	C	III	50 pumps/week 5,200 sprinklers/week
Tank manufacturing department	Cutting, rolling, welding, assembling, painting	C	III	6 tanks/day
Profile manufacturing department	Punching, forming, painting, packaging	C	II	

CAPACITY UTILIZATION

Full capacity output BS § 7, XX, XXI

Current utilization based on 1-shift operation.

Major products (or processes)	Approximate %							
	up to 30	40	50	60	70	80	90	100
Pipe manufacturing department								X
Pump and sprinkler manufacturing department								X
Tank manufacturing department					X			
Profile manufacturing								X

IX. HISTORY & PLAN

1. Performance in the past	Total output (1000 US \$)	No. of persons employed	Total output (1000 US \$)
Year: 1963	4,660	540	2,030
1964	4,630	544	1,860
1965	5,420	623	2,060
1966	5,840	587	2,590
1967	5,740	608	2,430
1968	6,090	555	2,330

2. Investments in the past	Approximate amount (1000 US \$)	Type of investment
From 1955 to 1967 :	980	Buildings
" 1955 " 1967 :	900	Machinery
" 1955 " 1967 :	890	Others

3. Future Plan:
From 19 .. to 19 ... : .. Company intends to set up an own galvanizing plant and to modernize the machinery and equipment. The amount to be spent will be financed out of depreciation funds.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

- confidential; figures of these size groups are included in those underlined.

(1964) Manufacture of metal products excl. machinery and transport equipment (ISIC Code 350)

1. Size groups by number of persons employed:	No. of estab.	No. of emp.	Av. W & S. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)	2. Size groups by annual scale of production (1000 US \$):		Av. W & S. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)	
						No. of estab.	No. of emp.				
up to 19	100	312	1,303	7,247	51	up to 20	65	92	933	5,008	64
20 - 49	21	878	1,652	7,648	50	20 - 40	16	57	1,488	7,244	57
100 - 494	9	<u>4,255</u>	<u>2,048</u>	<u>8,362</u>	<u>45</u>	40 - 200	26	351	1,452	6,164	53
500 - 999	2	C	C	C	C	200 - 400	10	381	1,505	7,389	51
over 1,000	1	C	C	C	C	400 - 2,000	10	1,102	1,834	8,245	48
						over 2,000	6	3,472	2,104	9,289	44
TOTAL	133	5,445	1,941	8,657	46	TOTAL	133	5,445	1,941	8,657	46

X. DESIGN AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service

- | | | |
|--|---------------------------------------|-----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Repair and repair manual files |
| 2. Feasibility studies | 6. Industrial training | 9. Admission of foreign labor |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, maintenance & replacement | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

1. Services performed during the past five years:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
1, 5, 8	Mozambique	2	Irrigation plants for sugar cane	Sprinkled area: 14,500 acres and 3,000 acres
8	Tunisia	1	Irrigation plant	162,000 m quick coupling pipes, 5,000 sprinklers of various types, 10,000 standard pipe couplings with automatic valves
1, 5, 8	Thana	1	Irrigation plant	Sprinkled area: 3,500 acres
8	South Africa	1	Irrigation plant for sugar cane	Sprinkled area: 1,150 acres
8	Rhodesia	2	Irrigation plants for sugar cane	Sprinkled area: 3,000 and 8,700 acres
1, 5, 8	Guinea	1	Irrigation plant for bananas	Sprinkled area: 4,760 acres

Further irrigation plants with less than 1,000 acres of sprinkled area were erected in Mozambique, Swaziland, Rhodesia, and Kenya.

2. Further co-operation possibilities with developing countries:

- | | |
|---|--|
| 1 | Company could furnish engineering studies for the production of irrigation plants. |
| 3 | The company is interested in supplying know-how contracts for the construction of irrigation plants. |
| 4 | Turn-key plants as well as single machines could be secured. |
| 5 | Could be provided. |
| 6 | Foreign personnel could receive in-plant training. |
| 7 | Trouble shooting advisory service could be rendered. |

XII. SUPPLEMENTARY NOTES

Contract and commission work:

Since the company does not yet operate an own galvanization plant to coat irrigation pipes, subcontractors had to be employed. Total commission paid amounted to US \$ 408,000.

On the other hand, the company performed commission work (turning) amounting to some US \$ 6,000.

Difficulties in the past:

Lack of capital and of skilled operatives.

Depreciation policy:

The company applies both the straight-line and accelerated methods of depreciation.

Inventory policy:

On the average the stock of finished products amounts to 1% of the total value of production.

Technical features of special machinery:

The available pipe manufacturing machinery can produce very thin-walled pipes applying both the butt and joint welding techniques.

Major Products:

Household refrigerators, water coolers and a variety of heating and cooling apparatuses.
Annual output amounted to US \$ 7.7 billion on one-shift operation.

Reporting Unit:

A one-establishment enterprise, founded in 1954; privately owned; no foreign capital participation; construction of the factory started in 1954 and commercial production in 1955; the first profits were made in 1954 when the total output amounted to US \$ 2 million. Possibility of further specialisation. No exports.

I. FIXED CAPITAL ASSETS

(End of 1968)

	Original purchase value 1000 US \$	Replacement value 1000 US \$	Average age (Yrs.)
1 Primary process equipment (including installation cost) TOTAL	2,204	..	..
- Process equipment *	2,195	..	..
- Hand tools & apparatuses	9	..	..
2 Buildings TOTAL	828	..	..
- Primary industrial buildings (total floor space: 25,000 m ²)	326	..	..
- Auxiliary buildings (450 m ²)	476	..	..
- Warehouses (2,000 m ²)	26	..	..
- Office administration buildings (150 m ²)	1/2	..	..
- Housing (100 m ²)	1/2	..	..
3 Auxiliary facilities (incl. buildings) TOTAL	24	..	..
- Internal power equipment	4	..	..
- Laboratory facilities	3	..	..
- Means of transportation	11	..	..
- Office equipment	6	..	..
TOTAL PHYSICAL FIXED ASSETS (excluding land)	3,056	..	..
4 Other fixed capital assets TOTAL	346	..	..
- Land (total acreage: 40,000 m ²)	58	71	..
- Land improvements	-	-	..
- Others	288	..	..

1/ Value included under "Auxiliary buildings".

*NB Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1968 monthly average)

	US\$	US\$	US\$	US\$	US\$	US\$
1. Local non-operatives						
- Managers (general assistant)	approx.					790
- Engineers	265	-				660
- Technicians	130	-				395
- Accountants	80	-				265
- Sales officers	80	-				395
- Clerks and typists	40	-				158
2 Local operatives						
- Supervisors	112	-				460
- Foremen	105	-				265
- Skilled operatives	40	-				200
- Machine operators	40	-				160
- Craftsmen	40	-				210
- Truck drivers	40	-				40
- Unskilled operatives	-	-				-
- Other full-time operatives	-	-				-
- Part-time operatives	-	-				-
3 Foreign employees						
- Managerial staff	-	-				790
- Technical staff	-	-				-
- Other skilled operatives	-	-				-
- Unskilled operatives	-	-				-

EXTERNAL CONDITIONS:

Transport:	external long distance	fair
	internal long distance	fair
	local and city	fair
Utilities:	electricity	fair
	water	fair
	gas	fair
Community:	residence	-
	health and recreation	-
	education	fair
Own Welfare Facilities:		-

III. INVENTORIES

(End of 1968)

	Actual value 1000 US \$	Number of months
Inventories	1,135	
PPPMs:		
- Production materials	512	..
- Other input materials	-	..
- Work-in-process	185	..
- Finished products	578	..

(See XI. for liquid assets and desired working capital).

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift
Shift boundary	8	-	- hours
Average hours/yr:	2,136	-	- days
Normal days/yr:	292	-	- days

IV. MANNING TABLE

(Number of persons)

Shift category: A Supervisory staff and foremen for all shops
B Machine operators
C Other operatives

(196 Average)

ALL SHOPS & UNITS:

1 Primary operative shops

All shops

2 Auxiliary operative units

- Repair & maintenance
- Mechanical shop
- Tooling shop
- Utilities control
- Product & material storage
- Off-site transport
- Guards, cleaners, etc.

3 Auxiliary non-operative units

- Production management
- Research & development
- Sales unit
- Accounting
- General administration
- Others

Total	A	to shift		2nd shift	3rd shift
		1	2		
712	92	620	-	-	-
615	15	40	580	-	-
77	77	-	-	-	-
2	2	-	-	-	-
1	1	-	-	-	-
11	11	-	-	-	-
11	11	-	-	-	-
20	20	-	-	-	-
32	32	-	-	-	-

V. ANNUAL PRODUCTION

(1968)	W of Prod	Quantity produced		Avg unit price in factory (US \$)	Total output value (1000 US \$)
		Unit	Quantity		
Producers for group of products					
Water heaters (25, 30, 40, 120 gallons)		pcs	17,172	74-174	1,244
Heaters (large, medium, small)		pcs	2,811	14- 63	356
Central heating water tanks		pcs	41	305-423	13
Radiator		m2	76,111	5	378
Refrigerators (7, 9, 12 ft)		pcs	16,120	234-314	3,673
Cooking ranges (3,4,5 flames)		pcs	10,496	22-213	229
Tables for stoves		pcs	448	14	6
Water coolers		pcs	5,161	166	858
Gas coolers		pcs	180	284	50
Others		472
TOTAL VALUE OF PRODUCTION:					7,711

VI. VALUE ADDED

(1968)	Total value (1000 US \$)
1. Annual wages & salaries	1,444
Operative workers	1,444
() All personnel	
Non-operative workers	
() All personnel	
2. Other payments for employees	
3. Annual depreciation	
Machinery & equipment	
Buildings & other fixtures	
Non-physical capital assets	
4. Rentals paid	
5. Interests & royalties	
6. Sales tax	
7. Other indirect business taxes	
8. () Subsidies	
9. Corporate income before tax	
TOTAL VALUE ADDED	

DESCRIPTION OF MAJOR PRODUCTS:

The quality of all the products meets international standards.

MARKET ASPECTS:

Consumers of products:
Private households and enterprises.

Sales organization:
Products are sold through sales representatives.

Extent of the market:
The market is located all over the country.

Share in the domestic market:
Approx. 12% of the domestic market.

Prospects of exports:
Good prospects, but export prices ought to be lower than the domestic prices.

Competition with imported products:
No products of the same type are imported.

Acquisition of production materials:
The delivery of imported materials and parts takes some 6 months on the average; that of domestically supplied goods only 15 days.

EXPORT

Total annual export: None.

Major products	To Western countries	To Eastern countries	To Developing countries

VII. ANNUAL CONSUMPTION

(1968)	Quantity consumed		% import	Average import price (US \$)	Total consumption value (1000 US \$)
	Unit	Quantity			
1. Energy and water					74
TOTAL					74
- Electricity	000 kWh	..	-	-	34
- Semi-solid fuels	..	..	-	-	3
- Liquid fuels	000 l	118	-	-	4
- Gas	000 m3	1,160	-	-	38
- Water	000 m3	43*	-	-	-
* Internally supplied and not counted in the total					
2. Production materials					3,997
TOTAL (Supplier)					3,997
- Sheet (Japan, GB, Fed.R. of Germany)	t	4,175	100	..	1,018
- Iron bars, pipes and profiles	kg	208,940	100	..	59
- Paints (Netherlands)	kg	61,431	50	..	113
- Carburizers (USA, Netherlands)	pcs	18,861	100	..	193
- Refrig. compressor (USA)	pcs	7,345	100	..	479
- Refrig. equipment	..	..	30	..	389
- Cooking range equipment	..	..	50	..	182
- Cooler equipment	..	..	60	..	275
- W.C. Water	pcs	6,126	100	..	91
- Heater equipment	..	..	50	..	54
- Other equipment	..	..	..	..	644

	Total consumption value (1000 US \$)
3. Other materials & supplies	115
TOTAL	115
- Packaging material (Cardboard boxes)	18
- Parts, supplies & services	5
- Other materials & supplies	112
4. Business services purchased	187
TOTAL	187
- Transportation, storage & insurance	60
- Communication, advertising & other business services	27
5. Work performed by subcontractors	11
TOTAL	11
TOTAL VALUE OF CONSUMPTION:	

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (N.1.):

Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Avg. Age (yrs)	Remarks
--------	--------------------------------------	--------------------------------	----------------	---------

Remarks:
 00. Replaced second-hand
 01. Obsolete
 02. Second
 03. Self constructed

Further details:

Galvanizing machines are of special type.

with training programme for operatives working on these machines.

CAPACITY POWER:

Process equipment:
 electric motors - kW

Generating equipment:
 installed capacity - kVA

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Classification:
 A. well advanced
 B. considerably high standard
 C. moderate standard
 D. appreciably short of India's standard
 E. almost outdated

Automation:
 I. fully automated
 II. semi-automated
 III. non-automated

Major primary operative shops	Kind of process involved	Classification	Automation
Cutting shop		B	II
Welding shop		A	II
Painting shop		B	II
Assembling shop		B	II

Further details:

CAPACITY UTILIZATION:

Full capacity output: Approximately 18.5 lakhs/year.

Current utilization:

Major products for process	Approximate %									
	up to 20	20-40	40-60	60-70	70-80	80-90	90-100			

The actual over-all capacity utilization is rated to be about 41% due to lack of demand.

For a maximum capacity utilization, another 336 operative and 45 non-operatives could be employed.

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output (1000 US \$)	No. of persons employed	Total assets (1000 US \$)
1963	-	-	-
1964	1,890	278	-
1965	4,240	462	-
1966	4,110	476	-
1967	5,280	683	-
1968	7,710	712	-

2. Investments in the past:

From 1961 to 1964:	Approximate amount (1000 US \$)	Type of investment
2,640	Purchase of land and equipment, construction of building.	

3. Future Plan:

From 1969 to 1974: 726 New additions to production facilities, technological improvement of process equipment. Another 150 primary operatives and 1 auxiliary operative as well as 50 persons for management and administration will be employed then.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

* Data of selected 10 establishments representing only part of ISIC 360.

(1967) Manufacture of machinery except electrical
 Industry 362102 (ISIC Code 360 *)

Size groups by number of persons employed	No. of estab.	No. of emp.	Avg. No. & E. per estab. (1000 \$)	Avg. gross prod. val. per estab. (1000 \$)	Avg. value added/gross prod. ratio (%)	Fixed capital per estab. (1000 US \$)
up to 50	2	..	8,114	32,017	25	32
50 - 200	4	..	25,130	24,7,452	79	500
over 200	4	..	151,411	2,47,5,232	24	3,593
TOTAL	10	..	331,314	1,485,017	29	1,643

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- 1. Engineering (civil)
- 2. Financial systems
- 3. Industrial services
- 4. Equipment supply
- 5. Installation & maintenance
- 6. Technical assistance (management)
- 7. Technical training
- 8. Technical consultancy
- 9. Other (specify)
- 10. Other (specify)
- 11. Other (specify)

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

1. Services performed during the past five years:

Type of services	Country or region	No. of projects	Field of industry	Description of projects
------------------	-------------------	-----------------	-------------------	-------------------------

XII. SUPPLEMENTS & NOTES

Contract work:

US \$ 10,560 were paid to a subcontractor for commission work based on short-term agreements.

Governmental policies:

Governmental policies can be considered as favourable.

Depreciation policy:

The following depreciation rates were applied: Machinery 30%, buildings 10%, office equipment 20%, laboratory facilities 25%.

Labour training:

On-job training is currently in operation. Operatives are also trained for specialized works.

<u>Liquid assets:</u>	<u>Value in US \$</u>	<u>Desired working capital:</u>	<u>Value in 1000 US \$</u>	<u>Equivalent no. of months</u>
- Cash on hand and in bank	13	- Production materials	172	12
- Marketable securities and bonds	-	- Other materials and supplies	11	12
- Accounts receivable from delivery of goods and services	264	- Finished products	325	12
- Other accounts receivable	723	- Wages for primary operative workers	315	12
- Prepaid expenses	41	- Other wages and salaries	179	12
Total average liquid assets	1,761	- Training costs	-	-
		- Administrative costs, sales costs and contingencies	141	12
		- Other special items	-	-
		Total desired working capital	1,761	12

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROSES EQUIPMENT (1):

Number	Original Purchase Value (USD US \$)	Replacement Value (USD US \$)	Age (Yrs)	Remarks
--------	-------------------------------------	-------------------------------	-----------	---------

Remarks:
 SW Purchased second-hand
 LW (Leased)
 S Special
 SI Self-constructed

Further details

galvanizing machines are of special type.

Two training programs for operatives working in these

machines.

CAPACITY POWER

Process equipment
 electric motors - 10

Generating equipment
 installed capacity - 1VA

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Methodology:
 1. most advanced
 2. considerably high standard
 3. almost standard

Assessment:
 I. fully advanced
 II. semi-advanced
 III. unadvanced

Name primary operative shops	Kind of process involved	Method	Assess.
Cutting shop		B	II
Welding shop		A	II
Painting shop		B	II
Assembling shop		B	II

Further details

CAPACITY UTILIZATION:

Full capacity output Approximately 100 %

Current utilization:

Major products for present	Approximate %									
	10	20	30	40	50	60	70	80	90	100

The actual overall capacity utilization is stated

to be about 30% due to lack of demand.

For a maximum capacity utilization, another 100 operatives

and 50 non-operatives would be employed.

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output (USD US \$)	No. of persons employed	Total capacity (USD US \$)
1963	-	-	-
1964	1,490	274	-
1965	1,740	162	-
1966	4,119	476	-
1967	1,250	683	-
1968	2,211	110	-

2. Investments in the past:

From 1911 to 1941:	Approximate amount (USD US \$)	Type of investment
1941 to 1944:	1,244	Purchase of land and equipment, construction of building.

3. Future Plan:

From 1944 to 1951:	Approximate amount (USD US \$)	Type of investment
1951 to 1954:	776	New additions to production facilities, technological improvement of process equipment. Another 100 primary operatives and 1 auxiliary operative as well as 5 persons for management and administration will be employed then.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

* Data of selected 10 establishments representing only part of ISIC 360.

(1967) Manufacture of machinery except electrical

Industry	Subindustry	(SIC Code)	Av. No. of estab.	Av. gross prod. val. per estab. (USD \$)	Av. value added per estab. (USD \$)	Fixed capital per estab. (USD US \$)
1	361	361	2	8,374	12,517	28
			50 - 200	6,150	14,192	19
			over 200	15,111	17,642	24
			TOTAL	333,314	2,400,317	29

III. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

1. Engineering studies	2. Industrial management systems	3. Industrial management systems
4. Industrial services	5. Industrial training	6. Industrial management systems
7. Equipment supply	8. Technical assistance	9. Industrial management systems
10. Installation & maintenance		

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES

1. Services performed during the past five years:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
-----------------	-------------------	-----------------	-------------------	-------------------------

III. SUPPLEMENTS & NOTES

Contract work:

US \$ 10,560 were paid to a subcontractor for commission work based on short-term agreements.

Governmental policies:

Governmental policies can be considered as favourable.

Depreciation policy:

The following depreciation rates were applied: Machinery 10%, buildings 5%, office equipment 5%, laboratory facilities 5%.

Labour training:

On-job training is currently in operation. Operatives are also trained for specialized works.

<u>Liquid assets:</u>	<u>Value in US \$</u>	<u>Desired working capital:</u>	<u>Value in US \$</u>	<u>Equivalent no. of months</u>
- Cash on hand and in bank	10	- Production materials	100	10
- Marketable securities and bonds	-	- Other materials and supplies	100	10
- Accounts receivable from delivery of goods and services	450	- Finished products	170	17
- Other accounts receivable	724	- Wages for primary operative workers	150	15
- Prepaid expenses	41	- Other wages and salaries	100	10
Total average liquid assets	1,265	- Training costs	10	1
		- Administrative costs, sales costs and contingencies	100	10
		- Other special items	10	1
		Total desired working capital	1,140	11

Major Products:

Refrigerators, coolers, heaters, etc.
 Capable of producing about 32,000 sets of refrigerators, 40,000 sets of coolers, 80,000 sets of heaters, 9,000 sets of water heaters and other products based on one-shift operation. Full-capacity output amounts to US \$ 13 million.

Reporting Unit:

A one-establishment enterprise, privately owned; founded in 1947. No foreign capital participation. Trial and commercial production were first started in the year of foundation. The break-even point was surpassed for the first time at an output level of US \$ 31,000. Total annual exports amount to approximately US \$ 460,000. There is no possibility of merging.

I. FIXED CAPITAL ASSETS

(End of 1968)	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average (Yrs)
1 Primary process equipment (including installation cost)	2,112	..	7
TOTAL	2,112	..	10
- Process equipment *	..	..	4
- Hand tools & apparatuses	..	..	..
2 Buildings	3,860	..	12
TOTAL	3,860	..	10
- Primary industrial buildings (total floor space: .. m ²)	3,860	..	10
- Auxiliary buildings	..	..	10
- Warehouses	..	..	10
- Office administration buildings	..	..	20
- Housing	..	..	..
3 Auxiliary facilities (excl. buildings)	141	..	4
TOTAL	141	..	4
- Internal power equipment	..	..	..
- Laboratory facilities	40	..	4
- Means of transportation	100	..	4
- Office equipment	145	..	4
TOTAL PHYSICAL FIXED ASSETS (excluding land)	6,521	..	..
4 Other fixed capital assets	433	..	..
TOTAL	433	..	..
- Land (total acreage: 1,100 m ²)	161	..	..
- Land improvements	..	..	..
- Others	204	..	..

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1968 monthly average)

	US\$	US\$	US\$	US\$	US\$	US\$
1. Local non operatives						
- Managers 1/			460	-	660	
- Engineers 2/			330	-	530	
- Technicians 2/			265	-	460	
- Accountants			130	-	230, 200-330, 265-395	
- Sales officers			140	-	240	
- Clerks and typists			85	-	145, 65 - 110	
2 Local operatives						
- Supervisors			160	-	330	
- Foremen						
- Skilled operatives			100	-	180	
- Machine operators			160	-	290	
- Craftsmen			120	-	165	
- Truck drivers			32	-	48	
- Unskilled operatives			90	-	130	
- Other full-time operatives						
- Part-time operatives						
3 Foreign employees						
- Managerial staff					660 per person	
- Technical staff 1/						
- Other skilled operatives						
- Unskilled operatives						

1/ General and 10 assistant managers
 2/ or assistant engineers
 3/ Engineers, trainers and other technical staff

EXTERNAL CONDITIONS:

Transport	external long distance	excellent
	internal long distance	fair
	local and city	fair
Utilities	electricity	excellent
	water	excellent
	gas	-
Community	residence	-
	health and recreation	excellent
	education	fair
Own Welfare Facilities:		-

IV. MANNING TABLE

(number of persons)

Shift categories: A Supervisory staff and foremen (for all shifts) & Machine operators
 B Others
 C Others
 D Others

(1968 average)

ALL SHOPS & UNITS:	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	B-D	B-D
TOTAL	2,011	413		1,598			
1 Primary operative shops	1,361	50	711	600			
All shops	1,361	50	711	600			
2 Auxiliary operative units	300	13		287			
- Repair & maintenance	45	5		40			
- Mechanical shop							
- Tooling shop							
- Utilities control	33	3		30			
- Product & material storage	35	5		30			
- Off-site transport							
- Hards, cleaners, etc.	60			60			
- Other units	127			127			
3 Auxiliary non-operative units	350	350					
- Production management	10	10					
- Research & development	7	7					
- Sales unit	35	35					
- Accounting and data processing	50	50					
- General administration	100	100					
- Other departments	148	148					

III. INVENTORIES

(End of 1968)

	Actual value (000 US \$)	Number of months
Inventories	12,376	
TOTAL	12,376	
- Production materials	6,316	..
- Other input materials	170	..
- Work-in-process	792	..
- Finished products	5,478	..

(See XII, for desired working capital and liquid assets)

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift hours/day	8	-	-	hours
Average hours yr:	2,320	-	-	hours
Normal days/year:	290	-	-	days

Major Products: Cans, cans with press-on-lids and other disposable containers.
Capable of producing annually 2,000 t of cans, 490 t of cans with press-on-lids and 20 t of lost containers based on 2-shift operation. Full-capacity output amounts to US \$ 1.5 million.

Reporting Unit: A branch of a centrally organized 4-establishment enterprise; privately owned joint stock company. Originally founded in 1890; this branch started production in 1935; 165 employees. Largest can manufacturer in the country. Advantageous location; no exports; own research activities. The machinery and equipment utilized is of modern standard.
Business year: 1 July 1966 - 30 June 1967.

I. FIXED CAPITAL ASSETS

(End of June 1967)	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average (Yrs)
1 Primary process equipment (including installation costs)			
TOTAL	568	2,636	
- Process equipment *	566	2,632	
- Hand tools & apparatus	2	4	1-15
2 Buildings			
TOTAL	363	774	
- Primary industrial buildings	251	426	3
- (total floor space: 5,336 m ²)			
- Auxiliary buildings	75	271	45
- Warehouse	-	-	-
- Office administration buildings	-	-	-
- Housing	37	77	30
3 Auxiliary facilities (excl. buildings)			
TOTAL	35	13	
- Industrial power equipment	3	27	60
- Laboratory facilities	-	-	-
- Means of transportation	29	50	4
- Office equipment	3	4	7
TOTAL PHYSICAL FIXED ASSETS (excluding land)	966	3,423	
4 Other fixed capital assets			
TOTAL	3	62	
- Land (total purchase: 22,142 m ²)	2	43	-
- Land improvements (t. acq. 1,433 m ²)	1	19	-
- Others	-	-	-

*NB: Details of process equipment and auxiliary facilities are given on page three, Section VIII.

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1966/67 monthly average)	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1 Local non operatives						
- Managers	-	-	-	-	-	1
- Engineers	-	-	-	1	-	-
- Technicians	-	-	-	-	-	-
- Accountants	-	-	2	2	-	-
- Sales officers	-	-	-	-	-	-
- Clerks and typists	-	3	1	2	2	-
2 Local operatives						
- Supervisors	-	-	-	-	-	-
- Foremen	-	-	-	4	9	-
- Skilled operatives	-	-	-	-	-	-
- Machine operators	-	24	-	10	-	-
- Craftsmen	-	-	-	-	1	-
- Truck drivers	-	-	-	-	4	-
- Unskilled operatives	-	86	-	-	-	-
- Other full-time operatives	-	-	1	5	3	-
- Part-time operatives	-	-	-	-	-	-
3 Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

EXTERNAL CONDITIONS

Transport	external long distance	fair
	internal long distance	fair
	local activity	fair
Utilities	electricity	excellent
	water	excellent
	gas	excellent
Community	residence	excellent
	health and recreation	fair
	education	fair
Own Welfare Facilities		-

III. INVENTORIES

(End of June 1967)	Actual value (000 US \$)	Number of months
Inventories		
TOTAL	351	
- Production materials	173	2.5
- Other input materials	43	10
- Work-in-process	89	3
- Finished products	46	0.5

WORKING TIME PER OPERATIVE WORKER

	1st shift	2nd shift	3rd shift	
Shift hours/day	8	8	-	hours
Actual hours/year	1,710	1,710	-	hours
Actual days/year	225	225	-	days

IV. MANNING TABLE

(number of persons)

Shift categories: A: Supervisory staff and foremen (for all shifts)
B: Skilled operatives
C: Semi-skilled operatives (machine operators)
D: Unskilled operatives

(1967 average)	Total	1st Shift				2nd Shift	
		A	B	C	D	B-D	B-D
ALL SHOPS & UNITS:	165	16	90		52		
1 Primary operative shops	130	6	4	30	35	55	-
Production of cans							
Production of cans with press-on-lids	130	6	4	30	35	55	-
Production of lost containers							
2 Auxiliary operative units	27	2	21		4		-
- Repair & maintenance	12	1	10		1		-
- Mechanical shop	-	-	-		-		-
- Tooling shop	-	-	-		-		-
- Utilities control	1	1	-		-		-
- Product & material storage (*)	5	-	3		-		-
- Off-site transport	2	-	1		1		-
- Guards, cleaners, etc.	4	-	2		2		-
- Others	5	-	5		-		-
(*) incl. shipping dept.							
3 Auxiliary non-operative units	8	8	-		-		-
- Production management	1	1	-		-		-
- Research & development	-	-	-		-		-
- Sales unit	3	3	-		-		-
- Accounting	3	3	-		-		-
- General administration	1	1	-		-		-

V. ANNUAL PRODUCTION

(1968)	Yr. of first prod.	Quantity produced		Av. unit price ex factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Products for group of products					
- Refrigerators	1963	}	27,374	145-172	4,330
- Coolers (water)	1961		36,129	102-106	3,754
- Heaters	1940		63,089	33	2,089
- Water heaters	1961	}	7,283	86- 48	640
- Tables and chairs (simple types for kitchens)	1948		pcs	25,800	3- 4	11
- Heater trays	1940		3,751	3.2	11
- Cooler strainers	1968		7,253	2.6	19
- Plastic tapes	1966		833	7.2	6
* Excluding sales tax.					
TOTAL VALUE OF PRODUCTION:					10,167

VI. VALUE ADDED

(1968)	Total value (000 US \$)
1. Annual wages & salaries	1,014
- Operative workers (1,661 persons)	1,014
- Non-operative workers (1,350 persons)	300
2. Other payments for employees	333
3. Annual depreciation	593
- Machinery & equipment	198
- Buildings & other facilities	106
- Non-physical capital assets	289
4. Rentals paid	66
5. Interests & royalties	30
6. Sales tax	-
7. Other indirect business taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	3,054
TOTAL VALUE ADDED: 6,171	

DESCRIPTION OF MAJOR PRODUCTS:

Major production materials for refrigerators, coolers, heaters and water heaters are imported:

- Compressors from Italy
- Electric motors from USA
- Electric pumps from Italy
- Iron sheets from Fed. Rep. of Germany, Japan and USA.

MARKET ASPECTS:

Consumers of products:

95% households; 5% business offices and hospitals.

Sales organization:

Products are sold through wholesale agents.

Share in the domestic market:

65% of the domestic market; no particular regional concentration.

Competition with imported products:

There is no import of similar products.

Import of production materials:

Some are subject to high customs duties.

EXPORT:

Total annual export US \$ 4,000,000

Major products	To Western countries	To Eastern countries	To Developing countries
Refrigerators	-	-	100%
Coolers	-	-	100%
Heaters	-	-	100%

Export price policy:

Reimbursement of custom duties for imported raw materials enables the establishment to reduce export prices to US \$ 121 for refrigerators, US \$ 133 for coolers, and US \$ 24 for heaters.

In the year of reference exports increased by 5%. In the future an increase of 4% is expected.

VII. ANNUAL CONSUMPTION

(1968)	Quantity consumed		% import	Average import duties on value (£)	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					191
TOTAL:					
- Electricity	000 kWh	6,200	-	-	123
- Solid fuels	..	..	-	-	2
- Liquid fuels	000 l	2,000	-	-	66
- Water	000 m3	400,000 *	-	-	..
* Internally supplied and not counted in the total.					
2. Production materials 1/ and 2/ see XII. Supplements.					1,349
TOTAL:					
- Iron sheets	t	5,000 1/	87	40	941
- Galvanized iron	t	75 1/	93	45	14
- Electric motors for coolers	pcs	33,500	100	20	663
- Compressors	pcs	23,000	100	100	304
- Heater and water carburetors	pcs	57,500	100	50	228
- Paints	gallons	25,000 1/	50	60	194
- Galvanized and ordinary pipes	t	350	100	35	73
- Screws and nuts	pcs	10 mill.	100	30	53
- Plastic refuse A.B.S. and H.I.P.	t	550	100	35-40	282
- Waterproofing materials	t	250	100	60	33
- Aluminium profiles	t	20 1/	50	65	53
- Freon gas	t	65 1/	93	35	55
- Other production materials 2/-					452

	Total consumption value (000 US \$)
3. Other materials & supplies	425
TOTAL:	
- Packaging material (cardboard boxes, etc.)	16
- Parts, supplies & services	132
- Other materials & supplies	33
4. Business services purchased	224
TOTAL:	
- Transportation, storage & insurance	132
- Commission, advertising & other business services	92
5. Work performed by subcontractors	-
TOTAL:	
TOTAL VALUE OF CONSUMPTION: 4,599	

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (8.1):

Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Avg. Age (yrs)	Remarks
--------	--------------------------------------	--------------------------------	----------------	---------

Remarks:
 III. Purchased second-hand
 IV. Obsolete
 V. Second
 VI. Self-renewed

Vacuum forming machines and electro-painting machines are included in the machine park.
 Total number of machinery amounts to 300.

CAPACITY POWER:

Process equipment:
 - electric motors: 500 sets ranging from 37 kWh to 0.20 kWh

Generating equipment:

The enterprise makes no use of generators because of the adequate supply from a municipality source.

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization		Further details
		Mechan.	Autom.	
Cutting shop	..	B	II	
Welding shop	..	B	II	
Painting shop	..	B	II	
Assembling shop	..	C	II	

CAPACITY UTILIZATION:

Full capacity output: US \$ 13 million.

Current utilization:

Major products (or processes)	Approximate %					
	up to 20	20-40	40-60	60-75	75-90	90-100
Refrigerators					94	
Coolers					90	
Heaters				78		
Water heaters				81		
Tables and chairs				81		

The actual over-all capacity utilization rate is considered as being about 86%, due to weak demand for the products. In the future an increase in demand is expected.

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output (1000 US \$)	Nb. of persons employed	Total exports (1000 US \$)
1963
1964	..	1,020	..
1965	..	1,320	320
1966	..	1,610	..
1967	..	2,011	460
1968	10,960	2,011	460

2. Investments in the past:

In	Approximate amount (1000 US \$)	Type of investment
In 1965:	2,640	For construction of building
" 1966:	530	For new machinery

3. Future Plan:

From 1968 to 1970: 1,320 Replacement investment for new additions and technological improvement covering both the primary and the auxiliary facilities. Also technological improvement of product-mix. These investments will be accompanied by an addition of 40 primary operatives for the 1st shift.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

* Data of selected 10 establishments represent only part of ISIC-code 360.

(1967) Manufacture of machinery except electrical machinery (ISIC Code: 360 *)

I. Size groups by number of persons employed	No. of establ.	No. of empl.	Avg. W. & S. per establ. (1000 US \$)	Avg. gross prod. val. per establ. (1000 US \$)	Avg. value added/gross prod. ratio (%)	Fixed capital per establ. (1000 US \$)
up to 50	2	..	8,314	32,017	25	32
51 - 200	4	..	85,232	940,952	79	500
over 200	4	..	753,911	2,755,632	24	3,593
TOTAL:	10	..	311,319	1,485,037	29	1,643

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services:

- 1. Engineering studies
- 2. Financial assistance
- 3. Industrial services
- 4. Equipment supply
- 5. Installation & maintenance
- 6. Technical and managerial personnel
- 7. Industrial training
- 8. Technical consultation
- 9. Transport and related services
- 10. Administrative services
- 11. Labour

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

1. Services performed during the past five years:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
-----------------	-------------------	-----------------	-------------------	-------------------------

XIII. SUPPLEMENTS & NOTES

Ann VII. Annual consumption

1) Internal supply of production materials not included in total consumption value:

- 700 tons of iron sheets
- 300 tons of galvanized iron
- 25,000 gallons of paints
- 20 tons of aluminium profiles
- 5 tons of freon gas
- 50 tons of special wire (included in other production materials).

2) Detail of other production materials:

	Quantity consumed	Unit	Quantity	% import	Average import duties - %	Total consumption value (000 US \$)
Special wire	t	500		90	25	141
Condenser pipes	m	60,000		100	20	69
Evaporators	No.	35,000		100	40	120
Punched sheets	No.	250		100	20	140
Total						470

Average liquid assets:	(000 US \$)	Desired working capital:	(000 US \$)	Equivalent no. of months
Cash on hand and in bank	792	Production materials	1,250	3
Marketable securities and bonds	7,920	Other materials and supplies	66	10
Accounts receivable from delivery of goods and services	3,960	Finished products	1,250	3
Other accounts receivable	660	Wages for primary operative workers	12	1
Prepaid expenses	26	Other wages and salaries	19	1
Total	13,358	Training costs	26	12
		Administrative and sales costs, contingencies	1,320	12
		Total	12,738	

Depreciation policy:

Under the income tax law, the following depreciation rates were applied: Machinery 10%, buildings 10%, laboratory facilities 25%, office equipment 20%.

Labour training:

Own training courses and on-job training programs available within the enterprise; technical staff members are sent to industrial Management Institutes abroad. Total annual expenses for training amount to US \$ 26,400 per annum.

Major Products: Cranes and stamping presses. The annual production capacity is 50 units of cranes and 100 presses on one shift operation (machinery of parts with two shifts)

Reporting Unit: A one-factory, private enterprise; established in 1959. No participation of foreign capital.

I. FIXED CAPITAL ASSETS

(End of 1967)

	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
1 Primary process equipment			
TOTAL		124.0	130.4
- Process equipment	1963	120.4	100.7
- Hand tools & apparatuses	1960-67	1.2	1.7
- Cost of installation		2.4	8.0
2 Primary industrial building			
TOTAL		11.2	19.7
(total floor space: 1,300 m ²)		11.2	19.7
3 Auxiliary facilities			
TOTAL		9.2	15.8
- Water, steam, electricity, cooling & storing	1960	1.2	10.2
- Transportation facilities (total load: 1 ton)		1.4	14.0
- Administrative facilities		4.2	9.0
- Laboratory facilities			
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		144.4	165.9
4 Other fixed capital assets			
TOTAL		16.2	17.0
- Land (total acreage: 1,300 m ²)		16.2	17.0

DETAIL OF PROCESS EQUIPMENT (no.)

	Supplier country	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
Cranes				
Lathes				
Drills				
Milling machines	Switz./Germ.	1960	14.0	100
Welding machines	and			
Boring machines	Mexico	1967		
Polishing machines				
Grinding machines, etc.				

* 10% of this value represents the investment made in 1967/68

HISTORY OF INVESTMENT:

The factory was constructed in 1960. Total production started in 1960 and commercial production in 1961.

The firm made its first profits in 1964, when 90% of capacity was utilized.

In 1966/67 U.S. \$ 1,000,000 were invested for an expansion of the production of movable and special cranes.

CAPACITY POWER:

Process equipment: 125 kW
Electric motors:

Generating equipment: Installed capacity

kVA

EXTERNAL CONDITIONS:

Transport: Long distance and local area, excellent.

Utilities: Electricity, water and gas, excellent.

Community: Residential, health and recreational, educational, excellent.

II. INVENTORIES AND WORKING CAPITAL

(in 000 US \$)

(End of 1967)

	Actual value (000 US \$)	2 Liquid assets	Actual value
1 Inventories		TOTAL	236.4
TOTAL	236.4		
- Production materials	114.4	- Cash (hand/bank)	11.8
- Other input materials	-	- Market, sec. & bonds	-
- Work-in-process	7.4	- Short-term investment	67.9
- Finished products	114.6	- Prepaid expenses	1.2
		- Accounts receivable	155.5
3 Deared working capital			
TOTAL		1,208.0	
- Production materials	12	400.0	
- Other input materials	12	16.0	
- Finished products	12	40.0	
- Wages & salaries	12	336.0	
- Other special items	12	416.0	

III. MANNING TABLE

(number of persons)

A - Machine operators
B - Other operators

(1967 average)

	Total	In shift A	In shift B	2nd shift A+B	3rd shift A+B
ALL SHOPS & UNITS:	90	77	11	-	-
1 Primary operative shops *	50	14	25	-	-
Crane manufacture	11	5	26	-	-
Stamping presses manufacture	25	8	9	8	-
2 Auxiliary operative units	6	5	1	-	-
- Repair and maintenance	1	1	-	-	-
- Mechanical shop	-	-	-	-	-
- Utilities control	-	-	-	-	-
- Product & material storage	4	3	1	-	-
- Off-site transport	1	1	-	-	-
- Guards, cleaners, etc.	-	-	-	-	-
3 Auxiliary non-operative units	28	26	2	-	-
- Production management	15	13	2	-	-
- Research & development	1	1	-	-	-
- Sales unit	2	2	-	-	-
- General administration	10	10	-	-	-

* Includes two engineers/technicians who are classified as non-operative in terms of salary scale.)

WORKING TIME PER OPERATIVE WORKER:

Normal hours/shift 1: 8.5 hours
Normal days/year: 251 days
Actual hours/year: 2,259 hours
2,133.5 hours

CAPACITY OF OPERATIVE SHOPS:

The machining of parts is done on two shifts. The welding and assembly shops work on one shift only. All the shops are moderately automated.

IV. ANNUAL PRODUCTION

(1967)	Product (or group of products)	Quantity produced		Normal capacity	Unit price in factory (MS US \$)	Total production value (MS US \$)
		Units	Output			
	- Movable cranes	1964	39	50	20,492	792.2
	- Stamping presses	1961	75	100	1,740	13.0
TOTAL VALUE OF PRODUCTION:						805.2

* One-shift operation

COMPUTING IMPORTS:

The tariff price of imported movable cranes without tariff amounts to U.S. \$16,640 per unit; on imports 15% duty is charged. The tariff price of stamping presses without tariff amounts to U.S. \$900 per unit; on imports 15% duty is charged.

EXPORTS: None

CAPACITY UTILIZATION:

Only one-shift operation. Under-utilization mainly due to the shortage of demand. Additional 85 working hours per day would be needed on the 1st shift, 255 hours per day on the 2nd shift and 140 hours per day on the 3rd shift, for full utilization of the present capacity.

V. ANNUAL CONSUMPTION

(1967)	Quantity consumed	Units		% imported	Tariff rate	Total consumption value (MS US \$)	
		Units	Purchase				
1. Energy and water							
TOTAL							8.6
	- Electricity	000 Kwh	188.8	-	-	5.3	
	- Liquid fuels and lubricants:						
	Oxygen	000 l	1,379	-	-	1.2	
	Acetylene	000 l	500	-	-	1.1	
	Hydrogen	000 l	5	-	-	0.3	
2. Production materials							
TOTAL							376.7
	- Pulley blocks and electric parts	pieces	70	30	20% ad val	198.5	
	- Iron and steel	ton	193	-	-	127.2	

VI. VALUE ADDED

(1967)	Value (MS US \$)
1. Wages & salaries	
- Employees in direct production (100 persons)	11.2
- Other employees (125 persons)	17.2
2. Other payments for employees	1.2
3. Annual depreciation (See IX)	12.2
4. Rental paid	1.2
5. Interest & royalties	1.1
6. Sales tax not included in S.A.I.	1.1
7. Other indirect taxes	1.1
8. () Subsidies	1.1
9. Corporate income before tax	1.1
48.4	

VII. MONTHLY EARNING RATES

(End of 1967)	No. of emp.	Average earning rate (MS US \$)
1. Local non-operatives		
TOTAL		
- Managers	1	confidential
- Engineers	1	190
- Technicians	1	130
- Accountants	1	100
- Sales officers	1	confidential
- Other professional staff	1	100
- Clerks & typists	6	40
2. Local operatives		
TOTAL		
- Supervisors	1	confidential
- Foremen	1	60
- Machine operators	13	160
- Craftsmen	10	160
- Truck drivers	1	130
- Other full-time operatives	6	90
- Unskilled & part-time operatives	1	90
3. Foreign employees		
TOTAL		
- Managerial staff	1	confidential
- Engineers, trainers and other tech. control staff	1	8
- Foremen and other skilled up.	1	8
- Other specific category	1	8

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)	Industrial establishments		MS US \$		(NSIC: 360)
Industry group	Number of estab.	Number of emp.	Av. emp. per estab.	Av. gross prod. per emp.	Av. emp. per gross prod.
1. Size groups by number of persons employed:					
up to 15	1,723	1,546	0.88	2,598	76
16 - 25	112	2,227	1,111	4,252	48
26 - 500	202	18,081	1,549	6,775	109
over 500	6	5,432	1,258	5,030	145
TOTAL	2,043	33,286	1,267	5,374	102
2. Size groups by value of annual production (MS US \$):					
up to 2	1,411	2,319	72	614	72
2 - 5	1,085	3,179	335	1,407	61
5 - 40	545	4,037	691	2,346	51
40 - 400	294	9,949	1,057	3,832	36
over 400	79	15,839	1,745	8,064	31
TOTAL	3,414	35,314	1,293	5,127	108

* Based on defined or standard equipment.

IX. SUPPLIERS

GOVERNMENT POLICIES:

It is desired to restrict competitive imports. The country imports a considerable number of presses similar to those produced by this firm, under certain IAPTA agreements. Also an effective policy to promote exports is desired. There is no special problem concerning the availability of production materials.

FUTURE PLANS:

Within a period of 2 years, approximately U.S. \$400,000 will be invested for renovation of the factory; additional 15 persons would be needed on the 1st shift, 10 persons on the 2nd shift and 10 persons on the 3rd shift.

Depreciation allowances:

- Machinery and equipment: MS \$ 11,700
- Buildings and other facilities: " " 14,430
- Non-physical capital: " " 140

Major Products:

Tractors, seeders, cultivators, harrows and other agricultural implements. Annual production capacity of (manufactured) tractors is 2,500 to 3,000 units; implements approx. 12,000 in various types. One-shift operation.

Reporting Unit:

A one-establishment enterprise; founded in 1957. Privately owned with 19% foreign capital participation. The data relate to the business year from July 1966 to June 1967.

I. FIXED CAPITAL ASSETS

(End of June 1967)		Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
1. Primary process equipment				
TOTAL				
- Process equipment			4,316	..
- Hand tools & apparatuses			3,495	..
- Cost of installation			421	..
2. Primary industrial building				
TOTAL				
(total floor space: 21,442 m ²)		1967	1,075	..
			1,775	..
3. Auxiliary facilities				
TOTAL				
- Meter, steam, electricity, cooling & storing (incl. in I.2)		1967	901	..
- Transportation facilities		1957/58	21	..
- Administrative facilities		1966	283	..
- Laboratory facilities			46	..
- Others (Guards facilities, etc.)			..	..
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):				
			6,542	..
4. Other fixed capital assets				
TOTAL				
- Land (total acreage: 87,040 m ²)			355	..
- Others			198	..

DETAIL OF PROCESS EQUIPMENT (no.):	Supplier country	Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
- Lathee	21 FR.Germ.	1964/65	191	..
	USA, UK			
- Drilling machines	26 FR.Germ.	1956, 1963	272	..
	USA	1965		
- Milling machines	12 USA, UK	1956/64	244	..
	Sweden, Japan			
- Punching machines	5 USA	1965	149	..
- Brushes	2 USA	1957	25	..
- Thread making machines	2 USA, UK	1956/65	10	..
- Reamers	2 USA	1957/64	15	..
- Saws	5 USA	1956/65	10	..
- Grinders	28 FR.Germ.	1956-1967	147	..
	USA, Mexico			
- Shears	3 USA	1957/65/1966	50	..
- Presses	16 USA	various	107	..
- Bending machines	3 USA	1956/65	4	..
- Welding machines	7 USA	various	22	..
	Mexico			
- Cleaning equipment	6 USA	1965	67	..
- Furnaces	9 USA	1956-59	37	..
		1965/66		
- Generators	2 USA	1957/65	8	..
- Equipment for tempering	1 USA	1965	60	..
- Tools and dies			1,388	..
- Handling material equipment			43	..
- Others	..	..	1,057	..

HISTORY OF INVESTMENT:

Construction of the factory started in 1956, trial production in 1957 and commercial production in 1958. Profits accrued in the same year for the first time. The following amounts were invested for expansion purposes: (in 000 US \$)

Year	Amount (000 US \$)	Purpose
1959/1964	227	Implements and assembly line
1965	2,108	Manufacturing of tractors
1966	2,736	" "
1967	313	Miscellaneous

CAPACITY POWER:

Process equipment:		Generating equipment:	
- Electric motors	1,641.7 kW	- Installed capacity	.. kVA
- Electric furnaces	149.1 "	- Other furnaces	3.2 kW

EXTERNAL CONDITIONS:

Transport: Long distance, local area, excellent.
 Utilities: Electricity, water, gas, all excellent.
 Community: Residential, excellent; health and recreational, educational, fair.

H. INVENTORIES AND WORKING CAPITAL

(in 000 US \$)

(End of June 1967)		Actual value	2 Liquid assets	Actual value
1 Inventories		10,783	TOTAL	
TOTAL			7,375	
- Production materials	2,608	- Cash (hand/bank)	244	
- Other input materials	259	- Market. sec. & bonds	-	
- Work-in-process	1,183	- Short-term investment	6,179	
- Finished products	6,733	- Prepaid expenses	62	
		- Accrued receivables	890	
3. Desired working capital		Number of months	Value	
TOTAL		5,175		
- Production materials	4	2,200		
- Other input materials	3	40		
- Finished products	2	1,840		
- Wages & salaries	4	957		
- Other special items	3	138		

III. MANNING TABLE

(1966/7 average)	Total	No. shift		No. shift	
		A	B	A+B	A-B
ALL SHOPS & UNITS:	654	615		37	2
1. Primary operative shops	301	273	31	-	-
- Material cutting	8	7	1	-	-
- Machining	93	84	9	-	-
- Welding and forging	74	68	6	-	-
- Assembling and painting	82	77	5	-	-
- Glass fibre	15	11	4	-	-
- Inspection	29	20	9	-	-
2. Auxiliary operative units	148	109	37	2	-
- Repair and maintenance	39	30	9	-	-
- Mechanical shop	35	25	10	-	-
- Utilities control	4	3	1	-	-
- Product & material storage	45	30	15	-	-
- Off-site transport	7	7	-	-	-
- Guards, cleaners, etc.	7	3	2	2	-
- Others	9	9	-	-	-
3. Auxiliary non-operative units	205	205	-	-	-
- Production management	5	5	-	-	-
- Research & development	35	35	-	-	-
- Sales unit	-	-	-	-	-
- General administration	49	49	-	-	-
- Others	66	66	-	-	-

WORKING TIME PER OPERATIVE WORKER:

Normal hours/day	8.5	hours	Normal days/year	253	days
Actual hours/year	2,151	hours			

CAPACITY OF OPERATIVE SHOPS:

IV. ANNUAL PRODUCTION

(1966/67)

Products (or group of products)	Yr. of Prod.	Quantity produced		Nominal capacity output	Unit price in factory (US \$)	Total production value (1000 US \$)
		Units	Output			
Tractors (manufactured)	1966	pieces	1,48	2,500-3,000	3,190	3,000
Tractors (assembly only)	1958	"	213	"	1,358	1,200
Pool-racks and rods	1958	"	114	"	1,100	1,200
Diaks and shares	1960	"	157	"	1,100	1,200
Ploughs and harrows	1958	"	1,21	12,000	1,100	1,200
Seeders and cultivators	1958	"	1,21	12,000	1,100	1,200
Trails for field work,	1958	"	201	"	1,114	1,200
Trailers of all types						
TOTAL VALUE OF PRODUCTION						12,100

EXPORTS:

	Ex factory unit price (US \$)
Ploughs	575
Harrows	921
Sowers	110
Cultivators	86

VI. VALUE ADDED

1. Wages & salaries	Value (1000 US \$)
- Employees in direct production (112 persons)	1,100
- Other employees (100 persons)	1,100
2. Other payments for employees	1,100
3. Annual depreciation	1,100
4. Royalties paid	1,100
5. Interest & royalties	1,100
6. Sales tax (not on value added)	1,100
7. Other incl. bus. taxes	1,100
8. () Subsidies	1,100
9. Corporate income before tax	1,100
TOTAL	

VII. MONTHLY EARNING RATES

(End of June 1967)

	No. of emp.	Average earning rate (US \$)
1. Local non-operative		
TOTAL		
Managers		
- High scores		
- Technicians		
- Accountants		
- Sales officers		
- Other professional staff		
- Clerks & typists		
2. Local operative		
TOTAL		
- Supervisors		
- Foremen		
- Machine operators		
- Craftsmen		
- Truck drivers		
- Other full-time operative		
- Unskilled & part-time operative		
3. Foreign employees		
TOTAL		
- Managerial staff		
- Engineers, trainees and other technical control staff		
- Other non-operative		

V. ANNUAL CONSUMPTION

(1966/67)

1. Energy and water	Quantity consumed				Total consumption value (1000 US \$)
	Units	Purchase	% imported	Totals	
TOTAL					111
- Electricity	000 Kwh	2,815	71	71	71
- Petrol, diesel oil	"	"	2	2	2
- Oils, fats, etc.	"	"	11	11	11
- Gas	"	"	4	4	4
- Water	"	"	1	1	1
2. Production materials					6,536
TOTAL					6,536
- Steel					156
- Parts of motors and tractors			10 ^(*)	1	291
- Electrical equipment			50	30	7
- Iron parts			20	30	4,398
- Non-iron parts			-	-	413
- Tubes and tyres			-	-	481

(*) Average percentage, including also tractors which are only assembled

	Total consumption value (1000 US \$)
3. Other materials & supplies	
TOTAL	161
- Packaging	13
- Repair & maintenance	111
- Non-factor services inputs	37
4. Business services purchased	
TOTAL	4
- Transport, storage & insurance	13
- Communication, advertisements, etc.	21
5. Work performed by sub-contractors	
TOTAL	1,194

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)

Industry group	Industrial machinery (HMC: 360)				
	Number of units	Number of emp.	Av. inv. US & C. per unit (1000 \$)	Av. emp. per unit (1000 \$)	Av. emp. per unit* (1000 \$)
1. The group by number of persons employed					
up to 15	1,723	7,546	646	2,598	76
16 - 25	112	2,227	1,111	4,252	74
26 - 500	202	18,081	1,549	6,775	104
over 500	6	5,432	1,258	5,030	143
TOTAL	2,043	33,286	1,267	5,374	102
2. The group by rate of annual production (1000 US \$)					
up to 2	1,411	2,339	72	614	62
2 - 8	1,085	3,179	335	1,407	61
8 - 40	545	4,037	691	2,346	31
40 - 400	294	9,949	1,057	3,832	26
over 400	79	15,839	1,745	8,064	116
TOTAL	3,414	35,343	1,193	5,127	108

* Capital is defined as physical capital assets.

IX. SUPPLEMENTARY

Governmental policies:

An application was filed to receive the privileges granted under the Federal Investment Promotion Law: exemption of the Federal portion of the sales tax, of import duties on parts, and reduction of the income tax. These privileges refer only to the production of tractors with an ordered content of nationally produced parts of more than 60%. The assembly of tractors as well as the production of implements are excluded.

Future plans:

To be studied.

Technical advantages due to participation of foreign capital:

- Training of personnel
- Supply of equipment and machinery (especially for tractor plant)
- Supply of production materials, patents and "know-how"
- Marketing of products.

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Major Products: Agricultural tractors. Capable of producing annually 5,000 units on 2-shift operation.

Reporting Unit: A one-establishment enterprise, founded in 1967, proportion of foreign capital in total capital stock 4%.

I. FIXED CAPITAL ASSETS

(End of 1967)	Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
1 Primary process equipment			
TOTAL		444	
- Process equipment	1967	131	
- Hand tools & apparatuses	"	170	
- Cost of installation			
2 Primary industrial building			
TOTAL		2,121	
(total floor space: 11,000 m ²)		2,121	
3 Auxiliary facilities			
TOTAL		131	
- Water, steam, electricity, cooling & storing	1967	111	
- Transportation facilities	"	20	
- Administrative facilities	"	0	
- Laboratory facilities	"	0	
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land)			
TOTAL		3,304	
4 Other fixed capital assets			
TOTAL		107	
Land (total acreage: 111,700 m ²)		107	

DETAIL OF PROCESS EQUIPMENT (no.)	Supplier country	Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
- Gearing for hydraulics	USA		113	
- Main boxes	USA		27	
- General equipment	USA, UK		6	
- Pools	Japan, UK, Brazil, Mexico	1967	108	
- Welding equipment	Mexico		0	
- Assembly	USA		13	

HISTORY OF INVESTMENT:

Construction of the factory started in 1967. The first trial as well as commercial production started in December 1967. The factory made its first profits in October 1968.

ADVANTAGES DUE TO PARTICIPATION OF FOREIGN CAPITAL:

- Better training of local employees
- Modern machinery and equipment
- Access to patents and "know-how"
- Access to components produced in the country of the foreign capital owner
- Larger market
- Better administration and control.

CAPACITY POWER:

Process equipment	500 kW	Generating equipment installed capacity	-	EVA
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EXTERNAL CONDITIONS:

- Transport:** long distance, local area, excellent.
- Utilities:** Electricity, water, gas, excellent.
- Community:** Residential, fair; health and recreational, educational, excellent.

II. INVENTORIES AND WORKING CAPITAL

In 1000 US \$

(End of 1967)	Actual value	2. Liquid assets	Actual value
1 Inventories	2,132	TOTAL	1,072
TOTAL		- Cash (hand/bank)	30
- Production materials	374	- Market. sec. & bonds	44
- Other input materials	845	- Short-term investment	488
- Work-in-process	133	- Prepaid expenses	27
- Finished products	1,075	- Accounts receivable	383
3. Desired working capital			
	Number of months	Value	
TOTAL	2,132		
- Production materials	1	300	
- Other input materials	1	200	
- Finished products	1	300	
- Wages & salaries	1	68	
- Other special items	1	1,671	

III. MANNING TABLE

Number of persons

A - Shifts operation
B - Other operation

(196 average)	Total	1st shift A	2nd shift B	3rd shift A+B
ALL SHOPS & UNITS:	266	266	-	-
1. Primary operative shops	42	42	-	-
- Production of parts	6	6	-	-
- Assembly of parts	6	6	-	-
- Final assembly	24	24	-	-
- Painting	6	6	-	-
2. Auxiliary operative units	17	17	-	-
- Repair and maintenance	-	-	-	-
- Mechanical shop	17	17	-	-
- Utilities control	20	20	-	-
- Product & material storage	-	-	-	-
- Off-site transport	4	4	-	-
- Guards, cleaners, etc.	3	3	-	-
- Others (quality controllers)	3	3	-	-
3. Auxiliary non-operative units	197	167	-	-
- Production management	13	13	-	-
- Research & development	11	11	-	-
- Sales unit	4	4	-	-
- General administration	19	19	-	-

WORKING TIME PER OPERATIVE WORKER:

Normal hours/day	8.5 hours	Normal days/year	215 days
Actual hours/year	1,927.5 hours		

CAPACITY OF OPERATIVE SHOPS:

Operative shops	Capacity	Utilization rate	Automation and Mechanization
Production of parts	15 tractors/day	40%	moderate
Assembly of axles	"	"	"
Assembly of tractors	"	"	"

IV. ANNUAL PRODUCTION

(1967)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price in factory US \$	Total production value 1966 US \$
		Unit	Output			
Tractors	1967	pieces	1,335	5,000	130	174
TOTAL VALUE OF PRODUCTION						174

CAPACITY UTILIZATION:

The nominal capacity output of 5,000 tractors is calculated on 7-shift operation. Since in 1967 the company was in its first year of commercial production it could only work on one shift. Therefore, the underutilization of capacity was due not only to lack of demand for a considerably unknown brand, but also was due to difficulties to be envisaged during initial commercial production.

COMPETING IMPORTS:

The import of tractors is prohibited.

EXPORTS:

For the time being production only for the domestic market.

V. ANNUAL CONSUMPTION

(1967)	Quantity consumed			Total consumption value 1966 US \$
	Unit	Purchase	% imported	
1. Energy and water				57
TOTAL				57
- Electricity	000 KwH	1,000		14
- Lubricants		..		1
- Gas	000 m ³	75		1
- Water	000 m ³	114		own supply
2. Production materials				6,544
TOTAL				6,544
for tractors			60	US \$ 6,04
60% of the components are imported,				per kg (gross)
40% are manufactured locally				> % ad values

VI. VALUE ADDED

(1967)	Value 1966 US \$
1. Wages & salaries	
- Employees in direct production	17
(" " persons)	
- Other employees	55
(" " persons)	
2. Other payments for employees	
3. Annual depreciation	
4. Rentals paid	
5. Interest and technical assistance	
6. Sales tax (incl. on value added)	100
7. Other ind. bus. taxes	
8. () Subsidies	
9. Corporate income before tax	

VII. MONTHLY EARNING RATES

(End of 1967)	No. of emp.	Average earning rate 1966 US \$
1. Local non-operatives		
TOTAL	114	131
- Managers	1	257
- Engineers	1	63
- Technicians	15	34
- Accountants	1	97
- Sales officers	1	116
- Other professional staff	1	137
- Clerks & typists	94	146
2. Local operatives		
TOTAL	153	77
- Supervisors	1	200
- Foremen	8	41
- Machine operators	73	73
- Craftsmen	1	92
- Truck drivers	1	8
- Other full-time operatives	1	8
- Unskilled & part-time operatives	1	8
3. Foreign employees		
TOTAL	1	1,374
- Managerial staff	1	1,440
- Engineers, trainers and other technical control staff	1	80

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965) The establishment is not included in the VIII Censo Industrial 1966, referring to dates of 1965 (NSC)

1. The group by number of persons employed	Number of units	Number of emp.	App. US & S. per emp. 1966 \$	App. gross prod. val. per emp. 1966 \$	App. emp. value* 1966 \$
TOTAL					
2. The group by value of annual production 1966 US \$:					
up to					
TOTAL					

IX. SUPPLEMENTARY

Government policies:

The import of components such as spare parts not produced nationally should be facilitated by exempting them from import duties. Governmental policies should also promote agricultural development programmes by increasing the demand for tractors and agricultural machinery.

Major Products: Agricultural machinery, trucks and tractors. Capable of producing annually 2,000 tons of agricultural machinery, 2,000 trucks and 3,000 tractors on 2-shift operation.

Reporting Unit: A centralized multi-establishment enterprise, founded in 1949, 100% foreign owned, 100% foreign capital.

I. FIXED CAPITAL ASSETS

	Year of installation	Orig. purchase value (100 US \$)	Replacement value (100 US \$)
(End of 1964)			
1 Primary process equipment			
TOTAL		4,283	4,283
- Process equipment	1947-49	4,283	4,283
- Hand tools & apparatus	1947-49		
- Cost of installation		included above	included above
2 Primary industrial building			
TOTAL	1964	1,000	1,000
(total floor space: 1,000 m ²)			
3 Auxiliary facilities			
TOTAL		264	264
- Water, steam, electricity, cooling & storing		100	100
- Transportation facilities		164	164
- Administrative facilities			
- Laboratory facilities			
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land)		5,547	5,547
4 Other fixed capital assets			
TOTAL		100	100
Land (total acreage: 110,000 m ²)		83	100
- Others (pipelines, fences, etc.)		17	17

DETAIL OF PROCESS EQUIPMENT (cont.)	Supplier country	Year of installation	Orig. purchase value (100 US \$)	Replacement value (100 US \$)
- Machine tools	FR, Germ., USA	1947-49	2,208	4,283
- Miscellaneous machinery	USA	1947-49	80	80
- Auxiliary equipment	USA, Mexico	1947-49	100	100
- Cooling and heating equipment	FR, Germ., USA	1947-49	164	164

HISTORY OF INVESTMENT:

Construction of the factory was started in 1949, trial production in 1949 and commercial production in 1949. In the one year profits accrued for the first time. The following investments were made for expansion purposes: (in 100 US \$)

1949	approx. 232	Assembly of trucks (increasing the assembly of trucks to more than 50% of the national truck production)
1950	" 40	Foundry
1964	" 5,600	Production of tractors

TECHNICAL ADVANTAGES CONNECTED WITH THE PARTICIPATION OF FOREIGN CAPITAL:

- Training of technical staff, - supply of equipment and machinery according to requirements of products, - supply of patents and "know-how" technology.

CAPACITY POWER:	Generating equipment installed capacity:
Process equipment: 3,500 KW	- Electric furnaces: 10 KW
Electric motors: 1,225 "	
- Other prime movers: -	

EXTERNAL CONDITIONS:

Transport: Long distance and local area, excellent.

Utilities: Electricity, gas, excellent; water, self-supply.

Community: Residential, health and recreational, educational, all excellent.

II. INVENTORIES AND WORKING CAPITAL

In 100 US \$

	Actual value	Liquid assets	Actual value
(End of 1964)			
1 Inventories			
TOTAL	5,124	TOTAL	11,234
- Production materials	1,124	Cash (hand/bank)	372
- Other input materials	1,124	Mark. sec. & bonds	1,124
- Work in process	1,124	Short term investment	-
- Finished products	1,752	Prepaid expenses	372
		Accounts receivable	1,234
3 Desired working capital	Number of months	Value	
TOTAL		4,158	
- Production materials	1	1,124	
- Other input materials	1	1,124	
- Finished products	1	1,752	
- Wages & salaries	1	1,124	
- Other special items	1	372	

III. MANAGING TABLE

	Total	1st shift		2nd shift		
		A	B	A+B	A+B	
(1964 average)						
ALL SHOPS & UNITS:	644	335	309	309	618	
1 Primary operative shops	513	218	295	295	513	
- Welding shop	1	13	-	10	-	
- Foundry	10	40	4	-	-	
- Forge	13	-	-	16	-	
- Maintenance of agricultural machinery	10	10	-	11	-	
- Assembly of agricultural machinery	10	-	1	-	-	
- Assembly of trucks	10	-	13	-	-	
- Assembly of tractors	53	151	-	52	-	
2 Auxiliary operative units	14	110	-	23	6	
- Repair and maintenance	1	22	-	3	-	
- Mechanical shop	1	17	-	5	-	
- Utilities control	1	37	-	4	-	
- Product & material storage	1	26	-	-	-	
- Off-site transport	4	4	-	-	-	
- Guards, cleaners, etc.	1	13	-	9	6	
- Others (shipment, yard, unloading, painting, laboratory)	4	42	-	3	-	
3 Auxiliary non-operative units	17	147	-	5	-	
- Production management	4	47	-	5	-	
- Research & development	10	30	-	-	-	
- Sales unit	-	-	-	-	-	
- General administration	3	70	-	-	-	

WORKING TIME PER OPERATIVE HOURS:

Normal hours/year	1st shift	2nd shift	Normal employees	Days
Actual hours/year	2,210	2,135		

CAPACITY OF OPERATIVE SHOPS:

Utilization of capacity:

Under-utilization of capacity due to lack of demand. 1,500 additional man-hours are required on the second shift in order to achieve full utilization of capacity. Ultimately the plant could work on 3-shift operation.

The motor testing department can check 8 motors daily. Full utilization of capacity.

V. ANNUAL PRODUCTION

Products (or group of products)	Yr of first prod	Quantity produced		Avg unit price ex factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Cans	1935	t	1,393	792.	1,114
Cans with press-on-lids	1935	t	475	645.3	313
Disposable containers	1935	t	20	750.	15
TOTAL VALUE OF PRODUCTION:				1,442	*****

VI. VALUE ADDED

(1966/67)	Total value (000 US \$)
1 Annual wages & salaries	141
- operational workers (151 personal)	135
- Non-operative workers (14 personal)	6
2 Other payments for employees	103
3 Annual depreciation (*)	189
- Machinery & equipment	147
- Buildings & other facilities	42
- Non-physical capital assets	-
4 Rentals paid	-
5 Interests & royalties	56
6 Sales tax	10
7 Other indirect business taxes	2
8 (1) Subsidies	2
9 Corporate income before tax (2)	1
(*) See page 4 XII Supplements.	
TOTAL VALUE ADDED	*****

DESCRIPTION OF MAJOR PRODUCTS:

Cans: 1st quality tin plates, thickness of plate 0.21 - 0.31 mm. Size of cans ranging from 41 x 51 mm to 230 x 260 mm.

Cans with press-on-lid: 1st quality, only slightly tin-plated, thickness of plate 0.21 - 0.31 mm. Size of cans ranging from 41 x 45 mm to 230 x 360 mm.

Disposable containers: 2nd quality plate, varying tin-plating. Size of cans ranging from 242 x 275 mm to 300 x 44 mm.

All products can either be manufactured bright, printed or varnished. Serial production: lot sizes between 1,000 and 2,000 pieces per lot. Packed in cartons (between 10 and 100 pieces) and partly shipped on pallets. Quality of tin plate has to meet governmental specifications. Shipment with company-owned trucks, limited transportability (up to 500 km) due to weight. Terms of delivery: up to 1 million cans can be delivered within 2 and 4 weeks.

MARKET ASPECTS:

Consumers of products:

Food industry, varnish industry, oil refineries.

Sales organization:

Own sales department as well as representatives for the domestic market.

Share in the domestic market:

Approximately 15%.

Competition in the market:

4 can manufacturers and 2 manufacturers of cans with press-on-lids. Quality of products is nearly the same; keen price competition.

EXPORT

Total annual export No exports due to high transport costs.

Major products	To		
	Western countries	Eastern countries	Developing countries

VII. ANNUAL CONSUMPTION

(1966/67)	Quantity consumed		% import	Average import duties (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL					11
- Electricity	000 kWh	1,067 (*)			6
- Gas	000 m3	252			6
- Water	000 m3	57 (**)			1
(*) 750,000 kWh self-supplied and not counted in the total.					
(**) 43,000 m3					
2. Production materials					
TOTAL					851
- Tin plates	t	2,822	100	44	731
- Other materials	..	..	20	5	120

	Total consumption value (000 US \$)
3 Other materials & supplies	40
TOTAL	31
- Packaging material (cartons)	
- Parts, supplies & services	
- Other materials & supplies	
4 Business services purchased	76
TOTAL	70
- Transportation, storage & insurance	
- Communication, advertising & other business services	6
5 Work performed by subcontractors	-
TOTAL	-

TOTAL VALUE OF CONSUMPTION: *****

IV. ANNUAL PRODUCTION

(1965)	Principle for group of product	No. of prod. units	Quantity produced		Unit price in factory (USD US \$)	Total production value (USD US \$)
			Units	Weight		
-	Discs (1 for separator)	1411	pieces	700	5	3500
-	Super-sine harvesting equipment	1418	"	200	30	6000
-	Cultivators	1449	"	200	10	2000
-	Ploughs	1451	"	200	10	2000
-	Ploughs (animal traction)	1452	"	200	10	2000
-	Tractors	1453	"	200	100	20000
-	Harrow	1454	"	200	10	2000
-	Sowers model 1	1455	"	200	10	2000
-	Sowers model 2	1456	"	200	10	2000
-	Maize seed peeling machine	1457	"	200	10	2000
-	Tractor	1458	"	200	100	20000
-	Trucks (Pick-up)	1459	"	200	100	20000
-	Trucks model 1	1460	"	200	100	20000
-	Trucks model 2	1461	"	200	100	20000
-	Tractors model 1	1462	"	200	100	20000
-	Tractors model 2	1463	"	200	100	20000
TOTAL VALUE OF PRODUCTION						140,000

EXPORTS:

Super-sine harvesting equipment	US \$	Unit
Cultivators	4,000	"
Ploughs	8,000	"
Harrow	4,000	"
Seed peeling machines	2,000	"
Sowers	4,000	"

V. ANNUAL CONSUMPTION

(1965)	Unit	Quantity consumed		Total consumption value (USD US \$)
		Purchased	% imported	
1. Energy and water				
TOTAL				
- Electricity	000 kWh	1,290	-	100
- Coke	t	315	35	14
- Diesel oil	000 l	160	-	13
- Water				own supply
2. Production materials				
TOTAL				
- Steel	t	3,850	-	221
- Pig iron	t	2,140	-	314
- Semi-finished parts	pieces	..	80	1,517
- Pipes	000 ft	14	-	36
- Welding rod	t	28	-	101
- Screws and nuts	000 pcs	2,140	-	37
- Tires and tubes	000 sets	11	-	100
- Paints	000 l	37	-	36
- Various	..	..	-	248
3. Other materials & supplies				
TOTAL				
- Packagings				10
- Repair & maintenance				10
- Non-factor service inputs				10
4. Business services purchased				
TOTAL				
- Transport, storage & insurance				10
- Commission, advertisements, etc.				10
5. Work performed by sub-contractors				
TOTAL				

VI. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)	Industry group	Industrial machinery		(HBC: 50)	
		Number of units	Number of emp.	Avg. gross prod. per emp. (USD US \$)	Avg. emp. per prod. unit (USD US \$)
1. Size groups by number of persons employed:					
up to 15	1,723	7,546	646	2,199R	71
16 - 25	112	2,227	1,111	4,252	107
26 - 500	202	18,081	1,549	6,775	107
over 500	6	5,432	1,258	5,036	107
TOTAL					
	2,043	33,286	1,287	5,174	109
2. Size groups by value of annual production (USD US \$):					
up to 2	1,411	2,339	72	614	52
2 - 8	1,085	3,179	335	1,167	71
8 - 40	545	4,017	691	2,346	107
40 - 400	294	9,949	1,052	3,142	107
over 400	79	15,539	1,245	8,064	116
TOTAL					
	3,414	35,343	1,191	5,127	108

* Capital is defined as physical capital assets.

VI. VALUE ADDED

(1965)	Value (USD US \$)
1. Wages & salaries	
- Employees in direct production (1,000 persons)	100,000
- Other employees (100 persons)	10,000
2. Other payments for employees	10,000
3. Annual depreciation	10,000
4. Rentals paid	10,000
5. Interest & royalties	10,000
6. Sales tax on final products	10,000
7. Other ind. bus. taxes	10,000
8. (-) Subsidies	-10,000
9. Corporate income before tax	10,000
TOTAL	

VII. MONTHLY EARNING RATES

(End of 1965)	No. of emp.	Average earning rate (USD US \$)
1. Local non-operatives		
TOTAL	100	100
- Managers	1	100
- Engineers	1	100
- Technicians	1	100
- Accountants	1	100
- Sales offices	1	100
- Other professional staff	1	100
- Clerks & typists	1	100
2. Local operatives		
TOTAL	100	100
- Supervisors	1	100
- Foremen	1	100
- Machine operators	1	100
- Craftsmen	1	100
- Truck drivers	1	100
- Other full-time operatives	1	100
- Unskilled & part-time operatives	1	100
3. Foreign employees		
TOTAL	1	100
- Managerial staff	1	100
- Engineering, technical and other staff	1	100
- Other non-managerial staff	1	100

VIII. SUPPLEMENTS

Government policies:

Government watches the difference of import and export mark-up between Mexico and countries of origin. Usually a 10% mark-up is added to the prices prevailing abroad.

To increase the competitiveness of national industry, prices of nationally produced inputs should be lowered.

Future plan:

Within 2 years approx. US \$ 400,000 will be invested to mechanize the foundry department. Additional 10 persons will be employed on the lat shift.

Major Products: Electrical pumps, electrical motors, switchgear.
 In 1966/67 the total value of production amounted to about US \$ 2.6 million based on 2- and 3-shift operation.
 Full-capacity output amounts to US \$ 3.9 million.

Reporting Unit: A one-establishment enterprise; founded in 1909; privately owned; approximately 500 employees. Largest pump manufacturer in the country. Approximately 20% exports; partly licensed production; own research and development activities. Although the company is already very old the utilized machinery and equipment meet most modern standards.
 Business year: 1 April 1966 - 31 March 1967.

I. FIXED CAPITAL ASSETS

(End of March 1967)

	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average (Yrs.)
1 Primary process equipment (including installation cost)	352	381	-
TOTAL	352	381	-
- Process equipment *	-	-	-
- Hand tools & apparatuses	-	-	-
2 Buildings	275	368	-
TOTAL	275	368	-
- Primary industrial buildings (total floor space: 18,000 m ²)	275	368	-
- Auxiliary buildings	-	-	-
- Warehouses	-	-	-
- Office administration buildings	-	-	-
- Housing	-	-	-
3 Auxiliary facilities (excl. buildings)	85	111	-
TOTAL	85	111	-
- Internal power equipment	16	23	9
- Laboratory facilities	-	-	-
- Means of transportation	53	58	4
- Office equipment	16	30	7
TOTAL PHYSICAL FIXED ASSETS (including land)	712	860	
4 Other fixed capital assets	98	271	-
TOTAL	98	271	-
- Land (total acreage: 55,000 m ²)	98	271	-
- Land improvements	-	-	-
- Others	-	-	-

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII).

II. MONTHLY GROSS WAGES AND SALARIES

(Number of personnel)

(1966/67 monthly average)

	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1 Local non-operatives	-	-	-	-	1	4
- Managers	-	-	1	5	9	-
- Engineers	1	-	1	15	3	-
- Technicians	1	2	3	3	-	-
- Accountants	-	1	3	7	11	-
- Sales officers	4	27	12	12	4	-
- Clerks and typists	-	-	2	12	4	-
- Foremen	-	-	-	-	-	-
2 Local operatives	-	-	-	-	-	-
- Supervisors	-	-	-	-	-	-
- Foremen (*)	-	-	-	-	-	-
- Skilled operatives	1	26	38	32	-	-
- Machine operators	-	9	15	12	16	-
- Craftsmen	-	3	3	-	-	-
- Truck drivers	5	5 ¹	6	-	-	-
- Unskilled operatives	3	40	32	13	-	-
- Other full-time operatives	-	-	-	-	-	-
- Part-time operatives	-	-	-	-	-	-
3 Foreign employees	-	-	-	-	-	-
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

No data available.

(*) Company considers foremen as local non-operatives.

EXTERNAL CONDITIONS:

Transport	external long distance	fair
	internal long distance	excellent
	local and city	fair
Utilities	electricity	fair
	water	fair
	gas	fair
Community	residence	fair
	health and recreation	fair
	education	insignificant
Own Welfare Facilities:		**

III. INVENTORIES

(End of March 1967)

	Actual value (000 US \$)	Number of months
Inventories	822	-
TOTAL	822	-
- Production materials	154	3
- Other input materials	-	-
- Work-in-process	311	1.5
- Finished products	357	1.5

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift hours/day	9	8	8.5	hours
Actual hours/year	2,330	2,180	2,200	hours
Actual days/year	259	259	259	days

IV. MANNING TABLE

(Number of personnel)

Shift categories: A. Supervisory staff and foremen (for all shifts)
 B. Skilled operatives
 C. Semi-skilled operatives (machine operators)
 D. Unskilled operatives

(1966/67 average)

	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	B-D	C-D
ALL SHOPS & UNITS:	473	138	-	331	-	2	2
1 Primary operative shops	307	24	166	92	21	2	2
- Foundry department	52	4	18	17	9	2	2
- Electrical motor dept.	43	3	5	35	-	-	-
- Mechanical production dept.	109	4	80	19	6	-	-
- Assembly	57	7	38	7	5	-	-
- Auxiliary depts. (e.g. tooling and mechanical shops)	46	6	25	14	1	-	-
2 Auxiliary operative units	61	9	-	52	-	-	-
- Repair & maintenance	18	1	-	17	-	-	-
- Mechanical shop	-	-	-	-	-	-	-
- Tooling shop	-	-	-	-	-	-	-
- Utilities control	2	2	-	-	-	-	-
- Product & material storage	15	5	-	10	-	-	-
- Off-site transport	10	1	-	9	-	-	-
- Guards, cleaners, ...	16	-	-	16	-	-	-
Auxiliary non-operative units	105	105	-	-	-	-	-
- Production management	3	3	-	-	-	-	-
- Research & development	2	2	-	-	-	-	-
- Sales unit	31	31	-	-	-	-	-
- Accounting	69	69	-	-	-	-	-
- General administration	-	-	-	-	-	-	-

V. ANNUAL PRODUCTION

(1966/67)

Products (or group of products)	Yr of first prod.	Quantity produced		Av. unit price ex factory (US \$)	Total output value (000 US\$)
		Unit	Quantity		
Volute pumps, multistage centrifugal pumps, domestic water supply pumps, submersible pumps, high pressure pumps, boiler feed pumps, hot water circulating pumps, sewage pumps, hand pumps, etc.	1909	pieces	11,843 (pumps)	..	2,741
		pieces	8,411 (motors)	..	
Revenue from repairs					130
Revenue from installations					307
Wastes					12
TOTAL VALUE OF PRODUCTION:					2,640

VI VALUE ADDED

(1966-67)

	Total value (000 US \$)
1 Annual wages & salaries	1,121
- Operative workers	46
(374 persons)	
- Non-operative workers	105
(147 persons)	
2 Other payments for employees	114
3 Annual depreciation	97 (*)
- Machinery & equipment	39
- Buildings & other facilities	12
- Non-physical capital assets	46
4 Rentals paid	114
5 Interests & royalties	56
6 Sales tax	83
7 Other indirect business taxes	-
8 () Subsidies	-
9 Corporate income before tax	17
(*) Including 10% (1966) for accelerated depreciation.	
TOTAL VALUE ADDED	
	1,688

DESCRIPTION OF MAJOR PRODUCTS:

Domestic water supply pumps: for all kinds of water supply of homes, farms and small industries; horizontal or submersible pumps. Between 0.8 - 3.0 HP and 20 - 180 l discharge. To be used for water levels down to 7.5 m.

Submersible pumps: consist of a submerged motor and a vertical centrifugal pump; for drawing water from deep wells (30 m) and boreholes with water levels below 7.5 ms. Between 0.9 - 4.0 HP and 20 - 180 l discharge. Sand protected design.

High pressure pumps: suitable for all purposes in water system; two different designs; the closed radially bladed impellers and diffusers are common to all types. With or without inserted motor.

Boiler feed pumps: designed as multistage centrifugal pumps; for high pressure boiler feeding at caloric power stations and boiler plants.

Hot water circulating pumps: designed as single stage volute casing pumps; for forced circulation in La Mont-boilers, La Mont-wells and distant heating plants.

Sewage pumps: for screened and unscreened sewage, designed as single stage volute casing pumps, chokeless pump pumps or semi-axial screw pumps. Single or serial production with individual outfitings. Terms of delivery are according to production time. Licen. production of some pump aggregates.

MARKET ASPECTS:

Re-sales:

Switchgear; air tanks; electrical motors with more than 10 HP; pumps (enterprise acts as general agent).

Consumers of products:

60% industrial enterprises; 40% private consumers (approx. 35% of production are domestic water supply pumps).

Sales organization:

Regional representatives. Direct selling to industrial plants.

Share in the domestic market:

Approximately 30 - 35%.

Major sales areas:

Europe (excluding Eastern Europe), Near East, South Africa, South America.

Competition in the market:

Pressure from abroad; prices of foreign products are about 10% lower.

EXPORT:

Total annual export US \$ 476,000.

Major products	To Western countries	To Eastern countries	To Developing countries
----------------	----------------------	----------------------	-------------------------

Pumps	41	52	21
-------	----	----	----

(circulating pumps, nonblock pumps)

Export price policy:

Prices are adapted to international market prices.

Governmental policies:

The government subsidizes exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under 71% has been set accordingly.

VII. ANNUAL CONSUMPTION

(1966/67)

	Quantity consumed		% import	Average import duties (000 US \$)	Total consumption value (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity				
1 Energy and water						
TOTAL						41
- Electricity	000 kWh	1,345	-	-	-	27
- Coke and coal	t	155	-	-	-	5
- Diesel oil, petrol	t	75	-	-	-	7
- Gas	000 m ³	38	-	-	-	1
- Water	000 m ³	.. (*)	-	-	-	1
(*) Self-supplied.						
2 Production materials						
TOTAL						579
- Production materials for foundry	..	..	13	-	-	65
- Production materials for mechanical manufacturing	..	..	-	-	-	340
- Other production materials	..	..	-	-	-	174
3 Other materials & supplies						
TOTAL						29
- Packaging material (boxes, cartons, steel strips)						14
- Parts, supplies & services						-
- Other materials & supplies						15
4 Business services purchased						
TOTAL						303
- Transportation, storage & insurance						63
- Communication, advertising & other business services						240
5 Work performed by subcontractors						
TOTAL						-
TOTAL VALUE OF CONSUMPTION:						952

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (I.I.):	Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Avg. Age (yrs)	Remarks		Year of installation	Daily running time	Capacity output
					SH: Purchased second hand	OH: Obsolete			
Vertical turning machine	1	38	39	1					
Coiling machine	1	56	58	2		Germany, F.R.G.	1966	3 hrs	12,000 motors/yr
Turning lathes (Montfort)	3	77	85	3		Germany, F.R.G.	1964	16 hrs	..
Foundry equipment	1	89	104	4		Austria / Germany, F.R.G.	1963	..	350 units/day
Other turning lathes	4	46	46	2					
Grinding machine	1	15	15	1					
Milling machine	1	8	9	2					
Balancing machine	1	10	11	3					
Copying laths	1	6	7	2					
Drilling machines	2	7	7	2					

CAPACITY POWER

Process equipment:
electric motors kW ..

Generating equipment:
installed capacity kVA 400

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Shop primary operative shops	Kind of goods involved	Shop	Equip.	Further details
Foundry department		B	II	75 (1-shift operation)
Electrical motor department		B	II	30 (1-shift operation)
Mechanical production department		C	III	80 (2-shift operation)
Assembly		C	II	..

CAPACITY UTILIZATION:

Full capacity output: US \$ 3,870,000.

Current utilization: based on 1- and 2-shift operation, respectively.

Major products for present	Approximate %									
	10	20	30	40	50	60	70	80	90	100
Centrifugal pumps for domestic water supply and small enterprises										x
Centrifugal pumps for farms										x
Centrifugal pumps for central water supply plants										x
Centrifugal pumps for industries (paper, sugar, chemicals)										x
Centrifugal sewage pumps										x
Electric motors (excl. special motors for pumps)										x

Under-utilization is due to insufficient demand. In order to operate at full-capacity output, additional personnel would be required: operatives: 50 on 1st and 20 on 2nd shifts; non-operatives: 4 on 1st and 2 on 2nd shifts.

IX. HISTORY & PLAN

1. Performance in the past:	Total output (1000 US \$)	No. of persons employed	Total output (1000 US \$)
Year 1963(*)	2,660	547	360
1964(*)	2,830	552	390
1965(**)	3,210	564	410
1966(**)	3,190	521	490
1967(**)	3,480	510	580
1968(forecast)			

(*) Calendar year; (**) Business year 1 April - 31 March.

2. Investments in the past:	Approximate amount (1000 US \$)	Type of investment
From 1961 to 1962:	310	Foundry shop
in 1967:	47	

3. Future Plan:
From 19 - to 19 - : No data available.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C = confidential; figures of these size groups are included in those underlined.

(1964)
Industry: Pumps and similar products manufacturing (HS/C-Code: 360)

1. Size groups by number of persons employed	No. of estab.	No. of emp.	Avg. W & B per emp. (1000 \$)	Avg. gross prod. vol./emp. (1000 \$)	Avg. value added/emp. (1000 \$)	2. Size groups by amount of production (1000 US \$)		Avg. W & B per emp. (1000 \$)	Avg. gross prod. vol./emp. (1000 \$)	Avg. value added/emp. (1000 \$)	
						No. of emp.	No. of emp.				
up to 19	27	131	1,614	7,696	55	up to 20	11	1,308	6,199	63	
20 - 99	21	891	1,888	7,832	53	20 - 40	9	1,675	7,866	50	
100 - 499	4	2,335	1,966	5,612	55	40 - 200	13	262	6,298	56	
500 - 999	3	6	0	0	0	200 - 400	7	243	1,804	52	
over 1,000	-	-	-	-	-	400 - 2,000	11	2,811	1,591	6,112	54
						over 2,000	3	0	0	0	0
TOTAL	54	3,366	1,432	6,282	54	TOTAL	54	3,356	1,932	6,282	54

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service

- | | | |
|---|---------------------------------------|--------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export research |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
3				The company is interested in signing know-how contracts with companies in developing countries.
6				Under special conditions the company is prepared to train foreign employees.

XII. SUPPLEMENTS & NOTES

History of investment:

The company was founded in 1909. Production started in the same year. Ever since the enterprise specialized in the design and manufacturing of pumps.

Contract and commission work:

Insignificant; only small series of some parts were manufactured by subcontractors.

Major bottlenecks in the past:

Quality of cast-iron was unsatisfactory. The turning department has to be modernized. Problems could partly be solved.

Current problems:

The machinery and equipment of the electrical motor and mechanics production departments still fall short of today's standard. Standardisation of products is desirable.

Training courses:

In-plant training courses are provided regularly, external training only if required.

Inventory policy:

On the average the stock of finished products amounts to 17% of the total value of production.

Depreciation policy:

The straight-line method as well as the accelerated method of depreciation are applied.

Major Products:

Chopper-blowers, combine harvesters, potato harvesters, maize attachments, etc.

Total output amounted to US \$ 7.9 billion based on 1- to 2-shift operation. Company operates at full capacity.

Reporting Unit:

A privately owned joint-stock company; founded in 1873; largest producer of agricultural machinery in the country, situated in the non-growing area of the country. Approximately 20 - 25% exports; 650 employees. Partially licensed production of spare-parts. Business year: 1 March 1967 - 29 February 1968.

I. FIXED CAPITAL ASSETS

(29 February 1968)

	Original purchase value (1000 US \$)	Replacement value (1000 US \$)	Ave age (Yrs.)
1 Primary process equipment (including installation cost)		3,563	6.8
TOTAL		3,563	
- Process equipment *			
- Hand tools & apparatuses			
2 Buildings		2,059	
TOTAL		2,059	
- Primary industrial buildings (total floor space: 18,089 m ²)		878	
- Auxiliary buildings		193	
- Warehouse		750	
- Office administration buildings		150	
- Housing		88	
3 Auxiliary facilities (incl. buildings)	123	134	
TOTAL	123	134	8
- Internal power equipment (water supply)	6	7	
- Laboratory facilities	10	11	3
- Means of transportation	78	85	4.4
- Office equipment	29	31	5.5
TOTAL PHYSICAL FIXED ASSETS (including land)		5,756	
4 Other fixed capital assets		175	
TOTAL		175	
- Land (total acreage: 16,873 m ²)		22	
- Land improvements (t.acr. 22,827 m ²)		15	
- Others (incl. intangible assets)	108	138	

*NB: Details of process equipment and assets of primary operations shown on Page Three (Section III).

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1967/68 monthly average)

	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1 Local non operatives						
- Managers						
- Engineers						
- Technicians						
- Accountants						
- Sales officers						
- Clerks and typists						
- Apprentices						
2 Local operatives						
- Supervisors						
- Foremen						
- Skilled operatives						
- Machine operators			100	190		
- Craftsmen			80	20		
- Truck drivers						
- Unskilled operatives		90	10			
- Other full-time operatives						
- Part-time operatives						
- Apprentices	35					
3 Foreign employees						
- Managerial staff						
- Technical staff				1		
- Other skilled operatives						
- Unskilled operatives		6	2			

EXTERNAL CONDITIONS

Transport	external long distance: fair internal long distance: excellent local and city: fair
Utilities	electricity: excellent water: fair gas: insignificant
Community	residence: poor (*) health and recreation: excellent education: fair
Own Welfare Facilities	Cafeteria, sports club and library.

(*) Company has to provide housing and subsidize rents

III. INVENTORIES

(29 February 1968)

	Annual value (1000 US \$)	Number of months
Inventories TOTAL	2,087	
- Production materials	568	2.5
- Other input materials	57	2.5
- Work-in-process	596	1.5
- Finished products	866	1.5

WORKING TIME PER OPERATIVE WORKER

	1st shift	2nd shift	3rd shift	hours
Shift hours/day	9	9.4		
Annual hours/year	2,007	2,100		hours
Annual days/year	223	223		days

IV. MANNING TABLES

(Number of persons)

Shift categories: A: Supervisory staff and foremen (for all shifts)
B: Skilled operatives
C: Semi-skilled operatives (non-line operatives)
D: Unskilled operatives

(29 February 1968)

	Total	1st Shift				2nd Shift	
		A	B	C	D	B-C	D
ALL SHOPS & UNITS:	652	179	447		85	-	
1 Primary operative shops	258	18	51	119	50	26	
- Foundry	34	2	8	10	11	3	
- Mechanical department	46	3	11	22	1	9	
- Stamping department	49	2	12	17	4	14	
- Welding department	42	1	6	18	17	-	
- Joinery	4	-	3	1	-	-	
- Assembly department	60	3	11	44	2	-	
- Finishing department	23	1	-	7	15	-	
2 Auxiliary operative units	242	30	212		-	-	
- Repair & maintenance	25	3	22		-	-	
- Mechanical shop (see above)							
- Tooling shop	25	5	20		-	-	
- Utilities control	24	3	21		-	-	
- Product & material storage	25	5	20		-	-	
- Off-site transport	19	1	18		-	-	
- Guards, cleaners, etc.	42	7	35		-	-	
- Vocational training dept.	36	1	35		-	-	
- Service	29	3	26		-	-	
- Others (testing dept.)	17	2	15		-	-	
3 Auxiliary non-operative units	152	137	15		-	-	
- Production management	18	18	-		-	-	
- Research & development	20	20	-		-	-	
- Sales unit	79	64	15		-	-	
- Accounting	18	18	-		-	-	
- General administration	17	17	-		-	-	

V ANNUAL PRODUCTION

(1967/68)

Product or group of products	Yr of first prod.	Quantity produced		Avg unit price in factory (US \$)	Total output value (1000 US \$)
		Unit	Quantity		
Chopper blowers	1900	pieces	2,810	702.	1,972
Combine harvesters	1956	"	630	7,092.	4,469
Potato harvesters	1964	"	300	2,820.	846
Raise attachments	1963	"	50	2,717.	137
Foundry products	1980	"	280	313.	87
Spare parts	-	-	-	-	256
Waste	-	-	250	92.	23
Revenue from repair work	-	-	-	-	30

TOTAL VALUE OF PRODUCTION: 1,400 *****

VI VALUE ADDED

(1967/68)

	Total value (1000 US \$)
1 Annual wages & salaries	1,356
- Operative workers (470 persons)	944
- Non-operative workers (179 persons)	412
2 Other payments for employees	439
3 Annual depreciation	265
- Machinery & equipment	40
- Buildings & other facilities	225
- Non-physical capital assets	-
4 Reverts paid	26
5 Interest & royalties	96
6 Sales tax	414
7 Other indirect business taxes	54
8 () Subsidies	-
9 Corporate income before tax	913

TOTAL VALUE ADDED: 3,563 *****

DESCRIPTION OF MAJOR PRODUCTS:

Combine harvesters: Double cylinder threshing system; heavy-duty transmission for self-propelled combine use; hydraulically floating header, quick variable speed cylinder drive; 75 HP diesel engine; special sower; second stage cleaning; cutting width 2.10 - 4.20 m; harvesting capacity: 6 tons/hour.

Chopper-blowers: Various types; chop and blow feed and straw; extension tubes can be used; simple and easy feeding of crop into chutes.

Potato harvesters: High lifting capacity, mechanical separation of clods and stones, storage capacity of bunker 850 kg, easily to tip, daily harvesting capacity 1 hectare.

Serial production of basic aggregates.

MARKET ASPECTS:

Re-sale:

Transporters and motor saws with attachments, high-pressure presses, chopper blowers, seed and fertilizer drills.

Consumers of products:

Farmers.

Sales organization:

Home market: regional representatives and direct selling to wholesalers (e.g. agricultural co-operatives).

Export market: central office sells to specialized wholesalers in importing countries.

Share in the domestic market:

Combine harvesters: 30%; chopper blowers: 70%; potato harvesters: 6%.

Competition in the market:

Products of competing firms are mechanically equal. Main advantages of reporting company: good service in all buyer countries, special design according to individual specifications.

Export countries:

Portugal, Spain, Italy, Yugoslavia, Norway, France, Netherlands, Libya, Turkey (only spare-parts).

Export price policy: Adaptation to world-market conditions.

EXPORT:

Total annual export US \$ 1,235,000

Major products	To Western countries	To Eastern countries	To Developing countries
Combine harvesters	91	6%	3%

Governmental policies:

The government subsidized exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under 12.0 has been deducted accordingly.

VII ANNUAL CONSUMPTION

(1967/68)

1 Energy and water	Quantity consumed		% import	Average input costs (1000 US \$)	Total consumption value (1000 US \$)
	Unit	Quantity			
TOTAL					59
- Electricity	000 kWh	1,795	-	-	58
- Fuel oil	t	298	-	-	7
- Water (°)	000 m ³	18	-	-	-
(°) Internally supplied.					
2 Production materials					2,379
TOTAL					
- Rolled iron	t	~2,000	-	-	540
- Cast iron	t	1,253 (°)	-	-	-
- Foundry production material	t	2,800	-	-	53
- Timber	m ³	300	-	-	12
- Plastics and varnishes	t	100	-	-	74
- Others (standardized parts, screws, gears, etc.)	..		30	72	1,700

(°) Internally manufactured.

3 Other materials & supplies

TOTAL	193
- Packaging material (sawn timber, oil paper)	3
- Parts, supplies & services	158
- Other materials & supplies	32

4 Business services purchased

TOTAL	1,630
- Transportation, storage & insurance	130
- Communication, advertising & other business services	619
- Commission for dealers	877

5 Work performed by subcontractors

TOTAL	4
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TOTAL VALUE OF CONSUMPTION: 4,261 *****

VII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT S.1.:

	Number	Original Purchase Value (USD US \$)	Replacement value (USD US \$)	Avg. Age (yrs)	Remarks	Supplier country	Year of installation	Daily running time
Dies	10,000	1,548	1,935	5	SC			
Eccentric presses	6	16	35	20	Ob	Germany, P.R. Austria	various	1-1.5 shifts
Bending presses	3	24	33	6		Switzerland	1965	1.5 "
Oil hydraulic presses	2	62	73	10		Germany, P.R. Switzerland	1960 1965	2 " 1-1.5 "
Plate rolling machine	1	4	5	5		Sweden	1963	1 shift
Spot welders	3	21	25	5		Switzerland	1960, 1965	1 "
Rectifiers	5	11	11	2		Sweden	1963-1968	1 "
Automatic chucking machine	1	30	36	3		"	"	"
Balancing machine	1	3	5	10		Germany, P.R.	1958	1 shift
Straightening press	1	7	8	3		"	1965	1 "
Finishing plant	1	85	108	2		"	1959	1 "
Other special machines	..	97	116	4				
Cranes	6	..	56	20	Ob			
Lift trucks	6	37	46	4				
Tractors	3	8	9	3				
Others	..	..	1,061	..				

CAPACITY POWER:
 Process equipment:
 - electric motors kW 2,064
 Generating equipment:
 - installed capacity kVA 10

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Manuf.	Autom.	Further details
Foundry		C	III	
Mechanical department		C	II	
Stamping department		B	III	
Welding department		C	II	
Assembly department		C	III	

CAPACITY UTILIZATION:

Full-capacity output: US \$ 7,900,000.

Current utilization:

Major products (or process)	Approximate %									
	up to 20	20-40	40-60	60-70	70-80	80-90	90-100	100		
Cabins harvesters										X
Chopper blowers										X
Potato harvesters										X
Wedge attachments										X

Company is operating at full-capacity output. Increases in production are only possible if production space could be enlarged substantially which is difficult, since company is located in down-town area.

III. HISTORY & PLAN

1. Performance in the past:	Total output (USD US \$)	No. of persons employed	Total exports (USD US \$)
Year: 1963	7,280	680	930
1964/65	8,590	665	2,350
1965/66	9,560	760	1,570
1966/67	9,380	730	1,530
1967/68	9,690	685	1,235
1968/69	8,710	735	1,350

2. Investments in the past:	Approximate amount (USD US \$)	Type of investment
From 1958 to 1960:	200	Storage facilities (assembly), control and finishing department
" 1961 " 1964:	290	Finishing, varnishing and laboratory dept.
" 1965 " 1967:	300	New office building, storage facilities and assembly
in 1967:	238	

3. Future Plan:	From 1968 to 1969:	180	Introduction of new products, (also on glass-fiber basis), and fabrication processes. 20 additional operatives will be required on the 1st shift.
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X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1964)

Industrial machinery						HSIC Code: 360							
1. Size groups by number of persons employed:		No. of units	No. of emp.	Avg. W. & S. per emp. (USD US \$)	Avg. gross prod. vol./per emp. (USD US \$)	Avg. value added/gross prod. ratio (%)	2. Size groups by annual value of production (USD US \$):		No. of units	No. of emp.	Avg. W. & S. per emp. (USD US \$)	Avg. gross prod. vol./per emp. (USD US \$)	Avg. value added/gross prod. ratio (%)
up to 19	19	1,302	5,536	1,269	6,945	51	up to 20	20	701	595	89	5,351	57
20 - 99	99	262	11,451	1,729	7,224	54	20 - 40	40	276	1,330	1,146	5,667	54
100 - 499	499	93	19,866	1,977	8,532	50	40 - 200	200	402	5,781	1,435	5,983	54
500 - 999	999	9	5,775	2,161	6,460	54	200 - 400	400	102	4,198	1,745	6,569	55
over 1,000	1,000	9	12,569	2,022	6,892	53	400 - 2,000	2,000	135	14,177	1,894	7,555	54
							over 2,000	2,000	53	28,717	2,061	8,095	49
TOTAL		1,675	55,198	1,885	7,511	51	TOTAL:		1,675	55,198	1,885	7,511	51

II. COVERED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|-------------------------|---------------------------------------|------------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Reports and expert consultation |
| 2. Financial assistance | 6. Technical training | 9. Advancement of foreign labour |
| 3. Technical assistance | 7. Technical co-operation | |
| 4. Equipment supply | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of project
3			Company offers license contracts for chopper-blowers and combine harvesters;	
6			training of service and repair personnel as well as of machine operators.	

III. SUPPLEMENTS & NOTES

Commission work:

Gear cutting, heat treating and galvanizing was done by several subcontracting firms. The commission paid by the reporting company amounted to US \$ 4,000.

Facilities in the plant:

Lack of space; plant is situated in a down-town area and separated by public roads.

Financial problems:

The financial basis has to be broadened in order to secure the establishment's present size.

Depreciation policy:

Both the straight-line as well as the accelerated methods of depreciation are applied.

Major Products:

Machinery and equipment for plastic processing industry; the annual production of \$ 12 million (as shown in V) practically represents the capacity output for the year considered (one-shift operation), but it is expected that some \$ 1 to 2 million investment on bottleneck shops will increase the capacity by US \$ 4 to 8 million/year.

Reporting Unit:

new-plant enterprise; founded in 1961; private corporation with minor participation of foreign capital; 4 employees; within the past 4 years the company nearly doubled its sales; almost the entire production is exported to industrialized as well as to developing countries. An amount equivalent to 10% of the sales revenue is spent annually on research and development activities.

I. FIXED CAPITAL ASSETS

(End of 1968)

	Original purchase value (1000 US \$)	Replacement value (1000 US \$)	Age (Yrs.)
1 Primary process equipment (including installation cost)			
TOTAL	112	1,094	5
- Process equipment *	102	730	5
- Hand tools & apparatuses	10	364	5
2 Buildings			
TOTAL	1,134	1,143	5
- Primary industrial buildings (total floor space: 15,900 m ²)	1,434	1,143	5
- Auxiliary buildings	-	-	-
- Warehouses	-	-	-
- Office administration buildings	4	2	5
- Housing	-	-	-
3 Auxiliary facilities (excl. buildings)			
TOTAL	294	338	4
- Internal power equipment	-	-	-
- Laboratory facilities	172	172	4
- Means of transportation	122	147	4
- Office equipment	-	-	-
TOTAL PHYSICAL FIXED ASSETS (excluding land)	2,540	3,575	
4 Other fixed capital assets			
TOTAL	104	1,432	-
- Land (total acreage: 100)	104	1,432	-
- Land improvements	-	-	-
- Others	-	-	-

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1968 monthly average)

	up to 100 US\$	100-140 US\$	140-160 US\$	160-240 US\$	240-560 US\$	560 US\$
1 Local non-operative						
- Managers	-	-	-	-	18	3
- Engineers	-	-	14	13	23	2
- Technicians	-	1	2	3	1	-
- Accountants	-	-	-	8	17	1
- Sales officers	-	-	-	12	7	1
- Clerks and typists	-	-	-	-	-	-
2 Local operative						
- Supervisors	-	-	-	14	8	-
- Foremen	-	6	30	1	-	-
- Skilled operatives	-	-	13	-	-	-
- Machine operators	-	-	-	-	-	-
- Craftsmen	-	-	2	3	-	-
- Truck drivers	-	30	3	-	-	-
- Unskilled operatives	-	-	21	136	-	-
- Other full-time operatives	-	-	-	-	-	-
- Part-time operatives	-	-	-	-	-	-
3 Foreign employees						
- Managerial staff	-	-	-	2	1	-
- Technical staff	-	1	6	7	1	-
- Other skilled operatives	-	8	10	-	-	-
- Unskilled operatives	-	-	-	-	-	-

EXTERNAL CONDITIONS:

Transport	external long distance	fair
	internal long distance	excellent
	local and city	"
Utilities	electricity	excellent
	water	"
	gas	"
Community	residence	fair
	health and recreation	"
	education	excellent
Own Welfare Facilities:		

III. INVENTORIES

(End of 1968)

	Actual value (1000 US \$)	Number of months
Inventories	6,390	
TOTAL		
- Production materials	1,377	..
- Other input materials	122	..
- Work-in-process	3,529	..
- Finished products	1,462	..

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift hours/day	8	-	-	hours
Actual hours/year	2,059	-	-	hours
Actual days/year	228	-	-	days

IV. MANNING TABLE

(Number of persons)

1968 categories: A: Supervisory staff and foremen (for all shifts)
B: Skilled operatives
C: Semi-skilled operatives (machine operators)
D: Unskilled operatives

(1968 average)

	Total	1st Shift			2nd Shift	3rd Shift
		A	B	C	D	D
ALL SHOPS & UNITS:	575	24	251			-
1 Primary operative shops	201	17	145	31	8	-
- Machine shop	52	4	25	17	3	-
- Sheet metal workshop	7	1	6	-	-	-
- Electrical workshop	32	2	28	1	1	-
- Nozzle production	24	2	21	-	1	-
- Assembly	27	4	21	1	1	-
- Paint shop	11	1	3	3	-	-
- Final fitting shop	6	1	5	-	-	-
- Tempering shop	2	-	1	1	-	-
- Manufacturing of parts	38	2	26	8	2	-
2 Auxiliary operative units	183	7	176			-
- Repair & maintenance	4	-	4			-
- Mechanical shop	73	3	70			-
- Tooling shop	4	-	4			-
- Utilities control	-	-	-			-
- Product & material storage	24	-	24			-
- Off-site transport	5	-	5			-
- Guards, cleaners, etc.	24	-	24			-
- Others	43	4	45			-
3 Auxiliary non-operative units	191	-	191			-
- Production management	3	-	3			-
- Research & development	65	-	65			-
- Sales unit	59	-	59			-
- Accounting	13	-	13			-
- General administration	51	-	51			-

VII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (1):	Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Avr Age (yrs)	Remarks:	
					OB Obsolete	SC Not maintained
Bodymaker for cans	2	505	2,327	5		
Bodymaker for cans with press-on-lids	1			3		
Automatic cover punching machines	3			3		
Printing and varnishing line	1			3		
Drying furnace	1			2	30	
Semi-automatic soldering lines	3			7		
Other special machines	73		20			
Metal cutting machines	61	61	110	1-35	partly Ob	

CAPACITY POWER

Process equipment: electric motors kW 380

Generating equipment: installed capacity kVA 200 (hydraulic power station)

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Machinery:		Automation:		Further details: Capacity output (t/yr)
		A most advanced	B considerable-high standard	C modern standard	D appreciably short of today's standard		I fully automated	II semi-automated
Cans					I, II	30,000 - 120,000 units, depending on size of cans
Cans with press-on-lids					II	10,000 - 50,000 units, depending on size of cans
Disposable containers					II	2,000 - 10,000 units, depending on size of cans

CAPACITY UTILIZATION:

Full capacity output US \$ 1,432,000

Current utilization based on 2-shift operation

Major products (or processes)	Approximate %						
	up to 30	30-40	40-50	50-60	60-70	70-80	80-100
Cans							I
Cans with press-on-lids							I
Disposable containers							I

Full-capacity output can only be reached in summer time (harvest). Output could be increased by 2% provided production could be better programmed. Furthermore, additional machinery has to be installed in order to avoid technological bottlenecks.

IX. HISTORY & PLAN

1. Performance in the past (*)	Total output (1000 US \$)	No. of persons employed	Total exports (1000 US \$)
Year: 1962/63	7,850	1,251	-
1963/64	8,410	1,257	-
1964/65	8,810	1,249	-
1965/66	9,310	1,246	-
1966/67	9,750	1,161	-
1967/68	-	-	-

(*) Data refer to entire company.

2. Investments in the past.	Investment amount (1000 US \$)	Type of investment
From 1955 to 1967:	1,010	Buildings, machinery and equipment

3. Future Plan:	Investment amount (1000 US \$)	Type of investment
From 1967 to 1969:	170	Expansion of machinery and operative shops; rationalisation of production processes; specialisation of product-mix.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C - confidential; figures of those size groups are included in those underlined.

(1964) Industry: Manufacturers of metal products, except machinery and transport equipment (ISIC Code 350)

1. Size groups by number of persons employed	No. of estab.	No. of emp.	Av. W. & B. per pers. (US \$)	Av. gross prod. val./pers. (US \$)	Av. value added/gross prod. ratio (%)	2. Size groups by annual sale of production (1000 US \$)		Av. W. & B. per pers. (US \$)	Av. gross prod. val./pers. (US \$)	Av. value added/gross prod. ratio (%)	
						No. of estab.	No. of emp.				
up to 19	67	433	1,738	8,298	57	up to 20	27	38	1,029	5,754	59
20 - 49	43	1,384	1,728	8,112	53	20 - 40	11	36	1,643	8,085	61
100 - 499	24	<u>5,543</u>	<u>1,753</u>	<u>6,054</u>	<u>56</u>	40 - 200	41	<u>728</u>	<u>1,679</u>	<u>6,031</u>	<u>63</u>
500 - 999	-	-	-	-	-	200 - 400	15	681	1,592	5,909	55
over 1,000	1	C	C	C	C	400 - 2,000	38	<u>6,377</u>	<u>1,772</u>	<u>6,823</u>	<u>54</u>
						over 2,000	3	C	C	C	C
TOTAL	135	7,360	1,746	6,671	55	TOTAL	135	7,860	1,746	6,671	55

V. ANNUAL PRODUCTION

(1967)

Product (or group of products)	Vt of steel prod.	Quantity produced		Avg unit price in factory (USD \$)	Total output value (USD USD)
		Unit	Quantity		
Extruders:					
Various subsequent units for plastic processing	100.0	pieces	37	4,200	155,400
Pipe extrusion heads	100.0	pieces	1	1,380	1,380
Vertical cabinets	"	"	21	1,460	30,660
Rotary pipe saws	"	"	28	11,250	315,000
Vacuum vented hopper	"	"	1	1,250	1,250
Embossing and laminating stands	"	"	2	34,275	68,550
Roller pipe haul-off	"	"	21	1,460	30,660
Multistage annealing oven	"	"	1	24,334	24,334
Pipe haul-off and orienting equipment	"	"	1	4,130	4,130
Flare mill-top edge lead off	"	"	1	1,250	1,250
Coiling feeder	"	"	1	1,250	1,250
Pipe saw with tipping trough	"	"	1	4,130	4,130
TOTAL VALUE OF PRODUCTION:					1,011,370

VI. VALUE ADDED

(1967)

	Total value (USD USD)
1 Annual wage & salaries	
- Operative workers	1,011,370
() () ()	
- Non-operative workers	
() () ()	
2 Other payments for employees	
3 Annual depreciation	
- Machinery & equipment	
- Buildings & other facilities	
- Non-physical capital assets	
4 Rentals paid	
5 Interest & royalties	
6 Sales tax	
7 Other indirect business taxes	
8 () Subsidies	
9 Corporate income before tax	1,011,370
TOTAL VALUE ADDED: 1,011,370	

DESCRIPTION OF MAJOR PRODUCTS:

Extruders: Twin-screw and two-stage twin-screw for extrusion of thermoplastics. Cap the production of commercial extruded profiles (8 to 1,000 mm in diameter), profiles (cross sections up to approx. 4,000 mm²) and sheets (width up to 2,000 mm and final thicknesses up to 1 mm), corrugated, multi-wall, etc.

Subsequent units: For material and temperature control of extruders and subsequent units.

Vacuum vented hoppers: For material inputs up to approx. 100 kg.

Subsequent units:

- For the production of commercial and special pipes, pipe extrusion heads, roller extruders, etc.
- For the production of thermoplastic sheet sections and webs. Flat and corrugated, plain or embossed, commercial, etc. (output widths up to 2,000 mm and final thicknesses up to 1 mm. (2000 mm width unit, etc.)
- For slit die extrusion of single and double layer floor coverings of 1000 mm width up to 2,000 mm and thicknesses between 1.0 and 2.5 mm. (Double slit die, polishing unit, etc.)
- For the production of thermoplastic profiles, cross sections up to approx. 4,000 mm² (extrusion head, roller extruders, etc.)

MARKET ASPECTS:

The plastic processing industry in the country records average growth rates of 20% annually. The company's sales are expected to grow to some extent.

Market organization:

The company has its own sales organization as well as agents and subcontractors in developed countries. Production only to order.

Recipients of products:

Plastic processing industry.

Market and competition:

Some 15 customers are presently supplied with the products of this firm, as well as some 100 large scale plastic processing firms. Unlimited sales pattern. The domestic market is covered completely by this firm. Due to quick technical obsolescence the machinery produced has an average lifetime of only approximately 5 years.

EXPORT: US \$ 11,714,000 = 1% of the total value
Total annual export

Major product	To Western countries	To Eastern countries	To Developing countries
Extruders and subsequent units	100.0	0.0	0.0

Export:

Major products are exported to Western, Eastern and Developing countries.

Governmental assistance:

The government subsidizes exports by way of 10% with the sales tax rebate and other imported goods during the present and previous administrations. The sales tax indicated under 7 in the consolidated accordingly.

VII. ANNUAL CONSUMPTION

(1968)

1 Energy and water	Quantity consumed		Avg unit price	Total consumption value (USD USD)
	Unit	Quantity		
TOTAL:				1,452
- Electricity	600 kWh	1,452		51
2. Production materials				5,654
TOTAL:				5,654
- Iron and steel of different forms				5,654
- Electrical material				
- Non-ferrous metals				
- Gears				
- Motors				
- Others				

	Total consumption value (USD USD)
3. Other materials & supplies	
TOTAL:	476
- Packaging material	11
- Parts, supplies & services	251
- Other materials & supplies	214
4. Business services purchased	188
TOTAL:	188
- Transportation, storage & insurance	110
- Communication, advertising & other business services	78
5. Work performed by subcontractor	141
TOTAL:	141
TOTAL VALUE OF CONSUMPTIONS: 6,714	

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (1):

	(1) Number	(2) Original Purchase Value USD US \$	(3) Replacement Value USD US \$	(4) Age in Years
Coping lathe	1	1,100	1,100	1
Nozzle grinding machine	1	1,100	1,100	1
Polishing lathe	1	1,100	1,100	1
Hydraulic straightening press	1	10,000	10,000	1
Plate working machine	1	4,000	4,000	1
Worm hob	1	4,000	4,000	1
Gialet machine	1	4,000	4,000	1
Hob milling machine	1	24,000	24,000	1
Liquid honing machine	1	4,000	4,000	1
Horning machine	1	7,000	7,000	1
Special machines for nozzle manufacturing	1	1,000	1,000	1
Turning lathe	17	154,000	154,000	1
Cylindrical grinding machine	1	4,000	4,000	1
Surface grinding machine	1	3,000	3,000	1
Tool grinders	2	2,000	2,000	1
Lapping machine	1	2,000	2,000	1
Double floor stand grinders	1	2,000	2,000	1
Back-saw machines	1	2,000	2,000	1
Outlet shears	1	1,000	1,000	1
Plate bending machine	1	1,000	1,000	1
Ripping shear	1	1,000	1,000	1
Welding set	1	1,000	1,000	1
Topon cutting machine	1	1,000	1,000	1
High speed shaper	1	4,000	4,000	1
Milling machine	1	2,000	2,000	1
Upright drilling machine	1	1,000	1,000	1
Radial drilling machine	1	1,000	1,000	1

Source:
 1. Purchased second hand
 2. (Number)
 3. Second
 4. Self constructed

	(1)	(2)	(3)	(4)
Vertical lathe	1	1,100	1,100	1
Machine	1	11,000	11,000	1
Machine	1	1,000	1,000	1
Machine	1	1,000	1,000	1
Machine	1	1,000	1,000	1

CAPACITY POWER

Process equipment
 electric motor kW
 - installed capacity
 Generating equipment
 installed capacity - kVA

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process worked	Station	Automation	Further details
Mechanical engineering	Machining and other plant operations			

Abbreviations:
 A. most advanced
 B. considerably high standard
 C. medium standard
 D. appreciably short of today's standard
 E. almost outdated

Automation:
 I. fully automated II. semi-automated
 III. non-automated

CAPACITY UTILIZATION

Full capacity output: The 1967 output is expected to be bottlenecked by the testing assembly. Full capacity output of the testing assembly will be reached after completion of a testing and assembly hall in 1970. In 1971 output is expected to approach 100% utilization.

Major products (or processes)	up to	Approximate %
	20	60
	30	50
	40	40
	50	30
	60	20
	70	10
	80	5
	90	2
	100	1

Machine shop	x
Tempering plant	x
Testing and assembly	x
Special processing shop	x

Based on 1-shift operation.

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output (USD US \$)	No. of persons employed	Total output (USD US \$)
1963	1,200	117	1,200
1964	2,400	247	2,400
1965	2,400	370	2,400
1966	2,400	430	2,400
1967	2,400	430	2,400
1968	11,200	600	11,200

2. Investments in the past:

From 19	to 19	Approximate amount (USD US \$)	Type of investment
1967	1968	20	Machinery, equipment and transport facilities
1969	1970	30	

3. Future Plan:

From 1971 to 1974: 2,700
 Combined testing and assembly hall, including an office-building (some US \$ 1.2 million) as well as machinery and equipment for primary processing shops.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1964)

Industry Industrial machinery (IIRC Code: 360)

1. Size groups by number of persons employed:	No. of estab.	No. of emp.	Avg. W. & S. per pers. (USD US \$)	Avg. gross prod. vol./per pers. (USD US \$)	Avg. value added/gross prod. ratio (%)
up to 10	1,302	5,536	4,260	6,945	51
20 - 99	262	11,451	1,720	7,221	54
100 - 499	91	19,866	1,977	8,530	50
500 - 999	9	5,776	2,161	14,200	54
over 1,000	9	12,569	2,222	6,800	53
TOTAL	1,675	55,198	1,986	7,511	51

2. Size groups by annual cash of production (USD US \$):	No. of estab.	No. of emp.	Avg. W. & S. per pers. (USD US \$)	Avg. gross prod. vol./per pers. (USD US \$)	Avg. value added/gross prod. ratio (%)
up to 20	707	995	826	5,351	57
20 - 49	277	1,430	1,146	5,667	54
50 - 99	400	6,091	1,435	5,923	54
100 - 499	100	4,192	1,745	6,960	55
500 - 9,999	135	11,177	1,894	7,555	54
over 10,000	53	25,117	2,061	9,405	49
TOTAL	1,672	55,198	1,986	7,511	51

IX. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

- Type of service**
- 1. Engineering study
 - 2. Financial assistance
 - 3. Industrial services
 - 4. Equipment supply
 - 5. Technical and managerial personnel
 - 6. Industrial training
 - 7. Technical consultation
 - 8. Import and export promotion
 - 9. Assistance of foreign labor

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
				The industrial plant is well represented in co-operating with developing countries.
				Technical and financial assistance is provided to developing countries. The company is prepared to render technical assistance to any country.
				Presently about 100 engineers are assisting plastic processors all over the world. The company has special service teams to ensure proper operation of the machinery delivered.
				The company maintains an own training center. Customers can train at any time. Self-financed seminars are organized for manufacturers of plastic products.
				The industrial plant is prepared to render technical assistance services and to furnish pre-investment studies.

XII. SUPPLEMENTS & NOTES

1. ANNUAL PRODUCTION (cont'd)

Products (or group of products)	First year of prod.	Quantity produced (unit)	Quantity (unit)	Avg. unit price ex factory (US\$)	Total value (US\$)
Plant for production of self-adhesive film	1968	pieces	1	1,000	1,000
Others	"	"	"	"	"
Flooring plants	"	"	"	310	310
Laminating equipment	"	"	"	"	"
4-colour printing machine	"	"	"	"	"
Spare parts	"	"	"	"	1,000
Other by-products and scrap	"	"	"	"	1,000
TOTAL ANNUAL PRODUCTION					2,310

DESCRIPTION OF MAJOR PRODUCTS (cont'd)

- Subsequent units (cont'd):**
- For slit die extrusion of thermoplastic flat sheet (longitudinally oriented), output width up to 1,800 mm and thicknesses between 0.02 and 0.1 mm. (Slit die, haul-off and orienting unit, etc.)
 - For wet and dry granulation of thermoplastics. (Granulating head and equipment, etc.)

Measuring and testing equipment.

Personnel structure: 44% of the employees is engaged in design and technical development work, 12% in sales, 12% in administration, and 32% in production. A very high percentage of the employees graduated from technical or engineering schools.

Major Products: Forging machines, crankshaft milling machines and drilling machines.
 Total value of production amounted to about US \$ 9 million based on 2-shift operation.

Reporting Unit: A one-establishment enterprise, privately owned, founded in 1952. The break-even point was surpassed in the same year after sales exceeded US \$ 22,000,000. 177 employees, almost 10% of them are engaged in design and development work. Largest regional employer.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value 1000 US \$	Replacement value 1000 US \$	Avg. age (Yrs.)
1. Primary process equipment (including installation cost)			
TOTAL	4,346	4,128	4
- Process equipment *	1,618	1,753	-
- Hand tools & apparatuses	538	575	-
2. Buildings			
TOTAL	3,343	4,152	7
- Primary industrial buildings (total floor space: 14,964 m ²)	2,195	3,141	-
- Auxiliary buildings	-	627	1
- Warehouses	296	134	6
- Office administration buildings	11	50	20
- Housing	-	-	-
3. Auxiliary facilities (excl. buildings)			
TOTAL	252	261	-
- Internal power equipment	-	-	-
- Laboratory facilities	-	-	-
- Means of transportation	19	20	2
- Office equipment	233	241	3.5
TOTAL PHYSICAL FIXED ASSETS (excluding land)	8,147	8,541	
4. Other fixed capital assets			
TOTAL	371	584	-
- Land (total acreage: 37,091 m ²)	267	371	-
- Land improvements (t. acc. 18,032 m ²)	17	181	-
- Others	87	95	-

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(1967 monthly average)	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1. Local non operatives						
- Managers	-	-	-	-	-	3
- Engineers	-	-	-	-	13	8
- Technicians	-	-	-	-	23	-
- Accountants	-	-	-	-	9	5
- Sales officers	-	-	-	-	15	-
- Clerks and typists	-	-	11	32	10	-
- Foremen	-	-	-	-	21	-
2. Local operatives						
- Supervisors (*)	-	-	-	135	214	-
- Foremen (*)	-	-	-	-	-	-
- Skilled operatives	-	-	-	-	-	-
- Machine operators	-	-	-	-	-	-
- Craftsmen	-	-	-	-	-	-
- Truck drivers	-	-	-	-	-	-
- Unskilled operatives	-	-	-	54	-	-
- Other full-time operatives	-	-	-	-	-	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

included in local non-operative and operatives

(*) The company considers supervisors and foremen as "non-operatives".

EXTERNAL CONDITIONS:

Transport	external long distance	poor (*)
	internal long distance	"
	local and city	insignificant
Utilities	electricity	excellent
	water	"
	gas	"
Community	residence	fair
	health and recreation	excellent
	education	"
Own Welfare Facilities:	-	-

(*) No private siding track, therefore no possibility to ship heavy products by railroad.

III. INVENTORIES

(End of 1967)	Actual value 1000 US \$	Number of months
Inventories		
TOTAL	3,720	-
- Production materials	669	6.5
- Other input materials	-	-
- Work-in-process	2,946	7
- Finished products (*)	105	9

(*) Drilling machines only

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	
Shift hours/day:	8.9	8.4	-	hours
Actual hours/year (*)	2,075	1,975	-	hours
Actual days/year:	234	234	-	days

(*) Hours paid, incl. time credited due to piece-work.

IV. MANNING TABLE

(As per 31/10/1968)

ALL SHOPS & UNITS:	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	B-C	B-D
		Number of persons					
1. Primary operative shops	675	195	379			101	-
- Production planning	25	24	-	-	1	-	-
- Tool shop	9	1	-	-	5	3	-
- Mechanical processing	273	14	144	11	20	54	-
- Assembly	207	15	151	10	17	14	-
- Apprentice shop	1	1	-	-	-	-	-
2. Auxiliary operative units	28	8	20			-	-
- Repair & maintenance	2	2	-	-	-	-	-
- Mechanical shop	-	-	-	-	-	-	-
- Tooling shop	-	-	-	-	-	-	-
- Utilities control	-	-	-	-	9	-	-
- Product & material storage	12	4	-	-	-	-	-
- Off-site transport	8	2	-	-	6	-	-
- Guards, cleaners, etc.	6	-	-	-	6	-	-
3. Auxiliary non-operative units	132	132	-			-	-
- Production management	5	5	-	-	-	-	-
- Research & development, design	55	55	-	-	-	-	-
- Sales unit	23	23	-	-	-	-	-
- Accounting	19	19	-	-	-	-	-
- General administration	30	30	-	-	-	-	-

that comprises: A: Supervisory staff and foremen (for all shifts)
 B: Skilled operatives
 C: Semi-skilled operatives (machine operators)
 D: Unskilled operatives

V. ANNUAL PRODUCTION

(1967)	W of the prod.	Quantity produced		Per unit price in factory US \$	Total output value 000 US \$
		Unit	Quantity		
Forging machines	1952	pieces	13	463,200	6,036
Crankshaft milling machines	"	"	10	269,100	2,691
Drilling machines	"	"	46 (18)	1,740	74
Revenue from contract and commission work					57
TOTAL VALUE OF PRODUCTION:					9,344

(* Not including internal consumption
of 1 piece.

VI. VALUE ADDED

(1967)	Total value 000 US \$	
1 Annual wages & salaries	1,146	
Operative workers		
(192) gross		
Non-operative workers		
(16) gross		
2 Other payments for employees		
3 Annual depreciation	1,270	
Machinery & equipment	173	
Buildings & other facilities	161	
Non-physical capital assets	936	
4 Rentals paid		
5 Interest & royalties		
6 Sales tax		
7 Other indirect business taxes		
8 () Subsidies		
9 Corporate income before tax	1,064	
TOTAL VALUE ADDED		1,471

DESCRIPTION OF MAJOR PRODUCTS:

Forging machines: utilized for precision forging, gas cylinder precision forging, stretcher forging, automatic 104 forging and barrel forging, single production; special design.
Terms of delivery: 1/2 - 1 year.
Advantages: Operation by semi-skilled personnel; one-man operation; high yield and low waste vibration-free operation, etc.

Crankshaft milling machines: Single production; special design.
Terms of delivery: 9 - 14 months.
Advantages: High cutting speed, simpler control movements; greater stock removal.

Drilling machines: Serial production; prompt delivery.

MARKET ASPECTS:

Re-sales:

Since buyers of machine tools frequently asked for tools, they were added to the sales programme. Annual turnover: US \$ 1/0,000.

Consumers of products:

Iron and steel industry, manufacturers of crankshaft machinery.

Sales organization:

Domestic market: products are directly sold to customers.

Foreign market: representatives.

Extent of the market:

Customers all over the world except for Australia.

Durability of products:

8 - 10 years.

Share in the domestic market:

Forging machines: 100%, almost no competitors at home and abroad.

Drilling machines: 10%.

Share in foreign market: Forging machinery: almost no competitors; crankshaft milling machines: 30%, one major competitor only.

EXPORT

Total annual export: US \$ 1.2 million.

Major products	To Western countries	To Eastern countries	To Developing countries
Forging machines	76%	13.2%	10.8%
Crankshaft milling machines	52.1%	41.8%	6.1%

Governmental aid and grants:

The government aids firms exporting by way of repaying the sales tax accumulated on all exported goods during the present and previous financial years. The sales tax indicated under item 6 has been admitted accordingly.

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		Average import duties (*)	Total consumption value 000 US \$	Total consumption value 000 US \$
	Unit	Quantity			
1. Energy and water TOTAL:					72
- Electricity	000 kWh	1,654	-	-	45
- Fuel oil	t	673	-	-	15
- Motor fuels	000 l	68	-	-	10
- Water	000 m ³	28	-	-	2
2. Production materials TOTAL:					3,117
- Steel	t	360	16	1.6	121
- Sheet metal	t	730	-	-	115
- Other production materials and supplies	..	..	54	11.2	267
- Various supplies	..	..	40	9.4	2,523
- Forms	..	..	-	-	91
3. Other materials & supplies TOTAL:					226
- Packaging material					30
- Parts, supplies & services					88
- Other materials & supplies					108
4. Business services purchased TOTAL:					740
- Transportation, storage & insurance					92
- Communication, advertising & other business services					648
5. Work performed by subcontractors TOTAL:					223
TOTAL VALUE OF CONSUMPTION:					4,378

(* Low import duties since goods are predominantly admitted in bond.

VI. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (1)

Number	Original Purchase Value (USD US \$)	Replacement value (USD US \$)	Avg. Age (yrs)	Supplier country	Year of installation	Daily running time
Vertical boring mill (special)	1	91	91	FR.Germ.	1966	18 hrs.
Boring mills BC	4	404	418	FR.Germ.	since 1967	18 "
Turning machines (special)	3	187	187	FR.Germ.	1967	18 "
Co-ordinate table drilling machine	1	43	46	FR.Germ.	1965	18 "
NC-drilling machine (*)	3	91	92	USA	1966/67	18 "
Turning machines	22	245	271			
Vertical boring mills	1	74	99			
Planing machines	7	248	262			
Milling machines	23	195	219			
Boring mills	7	496	535			
Drilling machines	13	71	79			
Grinding machines	38	433	484			
Crane installations	20	601	635			
Other machines	42	329	345			

(*) The company could increase its turning capacity by 40% due to the installation of NC-drilling machines. Reduction of costs for design and construction of devices and fixtures as well as for training and maintenance.

CAPACITY POWER

Process equipment:
electric motor ... kW

Generating equipment:
needed capacity ... kVA

CAPACITY OF PRIMARY OPERATIVE SHOPS

Major primary operative shops	Kind of process involved	Status	Autom.	Further details
Mechanical processing		A	II	
Assembly		A	III	

CAPACITY UTILIZATION

Full capacity output approx. US \$ 1 millions

Current utilization

Major products by process

The company reports almost full utilization of its existing capacity. After expansion of the assembly hall and modernization of the process equipment the company will have increased its capacity output by 20%.

III. HISTORY & PLAN

Year	Total sales (USD US \$)	No. of persons employed	Total output (USD US \$)
1963	2,780	345	2,640
1964	2,440	349	2,150
1965	3,570	380	3,460
1966	5,480	478	5,070
1967	9,320	593	8,500
1968	9,810	697	9,690

The break-even point was surpassed for the first time in 1952 with sales exceeding US \$ 220,000.

From	To	Approximate amount (USD US \$)	Type of investment
1955	1966	3,740	land and primary industrial buildings
1955	1966	2,100	Machinery, internal means of transportation, motor vehicles, factory and office equipment, office machines, implements and tools
1967	1968	1,600	

3. Future Plan:
From 1968 to 1970: 1,860 Expansion of assembly hall (US \$ 620,000) and of administration building (US \$ 543,000). Rationalization of machinery such as co-ordinate table drilling machines, co-ordinate table turning lathes, boring mills (US \$ 697,000). Increase in personnel on 1st shift (+ 120 operatives) and 2nd shift (+ 70 operatives).

II. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1964)

Industry Industrial machinery (SIC-Code: 360)

1. Size groups by number of persons employed:	No. of estab.	No. of empl.	Avg. W. & S. (US \$)	Avg. gross prod. vol./per pers. (US \$)	Avg. value added/gross prod. ratio (%)	2. Size groups by annual scale of production (USD US \$):	No. of estab.	No. of empl.	Avg. W. & S. (US \$)	Avg. gross prod. vol./per pers. (US \$)	Avg. value added/gross prod. ratio (%)
up to 19	1,302	5,536	1,269	6,945	51	up to 20	707	995	885	5,351	57
20 - 99	262	11,451	1,729	7,224	54	20 - 40	276	1,330	1,146	5,667	54
100 - 499	93	19,966	1,977	8,532	50	40 - 200	402	5,781	1,435	5,983	54
500 - 999	9	5,776	2,161	6,460	54	200 - 400	102	4,198	1,745	6,569	55
over 1,000	9	12,569	2,022	6,892	53	400 - 2,000	135	14,177	1,894	7,555	54
						over 2,000	53	28,717	2,061	8,095	49
TOTAL:	1,675	55,198	1,885	7,511	51	TOTAL:	1,675	55,198	1,885	7,511	51

II. SERVICE AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

- Type of service
- | | | |
|------------------------|---------------------------------------|-------------------------------|
| 1. Engineering work | 3. Technical and managerial personnel | 4. Repair and maintenance |
| 2. Physical assistance | 4. Industrial training | 5. Education of foreign labor |
| 3. Industrial services | 5. Technical consultancy | |
| 4. Equipment supply | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Name of industry	Description of project
-----------------	-------------------	-----------------	------------------	------------------------

9				As a rule, the establishment is prepared to employ foreign workers although it will be difficult to supply housing facilities for them.
---	--	--	--	---

III. SUPPLEMENTARY NOTES

Rationalization policy:

Both the straight-line and the accelerated methods are applied.

Contract and commission work:

The establishment tempered, nitrated and ground steel for four companies on commission basis. Total commission received: US \$ 51,000.

On the other hand 5 subcontractors received orders for special processing of large machine parts and designing of machines. Commissions paid: US \$ 223,000.

Difficulties in the past:

Lack of skilled workers due to presence of other iron and steel processing enterprises in the region.

Long terms of delivery for large castings and special aggregates.

Current problems:

Continuation of the rationalization programs. Lack of company-owned housing.



7 4.09.12

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XII. BOOMED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service

- | | | |
|-------------------------|---------------------------------------|--------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Reports and reports |
| 2. Financial assistance | 6. Industrial training | 9. Assistance of foreign labor |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply | | |
| machinery & accessories | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
1				The company is interested in preparing engineering studies for the production of tin metal containers, heating equipment (radiators, boilers, etc.) and agricultural machinery (medium-sized plants only). Pre-feasibility studies could be supplied rather quickly. Feasibility studies, however, can only be prepared in close co-operation with local experts.
2				Financial assistance could be considered in form of engineering studies.
3				Know-how contracts covering production methods could be signed. Licenses could be provided for the manufacture of agricultural machinery.
4				The company is interested in supplying self-designed machines, i.e. for the manufacturing of cans, radiators, and expanded metal as well as welding machines (especially for CO ₂ and resistance welding).
6				Toolsetters as well as repair and maintenance personnel could be trained either in a special training shop or on-the-job.
8				Agricultural machinery, expanded metals, shovels and spades could be exported to developing countries.

XIII. SUPPLEMENTS & NOTES

History of investment:

The company belongs to the metal-working industry and consists of 4 plants which manufacture cans, heating radiators, agricultural machinery and rolled products.

The company was originally founded in 1890, the reporting branch establishment in 1935.

Depreciation policy: (see VI. VALUE ADDED, No. 1 and 2, page 2)

The reporting establishment applies both the straight-line and the accelerated methods of depreciation. Particular emphasis is put on the latter type. For the 1966/67 business year total depreciation amounted to US \$ 189,000 out of which US \$ 139,000 resulted from accelerated depreciation. The loss of US \$ 124,000, therefore, does not reflect the actual financial situation of neither the establishment studied nor the entire company which had a profit of US \$ 283,000.

During the past years the company accumulated substantial financial reserves by means of self-financing. In 1967, these reserves were partly converted into equity capital which was doubled.

Inventory policy:

On the average the stock of finished products amounts to 30% of the total value of production.

Major Products: Enamelled copper wire.

Capable of producing annually 1,800 t of enamelled copper wire based on 3-shift operation. Full-capacity output amounts to US \$ 4 million.

Reporting Unit:

A one-establishment enterprise; privately owned; founded in 1948; largest electric wire manufacturer in the country; no licensed manufacturing; 50% exports; intensive research activity. Approx. 220 employees.
Business year: 1 April 1966 - 31 March 1967.

I. FIXED CAPITAL ASSETS

(End of 1966/67)	Original purchase value (1000 US \$)	Replacement value (1000 US \$)	Average age (Yrs.)
1 Primary process equipment (including installation cost)			
TOTAL	870	2,575	
- Process equipment **	720	2,400	5
- Hand tools & apparatuses	150	175	-
2 Buildings			
TOTAL	265	495	
- Primary industrial buildings (total floor space: 13,000 m ²)			
- Auxiliary buildings	265	495	8
- Warehouse			
- Office administration buildings			
- Housing			
3 Auxiliary facilities (excl. buildings)			
TOTAL	25	37	
- Internal power equipment			
- Laboratory facilities			
- Means of transportation	5	3	2.5
- Office equipment	20	29	7
TOTAL PHYSICAL FIXED ASSETS (excluding land)	1,160	3,107	
4 Other fixed capital assets			
TOTAL	20	194	
- Land (total acreage: 30,000 m ²)	15	174	-
- Land improvements			
- Others (incl. intangible assets)	7	10	-

(**) Including self-constructed process equipment which has not been activated.

*NB: Details of process equipment and auxiliary means of transport, this table given on Page three (Section VIII)

EXTERNAL CONDITIONS

Transport	external long distance	fair
	internal long distance	excellent
	local and city	"
Utilities	electricity	fair
	water	"
	gas	"
Community	residence	fair
	health and recreation	"
	education	"
Own Welfare Facilities		-

III. INVENTORIES

(End of 1966/67)	Actual value (1000 US \$)	Number of months
Inventories	390	
TOTAL		
- Production materials	228	2
- Other input materials	18	1
- Work-in-process	-	-
- Finished products	144	0.5

WORKING TIME PER OPERATIVE WORKER

	1st shift	2nd shift	3rd shift	hours
Shift hours/day (*)	7.2	7.0	7.0	hours
Actual hours/year	2,185	2,150	2,150	hours
Actual days/year	305	305	305	days

(*) Actual hours including holidays and breaks.
Including working hours of 1967.

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1966/67 monthly average)	Number of persons					
	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1. Local non-operatives						
- Managers	-	-	-	-	-	1
- Engineers	-	-	-	-	2	2
- Technicians	-	-	-	2	2	-
- Accountants	-	1	-	2	2	-
- Sales officers	-	1	-	3	1	1
- Clerks and typists	-	6	6	6	1	-
2. Local operatives						
- Supervisors	-	-	-	-	-	-
- Foremen	-	-	2	5	-	-
- Skilled operatives	-	-	-	-	-	-
- Machine operators	16	36	40	37	2	-
- Craftsmen	2	8	17	6	-	-
- Truck drivers	-	-	1	1	-	-
- Unskilled operative	3	6	1	-	-	-
- Other full-time operatives	-	-	3	2	-	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff						not applicable
- Technical staff						
- Other skilled operatives						
- Unskilled operatives						

IV. MANNING TABLE

(Number of personnel)

Full categories: A. Supervisory staff and foremen (for all shifts)
B. Skilled operatives
C. Semi-skilled operatives (machine operators)
D. Unskilled operatives

(31 March 1967)	Total	Number of personnel					
		A	B	C	D	2nd Shift	3rd Shift
ALL SHOPS & UNITS:	228	39		109		40	40
1 Primary operative shops	144	-	-	64	-	40	40
- Drawing department	25	-	-	11	-	7	7
- Grinding department	5	-	-	5	-	-	-
- Enamelling department	64	-	-	28	-	18	18
- Coiling department	50	-	-	20	-	15	15
2 Auxiliary operative units	45	-	-	45	-	-	-
- Repair & maintenance	13	-	-	13	-	-	-
- Mechanical shop	-	-	-	-	-	-	-
- Tooling shop	-	-	-	-	-	-	-
- Utilities control (test field)	12	-	-	12	-	-	-
- Product & material storage	8	-	-	8	-	-	-
- Off-site transport	3	-	-	3	-	-	-
- Guards, cleaners, etc.	9	-	-	9	-	-	-
3. Auxiliary non-operative units	39	39	-	-	-	-	-
- Production management	7	7	-	-	-	-	-
- Research & development	2	2	-	-	-	-	-
- Sales unit	6	6	-	-	-	-	-
- Accounting	22	22	-	-	-	-	-
- General administration	2	2	-	-	-	-	-

V. ANNUAL PRODUCTION

(1966/67)	Yr. of first prod.	Quantity produced		Avg. unit price on factory (US \$)	Total output value (1000 US \$)
		Unit	Quantity		
Enamelled copper wires	1948	t	1,319	2,841	3,758
Revenue from commission work (*)	-	t	114	..	254
TOTAL VALUE OF PRODUCTION:					4,012

(*) Copper supplied by customers.

VI. VALUE ADDED

(1966/67)	Total value (1000 US \$)
1 Annual wages & salaries	516
- Operative workers (187 persons)	371
- Non-operative workers (43 persons)	145
2 Other payments for employees	129
3 Annual depreciation	109
- Machinery & equipment	..
- Buildings & other facilities	..
- Non-physical capital assets	..
4 Rentals paid	6
5 Interests & royalties	54
6 Sales tax (*)	50
7 Other indirect business taxes	..
8 (1) Subsidies	..
9 Corporate income before tax	193
(*) Reimbursement of sales tax for exports has been deducted.	1,715
TOTAL VALUE ADDED	1,715

DESCRIPTION OF MAJOR PRODUCTS:

Enamelled round copper wires for all applications in electrical engineering. Nominal diameters: 0.3 to 2.0 mm. (Company produces according to IEC recommendations and to various international standards).
Covering based on synthetic resins. Fine, medium and thick coverings for all thermal classes, quickly solderable, highly resistant to chemicals or high and low temperatures, thermoplastic coating, coloured.
Serial production. Standard types can be delivered immediately, long-term delivery for special types.

MARKET ASPECTS:

Consumers of products:

70% of the output is sold to large-scale enterprises of the electrotechnical industry.

Sales organization:

Direct selling, representatives and 4 domestic sales depots.

Share in the domestic market:

66%.

Competition in the market:

No serious competition from domestic producers noticeable, but enterprise faces heavy competition from Italy and both price and quality competition from another Central European country and Japan.

EXPORT

Total annual export (US \$ 1,500)

Major products	To Western countries	To Eastern countries	To Developing countries
Wire	90%	10%	0%

Export prices:

The enterprise has to adjust its export prices to the price levels prevailing in different import countries.

Importation of equipment:

The enterprise has imported equipment worth 100,000 US \$ in 1966. The equipment was used for the production of enamelled copper wires. The equipment was imported from the USA and Japan.

VII. ANNUAL CONSUMPTION

(1966/67)	Quantity consumed		% import	Average import duties (1000 US \$)	Total consumption value (1000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL					22
- Electricity	000 kWh	4,851			54
- Coke	t	9			0.4
- Fuel oil	t	4.8			0.1
- Gas	000 m3	..			4
- Water	000 m3	..			0.4
2. Production materials					
TOTAL					2,034
- Copper wire (8 mm diameter)	t	1,300	80 (*)	-	1,850
- Synthetic resins	t	160	70	37	184
(*) Imported by a copper-smelting plant					

	Total consumption value (1000 US \$)
3. Other materials & supplies	265
TOTAL	257
- Packaging material (pallets, containers, cases, cartons)	..
- Parts, supplies & services	..
- Other materials & supplies	8
4. Business services purchased	511
TOTAL	209
- Transportation, storage & insurance	..
- Communication, advertising & other business services	42
5. Work performed by subcontractors	..
TOTAL	..
TOTAL VALUE OF CONSUMPTION:	2,769

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (1):	Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Age (yrs)	Remarks		Total output	Daily running time
					(1) Purchased second-hand (2) Obsolete (3) Special (4) Self-manufactured	Supplier country		
Wire drawing machines	62	599.8	774.0	4		70- Fed. Rep. of Germany	1,900 t/yr (*)	16 - 24 hrs
Pot-core coiling machines	4	-	13.5	3	90			
Spool coiling machines	12	27.8	3.9	5			1,800 t/yr.	24 hrs
Enamelling furnaces	19	-	1,470.6	5	30			
Others	..	26.7	112.3	8				

(*) Output of each wire drawing machine depends upon diameter of wire.

CAPACITY POWER

Process equipment electric motors kW 1, ...
Generating equipment installed capacity kVA -

CAPACITY OF PRIMARY OPERATIVE SHOPS

Major primary operative shops	Kind of process involved	Machin.	Autom.	Further details
Wire drawing department	Diamond drawing	B	III	diameters ranging from 4.70 - 0.003 mm
Enamelling department	See page 4 XII - Supplements	A	II	
Coiling department		C	III	After leaving the enamelling furnace the wire is either put on reels or on pot-core coils for shipment. Since only some wires require rewinding, the coiling department can operate on 2 shifts as against 3 shifts which would be normal.

CAPACITY UTILIZATION

Full capacity output (1000 US \$) ...

Current utilization

Major products (or processes)	Approximate %									
	up to 20	20-40	40-60	60-70	70-80	80-90	90-100	100		
Wire drawing department (3 shifts)										x
Enamelling department (3 shifts)										x
Coiling department (2 shifts)										x

Since the company is operating already at full-capacity producing copper wires worth US \$ 4,000,000, the above-mentioned full-capacity output could only be reached if the existing machinery and equipment could be expanded which actually is anticipated for the 1968-1972 period.

IX. HISTORY & PLAN

	Total output (1000 US \$)	No. of persons employed	Total exports (1000 US \$)
1. Performance in the past			
Year: 1963	1,510	166	310
1964	2,240	176	590
1965	2,830	197 (*)	900
1966	4,360	215 (*)	1,810
1967	4,520	237	2,040
1968			
(*) referring to calendar year.			
2. Investments in the past	Approximate amount (1000 US \$)	Type of investment	
From 1965 to 1968:	460	Primary industrial building and machinery	
1968:	310		
3. Future Plan			
From 1968 to 1972:	1,160	Expansion of machinery and equipment, rationalization of auxiliary production facilities; Another 50 skilled operatives and 15 non-operatives will have to be employed on the 1st shift.	

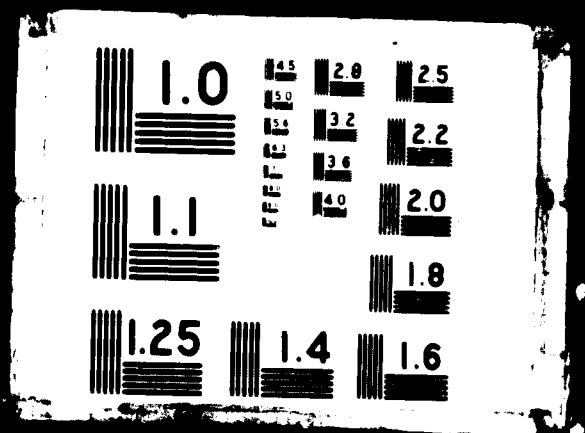
X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

... confidential; figures of those size groups are included in those underlined.

(1964) Manufacture of metal products excl. machinery and transport equipment (ISIC Code 35)

1. Size groups by number of persons employed:	No. of establishments	No. of emp.	Avg. W & S per pers. (1000 US \$)	Avg. gross prod. val./per pers. (1000 US \$)	Avg. value added/gross prod. ratio (%)	2. Size groups by or 1/2 each of pers. (1000 US \$):	No. of establishments	No. of emp.	Avg. W & S per pers. (1000 US \$)	Avg. gross prod. val./per pers. (1000 US \$)	Avg. value added/gross prod. ratio (%)
up to 19	100	372	1,303	7,247	51	up to 20	65	32	933	5,006	64
20 - 99	21	878	1,652	7,648	50	20 - 40	16	57	1,496	7,244	57
100 - 499	9	4,255	2,348	8,969	45	40 - 200	26	351	1,452	6,164	53
500 - 999	2	C	C	C	C	200 - 400	10	381	1,905	7,309	51
over 1,000	1	C	C	C	C	400 - 2,000	10	1,102	1,834	8,245	48
						over 2,000	6	3,472	2,104	9,289	44
TOTAL	133	5,445	1,941	8,657	46	TOTAL	133	5,445	1,941	8,657	46

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02919



Major Products: Universal machine tools, woodworking machines, lathes, shanks, hardness testing devices.
Capable of producing annually US \$ 3,87 million on 2-shift operation.

Reporting Unit: A branch of a centralized multi-establishment enterprise founded in 1952. Production started in the same year; the break-even point was reached in 1953 with sales, surpassing US \$ 1.35 million. Privately owned. High rate of exports. Own research facilities, 3% of sales revenue is devoted to research and development. 350 employees.

I. FIXED CAPITAL ASSETS

(End of 1968)	Original purchase value (000 US \$)	Replacement value (000 US \$)	Avg. age (Yrs.)
1. Primary process equipment (including installation cost)	856	428 (**)	8
TOTAL	856	428	8
- Process equipment *	-	-	-
- Hand tools & apparatuses	-	-	-
2. Buildings	743	1,064	8
TOTAL	743	1,064	8
- Primary industrial buildings (total floor space: m ²)	512	658	8
- Auxiliary buildings	36	160	8
- Warehouses	8	10	8
- Office administration buildings	139	174	1
- Housing	48	62	5
3. Auxiliary facilities (excl. buildings)	72	32 (**)	-
TOTAL	72	32	-
- Internal power equipment	-	-	-
- Laboratory facilities	5	3	5
- Means of transportation	34	12	5
- Office equipment	33	17	1
TOTAL PHYSICAL FIXED ASSETS (excluding land):	1,671	1,524	
4. Other fixed capital assets	36	160	-
TOTAL	36	160	
- Land (total acreage: 13,822 m ²)	-	-	-
- Land improvements	-	-	-
- Others	-	-	-

(**) Depreciated book value as of 1968.

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII.)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1968 monthly average)	up to 100 US\$	100 -140 US\$	140 -160 US\$	160 -240 US\$	240 -560 US\$	over 560 US\$
1. Local non-operatives	-	-	-	-	1	3
- Managers	-	-	-	3	5	-
- Engineers	-	-	-	8	1	-
- Technicians	-	2	1	3	-	-
- Accountants	-	2	-	3	-	-
- Sales officers	-	-	-	-	5	-
- Clerks and typists	-	17	16	12	1	-
2. Local operatives	-	-	-	2	8	-
- Supervisors	-	-	-	15	-	-
- Foremen	-	-	-	36	-	-
- Skilled operatives	-	-	143	-	-	-
- Machine operators	-	-	12	-	-	-
- Craftsmen	-	-	3	-	-	-
- Truck drivers	-	15	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-
- Other full-time operatives	-	-	-	-	-	-
- Part-time operative	-	-	-	-	-	-
3. Foreign employees	-	-	-	-	-	-
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	37	1	1	-	-

EXTERNAL CONDITIONS:

Transport:	external long distance	excellent
	internal long distance	"
	local and city	fair
Utilities:	electricity	fair
	water	"
	gas	"
Community:	residence:	fair
	health and recreation	"
	education:	"
Own Welfare Facilities:	canteen, sports-field, housing	

III. INVENTORIES

(End of 1968)	Actual value (000 US \$)	Number of months
Inventories	913	-
TOTAL:	236	2
- Production materials	19	2
- Other input materials	387	1
- Work-in-process	271	1
- Finished products	-	-

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
- Shift hours/day:	9	9	-	hours
- Actual hours/year	2,304	2,304	-	hours
- Actual days/year	257	257	-	days

IV. MANNING TABLE

(number of persons)

Skill categories: A. Supervisory staff and foremen (for all shifts)
B. Skilled operatives
C. Semi-skilled operatives (machine operators)
D. Unskilled operatives

(1968 average)	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	B-D	B-D
ALL SHOPS & UNITS:	353	96	231			26	-
1. Primary operative shops	211	24	36	126	-	25	-
- Production programming	2	2	-	-	-	-	-
- Hardness testing section	6	1	4	1	-	-	-
- Turning shop	44	9	-	26	-	10	-
- Milling shop	41	7	-	29	-	5	-
- Drilling shop	22	1	-	17	-	4	-
- Tool shop	30	1	27	1	-	1	-
- Assembly	28	2	-	26	-	-	-
- Annealing shop	4	-	-	4	-	-	-
- Grinding shop	26	2	-	20	-	4	-
- Painting	8	-	5	2	-	1	-
2. Auxiliary operative units	75	5	69			1	-
- Repair & maintenance	5	1	-	3	-	1	-
- Mechanical shop	-	-	-	-	-	-	-
- Tooling shop	-	-	-	-	-	-	-
- Utilities control	34	3	31			-	-
- Product & material storage	15	1	14			-	-
- Off-site transport	6	-	6			-	-
- Guards, cleaners, etc.	15	-	15			-	-
3. Auxiliary non-operative units	67	67	-				-
- Production management	3	3	-				-
- Research & development (*)	16	16	-				-
- Sales unit	19	19	-				-
- Accounting	27	27	-				-
- General administration	2	2	-				-

(*) Mostly for machine designs

V. ANNUAL PRODUCTION

(1967)	Yr. of first prod.	Quantity produced		Av. unit price ex factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Products for group of products					
Ball supports and ball cages	1909	000 pcs	54,816	..	1,762
Standard ball bearings and roller bearings	1940	" "	1,026	..	454
Steering wheel spindle-cup & cone bearings	1950	" "	5,315	..	1,313
Ball boxes and shafts	1959	" "	273	..	1,339
Stamped metal parts	1924	" "	29,742	..	789
Rings	1956	" "	10,279	..	424
Plastic parts	1964	" "	3,747	..	371
Tread rollers	1955	" "	419	..	66
Tubs and wheels	1943	" "	208	..	142
Tools	1928	" "	1	..	210
TOTAL VALUE OF PRODUCTION:					6,870

VI. VALUE ADDED

(1967)	Total value (000 US \$)
1. Annual wages & salaries	
- Operative workers (727 persons)	1,520
- Non-operative workers (190 persons)	601
2. Other payments for employees	417
3. Annual depreciation	533
- Machinery & equipment	21
- Buildings & other facilities	158
- Non-physical capital assets	11
4. Rentals paid	27
5. Interests & royalties	113
6. Sales tax	223
7. Other indirect business taxes	162
8. (-) Subsidies	-
9. Corporate income before tax	91
TOTAL VALUE ADDED:	
	1,464

DESCRIPTION OF MAJOR PRODUCTS:

No details available.

MARKET ASPECTS:

Consumers of products:

Automobile, bicycles, electrical and agricultural machinery industry; manufacturers of wheels and rollers, conveying equipment, household equipment, building machines.

Sales organization:

Domestic as well as foreign market: representatives.

EXPORT:

Total annual export: US \$ 1,270,000.

Major products	To Western countries	To Eastern countries	To Developing countries
Ball boxes	100%	-	-
Shafts	100%	-	-
Roller bearings	99%	1%	-
Rings	95%	1%	4%
Ball supports K,P,S	95%	-	5%
Ball supports C,D,L	33%	-	7%
Cone bearings	100%	-	-

Export price policy:

Adjustment to world market prices.

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import duties	Total consumption value (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity				
1. Energy and water						
TOTAL:						143
- Electricity	000 kWh	2,491	-	-	51	
- Solid fuels	t	900	-	-	25	
- Liquid fuels	t	165	-	-	4	
- Gas	t	920	-	-	26	
- Water	t	47	-	-	7	
2. Production materials						
TOTAL:						1,739
- Strip iron	..	-	-	-	561	
- Precision-steel tubes	..	-	-	-	113	
- Free-cutting steel	..	-	-	-	59	
- Plastics	..	-	-	-	70	
- Tool-steel	..	-	-	-	28	
- Balls	..	-	-	-	438	
- Purchased parts	..	-	-	-	265	
- Double-Duro hardened steel	..	-	-	-	50	
- Others	..	-	-	-	155	
3. Other materials & supplies						238
TOTAL:						238
- Packaging material (boxes, wooden frames, cartons)						161
- Parts, supplies & services						54
4. Business services purchased						189
TOTAL:						189
- Transportation, storage & insurance						70
- Communication, advertising & other business services						119
5. Work performed by subcontractors						97
TOTAL:						97
TOTAL VALUE OF CONSUMPTION:						2,406

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (I.1):

Description	Number	Original Purchase Value (1960 US \$)	Replacement value (1960 US \$)	Av. Age (yrs)	Remarks SH Purchased second-hand OB Obsolete R Rented SC Self-constructed	Supplier country	Year of installation	Daily running time	Capacity output
Double-column revolving presses (up to 100 t)	23			10		Germany, F.R.	1966	16 hrs	3,000 units/day
Bent-lever embossing presses (up to 400 t)	14			10		Germany, F.R.	1966	14 hrs	20,000 units/day
Double-column eccentric presses (up to 300 t)	8			8		Germany, F.R.	1966	16 hrs	13,000 units/day
One-column eccentric presses	60			6		-	-	-	-
High speed presses	3			6		Germany, F.R.	1962	3 hrs	3,000 units/day
6-spindle automatic chucking machine	1		5,750	3		Germany, F.R.	1963	12 hrs	3,600 units/day
4-spindle automatic chucking machine	1			3		Sweden	1963	2 hrs	1,200 units/day
Single spindle automatic chucking machines	16		incl. hand tools and apparatuses	4					
Borehole grinding machines	14			3					
Centerless grinding machines	6			3		Germany, F.R.	1965	12 hrs	..
Screw-injection machine, plunger-die casting machine, miscellaneous spraying equipment for plastic	30			3			1967	12 hrs	..
Spark erosion machine	3			2		Switzerland	1967	16 hrs	..
Turning machines	24			14					
Planning and slotting machines	7			27					
Milling cutter	18			16					
Snappers and saws	4			14					
Circular grinding machines	15			17					
Drillers	17			2					

CAPACITY POWER:
Process equipment: electric motors kW 1,100
Generating equipment: installed capacity kVA -

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechan.	Autom.	Further details
Tool shop		A	II	
Noncutting metal processing department		A	II	
Cutting metal processing department		A	II	
Plastic processing department		A	II	

CAPACITY UTILIZATION:

Full-capacity output: US \$ 8,100,000

Current utilization: based on 2- and 3-shift operation.

Major products (or processes)	Approximate %						
	up to 20	20-40	40-50	50-70	70-80	80-90	100
Ball supports and ball cages							X
Standard ball bearings and roller bearings							X
Ball boxes				X			
Rings			X				
Tread rollers				X			
Hubs and wheels				X			
Plastic parts						X	

Under-utilization of capacity due to substantial decrease of demand in reporting year.

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output (1960 US \$)	No. of persons employed	Total exports (1960 US \$)
1963	5,790	390	1,050
1964	6,530	929	1,020
1965	7,750	329	1,190
1966	7,350	1,033	1,590
1967	6,970	917	1,270
1968	3,100	363	1,570

2. Investments in the past:

From 1960 to 1965: 1,250 Construction of a branch factory

3. Future Plan:

From 1969 to 1971: 1,570 Rationalization of machinery and other process equipment, purchase of auxiliary equipment, expansion of welfare facilities. Labour requirements 1st shift: 17 non-operatives, approximately 50 skilled operatives and 12 unskilled operatives. 2nd shift: 6 non-operatives, approximately 30 skilled operatives and 7 unskilled operatives.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C = confidential; these figures are included in total.

(1962) Manufacture of machinery, except electrical machinery (NIC-Code: 360)

1. Size groups by number of persons employed:	No. of estab.	No. of emp.	Av. W. & S. per pers. (US \$)	Av. sales per pers. (US \$)	Av. value added/saler ratio (%)	2. Size groups by annual value of sales (1960 US \$):			Av. W. & S. per pers. (US \$)	Av. sales per pers. (US \$)	Av. value added/saler ratio (%)
						No. of estab.	No. of emp.	Av. W. & S. per pers. (US \$)			
up to 19	1,981	14,531	7,332	7,093	62	up to 500	3,628	89,636	650	5,932	0
20 - 99	2,071	102,271	4,915	7,305	59	500 - 1,250	992	113,370	0	6,268	0
100 - 499	1,313	289,759	2,190	7,961	57	1,250 - 2,500	474	111,027	0	7,575	58
500 - 999	200	135,237	2,043	8,421	55	2,500 - 12,500	538	332,330	2,038	8,296	55
over 1,000	184	571,100	2,133	8,494	52	12,500 - 25,000	66	138,588	2,121	8,297	53
						over 25,000	45	329,007	2,195	9,371	50
TOTAL:	5,749	1,112,958	2,041	8,212	54	TOTAL:	5,743	1,112,958	2,033	8,215	54

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service:

- | | | |
|-------------------------|---|--------------------------------|
| 1. Engineering study | 4. Technical and industrial personnel | 5. Transport and communication |
| 2. Financial assistance | 6. Industrial training | 7. Extension of foreign trade |
| 3. Industrial services | 8. Technical consultation and installation of equipment | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
2				Company is willing to finance industrial projects.
3				Know-how and license agreements could be signed.

XII. SUPPLEMENTS & NOTES

Contract and commission work:

Turned parts and other construction elements were manufactured by two sub-contractors.
The commission paid amounted to 100 000,00.

Major bottlenecks in the past:

Lack of production capacities as well as of personnel.

Current problems:

Lack of skilled personnel; difficulties in material supply.

Inventories policy:

On the average the value of finished products on stock amounts to about 7% of the total value of production.

Depreciation policy:

The company basically applied the declining balance method. However, in the case of buildings and office equipment the accelerated method was applied as well.

Training courses:

Managerial staff participated in courses and seminars dealing with late processing and cost accounting.

Major Products: Plastic insulated electrical cables.
Capable of producing annually approximately 9,300 million metres of cables on one-shift operation.

Reporting Unit: A one-establishment, privately owned enterprise. Founded in 1965; no foreign capital participation; construction of the factory was started in 1965; trial as well as commercial production began in 1966; the first profits were made in 1968, when the production value amounted to approximately US \$ 2 million. No exports.

I. FIXED CAPITAL ASSETS

(End of 1968)

	Original purchase value (000 US \$)	Book value (000 US \$)	Average (Yrs)
1 Primary process equipment (including installation cost)			
TOTAL	1,192	601	3
- Process equipment *	1,192	573	3
- Hand tools & apparatuses	1	2	**
2 Buildings			
TOTAL	248	216	2.5
- Primary industrial buildings	248	192	2.5
- Total floor space: 4,1 m ²			
- Auxiliary buildings	4	4	2.5
- Warehouse (100 m ²)	21	21	2.5
- Office administration buildings (10 m ²)	7	7	2.5
- Housing (200 m ²)	7	7	2.5
3 Auxiliary facilities (excl buildings)			
TOTAL	41	6	**
- Internal power equipment	1	1	**
- Laboratory facilities	1	1	**
- Means of transportation	2	2	**
- Office equipment	37	4	**
TOTAL PHYSICAL FIXED ASSETS (excluding land)	1,481	823	
		replacement value (200 US \$)	
4 Other fixed capital assets			
TOTAL	8	10	
- Land (total acreage: 100 m ²)	8	10	
- Land improvements	-	-	
- Others	-	-	

* & ** Details of process equipment and auxiliary of primary operative shops are given on Page three (Section III)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1968 monthly average)

	up to 60 US\$	60-90 US\$	90-130 US\$	130-190 US\$	over 190 US\$	over 590 US\$
1 Local non operatives						
- Managers	-	-	-	-	-	4
- Engineers	-	-	-	-	-	-
- Technicians	-	-	-	-	-	-
- Accountants	-	-	1	2	-	-
- Sales officers	-	-	-	1	-	-
- Clerks and typists	-	-	1	-	-	-
- Others	4	-	-	-	-	-
2 Local operatives						
- Supervisors	-	-	1	-	-	-
- Foremen	-	-	5	1	-	-
- Skilled operatives	-	-	9	14	-	-
- Machine operators	-	-	3	1	-	-
- Craftmen	-	-	2	-	-	-
- Truck drivers	-	-	2	-	-	-
- Unskilled operatives	2	3	2	-	-	-
- Other full-time operatives	-	1	1	-	-	-
- Part-time operatives	-	-	-	-	-	-
- Others	-	1	1	-	-	-
3 Foreign employees						
- Managerial staff	-	-	-	-	-	1
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	1	-	-
- Others	-	-	-	-	-	-

EXTERNAL CONDITIONS

Transport:	external long distance	fair
	internal long distance	fair
	local and city	fair
Utilities:	electricity	poor *
	water	fair
	gas	-
Community:	residence	fair
	health and recreation	fair
	education	fair
Own Welfare Facilities:	-	-

* Irregular supply of electricity - problem yet to be solved.

III. INVENTORIES

(End of 1968)

	Actual value (000 US \$)	Number of months
Inventories	61	
TOTAL	221	
- Production materials	8	
- Other input materials	-	
- Work-in-process	-	
- Finished products	43	

(See XII. for liquid assets and deprec. working capital)

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	
Shift hours/day	8	-	-	hours
Average hours/yr:	2,320	-	-	hours
Normal days/year:	290	-	-	days

IV. MANNING TABLE

(number of persons)

Shift categories: A: Supervisory staff and foremen (for all shifts)
B: Machine operators
C: Other operative
D

(1968 Average)

	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	B-D	B-D
ALL SHOPS & UNITS:	72	14	55		3	-	
1. Primary operative shops	35	6	21	4	-	-	
- Dioxide plant	3	-	1	2	-	-	
- Drawing plant	4	1	7	-	-	-	
- Twisting plant	2	1	1	-	-	-	
- Extruder plant	12	3	9	-	-	-	
- Others (packing, etc.)	10	1	3	6	-	-	
2. Auxiliary operative units	22	1	18		3	-	
- Repair & maintenance	6	1	5		-	-	
- Mechanical shop	-	-	-		-	-	
- Tooling shop	-	-	-		-	-	
- Utilities control	2	-	2		-	-	
- Product & material storage	6	-	6		-	-	
- Off-site transport	-	-	-		-	-	
- Guards, cleaners, etc.	6	-	3		3	-	
- Others	2	-	2		-	-	
3. Auxiliary non-operative units	15	7	8		-	-	
- Production management	4	4	-		-	-	
- Research & development	2	1	1		-	-	
- Sales unit	-	-	-		-	-	
- Accounting	3	1	2		-	-	
- General administration	6	1	5		-	-	

V. ANNUAL PRODUCTION

(1968)

Products (or group of products)	Yr. of first prod.	Quantity produced		Av. unit price ex factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Plastic insulated cable (N.Y.Y.)	1966	km	1,608	901.6	1,450
Plastic insulated cable (N.Y.M.)	1966	km	1,723	242.9	418
Plastic insulated cable (N.Y.A.)	1966	km	3,551	33.2	112
Plastic insulated cable (N.Y.B.)	1966	km	4	570.9	5
TOTAL VALUE OF PRODUCTION:					1,985

VI. VALUE ADDED

(1968)

	Total value (000 US \$)
1 Annual wages & salaries	177
- Operative workers (57 persons)	177
- Non-operative workers (15 persons)	0
2 Other payments for employees	33
3 Annual depreciation	129
- Machinery & equipment	101
- Buildings & other facilities	28
- Non-physical capital assets	0
4 Rentals paid	1
5 Interests & royalties	1
6 Sales tax	34
7 Other indirect business taxes	2
8 I Subsidies	(1)
9 Corporate income before tax	0
TOTAL VALUE ADDED:	339

DESCRIPTION OF MAJOR PRODUCTS:

Plastic insulated cables with profiles of 14 and 24 mm; serial production. Quality controlled by a Federal Agency technique and standard. Prompt delivery; sales to the government for main and to the other consumers on a monthly instalment basis.

MARKET ASPECTS:

Consumers of products:

Cable laying firms.

Sales organization:

Sales agencies, wholesalers and own representatives.

Extent of the market:

Markets throughout the country.

Competition in the market:

No domestic competition, but competition with similar foreign products, which are imported at a low price.

Prospects of exports:

The quality of the products is believed to readily meet the international standards for exports. But no specific prospects so far; shipment can be a problem.

EXPORT:

Total annual export -

Major products	To Western countries	To Eastern countries	To Developing countries

VII. ANNUAL CONSUMPTION

(1968)

	Quantity consumed		% import	Average import duties (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity			
1 Energy and water					
TOTAL					21
- Electricity	000 kWh	857			17
- Petroleum	000 l	128			4
2 Production materials					
TOTAL					1,502
- Electric copper wire (5.6")*	t	785	100	15	1,017
- Plastic P.V.C.	t	897			465
- Others	..	..			20

* Exempted from custom duties.

	Average import duties (000 US \$)	Total consumption value (000 US \$)
3 Other material & supplies		
TOTAL		91
- Packaging material	2.8	51
- Parts, supplies & services		23
- Other materials & supplies		23
4 Business services purchased		
TOTAL		31
- Transportation, storage & insurance		14
- Communication, advertising & other business services		17
5 Work performed by subcontractors		
TOTAL		7
TOTAL VALUE OF CONSUMPTION:		1,654

IRAN : 370 - (1)

1240

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (I.1.)

Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Avg. Age (yrs)	Remarks
1				
1				
1				
1				
2				
1				
1				
1				
2				

Remarks
 M Purchased second-hand
 O Obsolete
 R Rented
 SC Self-constructed

Further details:

Machines are supplied mostly by DR, Fed. Rep. of Germany, Switzerland and Belgium.

CAPACITY POWER:
 Process equipment electric motors kW 1,100

Generating equipment installed capacity - kVA

CAPACITY OF PRIMARY OPERATIVE SHOPS

Major primary operative shops	Kind of process involved	Mechan.	Autom.	Further details:

Mechanization:
 A most advanced
 B considerably high standard
 C moderate standard
 D appreciably short of today's standard
 E almost outdated

Automation:
 I fully automated
 II semi-automated
 III non-automated

All shops can be considered as being fully mechanized and partly automated.

CAPACITY UTILIZATION

Full capacity output

Current utilization

Major products (or processes)	Approximate %					
	up to 30	40	50	60	70	80 90 100
All products						

Under-utilization is due to lack of demand. Demand is low due to the large stock of foreign products in the market and imports from East European countries; in winter demand is even less. For full capacity utilization would use additional 72 workers.

IX. HISTORY & PLAN

	Total output (1000 US \$)	No. of persons employed	Total exports (1000 US \$)
1. Performance in the past:			
Year: 1963	-	-	-
1964	-	-	-
1965	-	-	-
1966 (2 months only)	140	30	-
1967	1,330	48	-
1968	1,440	72	-
2. Investments in the past:	Approximate amount (1000 US \$)	Type of investment	
	-		
3. Future Plan:	From 1969 to 1971: 7,520 Replacement investment for primary production facilities except process machinery and equipment. New additions as well as technological improvements of product-mix, production, administrative and welfare facilities. Additional 200 primary and 50 auxiliary operatives as well as 20 persons for management and administration will then be employed.		

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1967)

Industry _____ (ISIC Code: _____)

1. Size groups by number of persons employed: up to	No. of estab.	No. of emp.	Av. W & S. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)	2. Size groups by annual rate of production 1000 US \$: up to	No. of estab.	No. of emp.	Av. W & S. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)

In the industry producing wires and cables, there are two other firms; one of them is small in size (employing less than 7 persons); the other has a different product-mix and is not quite comparable to this case.

TOTAL: _____

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services:

- | | | |
|---|---------------------------------------|-----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export transactions |
| 2. Feasibility studies | 6. Industrial training | 9. Admission of foreign labor |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

1. Services performed during the past five years:

Type of services	Country or region	No. of projects	Field of industry	Description of projects
------------------	-------------------	-----------------	-------------------	-------------------------

XII. SUPPLEMENTS & NOTES

Contract and commission work:

US \$ 6,770 were paid to practically independent subcontractors for commission work. The contract was based on short-term agreements.

Depreciation policy:

The depreciation rates are fixed annually by the Ministry of Finance and are as follows: Machinery and buildings 10%, office equipment 20%, instruments 25% and transportation equipment 35%.

Governmental policies:

Exemption from customs duty as well as from commercial tax for machinery; exemption from customs duty for raw materials (copper wire) up to the amount of production capacity; 50% exemption from income tax for 5 years. But the invasion of low-price imports of similar nature in the domestic market has been a checking factor.

Training:

Lack of skilled operatives used to be a bottleneck, but five operatives who had been trained abroad have already returned and are providing on-the-job training in the factory.

<u>Liquid assets (average):</u>	<u>Value in 000 US \$</u>	<u>Desired working capital:</u>	<u>Value in 000 US \$</u>	<u>Equivalent no. of months</u>
- Cash on hand and in bank	55	- Production materials	343	5
- Marketable securities and bonds	-	- Other materials and supplies	34	5
- Accounts receivable from delivery of goods and services	332	- Finished products	462	5
- Other accounts receivable	5	- Wages for primary operative workers	45	5
- Pre-paid expenses	152	- Other wages and salaries	26	5
Total average liquid assets	544	- Training costs	-	-
		- Administrative costs, sales costs and contingencies	54	5
		- Other special items	22	5
		Total desired working capital	1,055	5

Major Products: television and radio sets and gramophones.
Capable of producing about 15,500 television sets, 42,000 radio sets and 2,000 gramophones based on one-shift operation. Full-capacity output being approximately equal to the actual annual output, amounting to US \$ 5.2 million.

Reporting Unit: A one-establishment enterprise, privately owned. Founded in 1962. No foreign capital participation. The construction of the factory started in 1962; trial and commercial production was started in 1963. The break-even point was surpassed for the first time in 1964 at an annual output of US \$ 1.7 million. The establishment is located within the capital city. No exports. No possibilities for merging with other companies.

I. FIXED CAPITAL ASSETS

(End of 1968)	Original purchase value (000 US \$)	Replace ment value (000 US \$)	Average age (Yrs)
1 Primary process equipment (including installation cost)			
TOTAL	1,687	477.1	2
- Process equipment *	1,687	477.1	2
- Hand tools & apparatuses	-	-	-
2 Buildings			
TOTAL	1,047	243.1	7
- Primary industrial buildings	880	243.1	7
- Total floor space: 14,950 m ²	1,120	17	7
- Auxiliary buildings	4	33	7
- Warehouse	4	33	7
- Office administration buildings	1	1	7
- Housing	1	1	7
3 Auxiliary facilities (excl. buildings)			
TOTAL	110	11.1	4
- Internal power equipment	1	1	2
- Laboratory facilities	-	-	-
- Means of transportation	1	1	4
- Office equipment	108	9.1	5
TOTAL PHYSICAL FIXED ASSETS (excluding land)	2,844	731.3	5
4 Other fixed capital assets			
TOTAL	11	11	1
- Land (total acreage: 100 m ²)	11	11	1
- Land improvements	-	-	-
- Others	-	-	-

* Book value after depreciation.

*NB: Details of process equipment and details of primary operative shops are given on Page three (Section VIII).

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1968 monthly average)	up to 60 US\$	60 - 80 US\$	80 - 130 US\$	130 - 200 US\$	200 - 595 US\$	over 595 US\$
1. Local non operatives						
- Managers	-	-	-	-	-	1
- Engineers	-	-	-	10	12	-
- Technicians	-	-	-	-	-	-
- Accountants	-	-	2	2	-	-
- Sales officers	-	-	1	-	-	-
- Clerks and typists	-	-	4	-	-	-
- Others	1	3	4	2	-	-
2 Local operatives						
- Supervisors	-	-	-	1	2	-
- Foremen	-	-	15	10	5	-
- Key-machine operators	1	126	46	-	-	-
- Machine operators	-	-	-	-	-	-
- Craftsmen	2	8	10	1	-	-
- Truck drivers	-	-	4	-	-	-
- Unskilled operative	21	15	1	-	-	-
- Other full-time operatives	18	208	41	-	-	-
- Part-time operatives	-	-	-	-	-	-
- Other operatives	10	10	2	1	-	-
3 Foreign employees						
- Managerial staff	-	-	-	-	-	3
- Technical staff	-	-	-	-	-	7
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

EXTERNAL CONDITIONS

Transport	external long distance	fair
	internal long distance	fair
	local and city	excellent
Utilities	electricity	fair
	water	fair
	gas	fair
Community	residence	excellent
	health and recreation	fair
	education	fair
Own Welfare Facilities:	-	-

III. INVENTORIES

(End of 1968)	Actual value (000 US \$)	Number of months
Inventories	1,122	
TOTAL	1,122	
- Production materials	248	**
- Other input materials	11	**
- Work-in-process	418	**
- Finished products	445	**

(See XII, Supplement)

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	
Shift hours/day	8	-	-	hours
Average hours/yr: 2,130	-	-	-	hours
Normal days/year: 230	-	-	-	days

IV. MANNING TABLE

(Number of persons)

Skill categories: A Supervisory staff and foremen (for all shifts)
B Machine operators
C Other operatives
D

(1968 Average)	Total	A	B	C	D	1st Shift	2nd Shift	3rd Shift
							B-D	B-D
ALL SHOPS & UNITS:	697	79	618	-	-	-	-	-
1. Primary operative shops	541	33	484	13	-	-	-	-
- Carpentry shop	122	5	113	4	-	-	-	-
- Cabinet manufacturing shop	19	2	15	2	-	-	-	-
- Loud speaker shop	33	3	30	-	-	-	-	-
- Coil manufacturing shop	72	2	68	2	-	-	-	-
- Plating shop	21	1	19	1	-	-	-	-
- Moulding shop	37	2	34	2	-	-	-	-
- Pressing shop	15	2	11	2	-	-	-	-
- Plastic manufacturing shop	13	2	11	-	-	-	-	-
- Printing shop	11	2	9	-	-	-	-	-
- Radio and testing machine assembling	64	5	60	-	-	-	-	-
- Television and testing machine assembling	52	5	47	-	-	-	-	-
2. Auxiliary operative units	99	8	91	-	-	-	-	-
- Repair & maintenance	22	1	21	-	-	-	-	-
- Mechanical shop	-	-	-	-	-	-	-	-
- Tooling shop	-	-	-	-	-	-	-	-
- Utilities control	-	-	-	-	-	-	-	-
- Product & material storage	24	1	23	-	-	-	-	-
- Off-site transport	-	-	-	-	-	-	-	-
- Guards, cleaners, etc.	34	-	32	-	-	-	-	-
- Other units	14	1	13	-	-	-	-	-
3. Auxiliary non-operative units	64	38	30	-	-	-	-	-
- Production management	1	4	-	-	-	-	-	-
- Research & development	2	1	1	-	-	-	-	-
- Sales unit	2	1	1	-	-	-	-	-
- Accounting	4	2	2	-	-	-	-	-
- General administration	25	3	22	-	-	-	-	-
- Other units	31	27	4	-	-	-	-	-

V. ANNUAL PRODUCTION

(1968)	Yr of first prod.	Quantity produced		Av. unit price ex factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Television (21" and 25")	1963	sets	11,432	221-277	2,532
Television (19")	1967	sets	3,633	177	643
Transistor radio	1963	sets	36,174	22	793
Radio	1964	sets	736	13	94
Car radio	1968	sets	4,400	19	83
Radio gramophone	1968	sets	1,428	24	34
TV gramophone	1967	sets	108	34	36
TOTAL VALUE OF PRODUCTION					4,174

VI. VALUE ADDED

(1968)	Total value (000 US \$)
1 Annual wages & salaries	17
- Operative workers	17
- Non-operative workers	0
2 Other payments for employees	0
3 Annual depreciation	10
- Machinery & equipment	10
- Buildings & other facilities	0
- Non-physical capital assets	0
4 Rentals paid	0
5 Interests & royalties	0
6 Sales tax	0
7 Other indirect business taxes	0
8 () Subsidies	0
9 Corporate income before tax	10
TOTAL VALUE ADDED	

DESCRIPTION OF MAJOR PRODUCTS:

Television, radio sets and gramophones meet international standards.

There is a heavy demand for television and radio sets all over the country. The radio parts for television are imported from Federal of Germany, and Japan; delivery within 1 to 2 months. Cabinet parts, fibre parts and wire, etc. are manufactured locally. Delivery requires 15 days lead time.

MARKET ASPECTS:

Consumers of products:

Private persons.

Sales organisation:

Sales representatives and intensive advertising.

Share in the domestic market:

25%.

Competition in the market:

No competition with imported goods, since importation is prohibited.

EXPORT:

Total annual export - None.

Major products	To Western countries	To Eastern countries	To Developing countries

Prospects of exports:

Under the present cost position, export could be possible only with Government subsidies.

Availability of imported materials:

Spare parts as well as parts for new production to be imported need 1 to 2 months advance order.

VII. ANNUAL CONSUMPTION

(1968)	Quantity consumed		% import	Average import duties (000 US \$)	Total consumption value (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity				
1. Energy and water						
TOTAL						19
- Electricity	000 kWh	618	-	-	12	
- Liquid fuels and lubricants	000 l	197	-	-	6	
- Water	000 m3	9.2	-	-	1	
2. Production materials						
TOTAL				703	3,975	
- Television parts		16,155	100	526	1,526	
- Transistor radio parts		36,974	100	124	427	
- Car radio parts		4,460	100	28	106	
- Radio parts		738	100	8	20	
- Gram. radio parts		1,325	100	17	82	
- Wooden (cabinet) parts		16,155	-	-	1,365	
- Plastic parts	Series	16,155	100	-	13	
- Fibre parts		16,155	100	-	18	
- Cable parts		16,155	100	-	17	
- Tin and others		16,155	100	-	64	
- Other radio parts and others		16,155	100	-	237	
3. Other materials & supplies						
TOTAL						4
- Packaging material (Wooden boxes, etc.)						4
- Parts, supplies & services						0
- Other materials & supplies						28
4. Business services purchased						
TOTAL						196
- Transportation, storage & insurance						106
- Communication, advertising & other business services						84
5. Work performed by subcontractors						
TOTAL						0
TOTAL VALUE OF CONSUMPTION						4,164

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (I.1.)

	Number	Original Purchase Value (1000 US \$)	Book value (1000 US \$)	Avg. Age (yrs)	Remarks	Further details:
Television assembly machines	..	48	25	5		
Radio assembly machines	..	38	20	5		
Cutting machines	..	114	119	1		
Plastic manufacturing machines	..	52	47	1		
Television cabinet making machines	..	124	116	1		
Radio cabinet making machines	..	65	33	4		
Galvanizing machines	..	13	12	1		
Coil making machines	..	7	6	1		
Printing machines	..	13	12	1		
Common type of machines and equipment	..	48	24	..		

Remarks
 A: Purchased second-hand
 B: Obsolete
 C: Reused
 D: Self-constructed

Supplier countries for specialized machines are: Fed. Rep. of Germany, Japan, Hungary and Czechoslovakia.

CAPACITY / POWER:

Process equipment:
 - electric motors - 147

Generating equipment:
 installed capacity - 14VA

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization		Automation		Further details:
		Mechan.	Autom.	Mechan.	Autom.	
Manufacturing of television and radio sets	Chassis making, loud speaker and coil making, moulding, pressing, plastic manufacturing, cabinet making, assembling, completing, packing.	B	II			

Mechanization:
 A: most advanced
 B: considerably high standard
 C: moderate standard
 D: appreciably short of today's standard
 E: almost outdated

Automation:
 I: fully automated
 II: semi-automated
 III: non-automated

CAPACITY UTILIZATION:

Full capacity output Approximately US \$ 1,110,000

Current utilization

Major products (or processes)	Approximate %					
	up to 30	40	50	60	70	80 90 100

The actual over-all capacity utilization is considered to be about 100%.

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output (1000 US \$)	No. of persons employed	Total exports (1000 US \$)
1963	184	520	-
1964	1,670	520	-
1965	2,630	580	-
1966	2,430	590	-
1967	3,380	600	-
1968	5,150	697	-

2. Investments in the past:

From 1964 to 1968:	Approximate amount (1000 US \$)	Type of investment
	49	Replacement of machines
	58	Replacement of buildings

3. Future Plan:

From 1968 to 1973: 7,920 New additions to process equipment other primary and auxiliary facilities. Then an increase of 2,074 man-years on the first shift of which 971 work as primary and auxiliary operatives each and 132 in management and administration departments. The annual output will then amount to about 60,000 TV and 40,000 radio sets.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

* Data of selected establishments representing only part of ISIC 370.

(1967) Industry Manufacture of electrical machinery, apparatus, appliances and supplies (ISIC-Code: 370 *)

1. Size groups by number of persons employed:	No. of estab.	No. of empl.	Avg. W. & S. per pers. (US \$)	Avg. gross prod. val. per pers. (US \$)	Avg. value added/gross prod. ratio (%)	Avg. fixed capital per estab. (1000 US \$)
up to 50	3	60	707	14,268	40	168
51 - 100	4	332	622	11,388	22	320
over 100	5	973	1,148	11,101	30	1,920
TOTAL	12	1,265	1,027	11,262	29	..

V. ANNUAL PRODUCTION

(1968)	Yr. of first prod.	Quantity produced		Avg. unit price on factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Various wood working machines	1962	pieces	5,921	181.9	1,080
Universal machine tools	1955	"	2,101	541.8	1,132
Miniature universal machine tools	1953	"	8,000	77.4	610
Lathe chucks	1949	"	6,725	58.1	395
Hardness testing devices	1951	"	349	464.4	161
Special turning lathes	1966	"	2	5,805.0	11
Toolpost grinding machines	1966	"	110	205.1	23
Special machines	1968	"	1	9,945.9	10
TOTAL VALUE OF PRODUCTION:					1,422

VI. VALUE ADDED

(1968)	Total value (000 US \$)
1. Annual wages & salaries	888
- Operative workers (257 annual)	603
- Non-operative workers (96 annual (*))	286
2. Other payments for employees	184
3. Annual depreciation	187
- Machinery & equipment	97
- Buildings	86
- Non-physical capital assets	4
4. Rentals paid	10
5. Interest & royalties	167
6. Sales tax	36
7. Other indirect business taxes	45
8. (-) Subsidies	-
9. Corporate income before tax	224
(*) including 6 apprentices	
TOTAL VALUE ADDED:	1,741

DESCRIPTION OF MAJOR PRODUCTS:

Woodworking machines:

Type I: Without any conventional changes and almost no time-requirements for tool-setting, type I can be used as band-saw, circular-saw, rebrs-saw, jig-saw, belt-sander and disc-sander. 2-speed 1/4 H.P. motor (1,500 and 3,000 r.p.m.). Accessories provide ten further woodworking functions: horizontal drilling, moulding, combing, slotting, hollowing, lathe and face turner, tool grinder, flexible shaft work, planing, thickening and mortising. Designed for professional carpenters, model makers, instrument makers.

Type II: Planing and thickening machine for home carpenters. Equipped with 1/30 HP AC motor or 1/4 HP three-phase motor.

Universal machine tools:

Type I: All chip-removing operations in metalworking can be performed, i.e. turning, thread-cutting, drilling, milling and grinding. Used in industrial training schools, mobile workshops and repair shops. Equipped with three-phase or single-phase AC motor 1,400/1,800 r.p.m. (0.4 HP/0.55 HP). This type of lathe can also be delivered in 2 other versions.

Continuation see page 4 XII, Supplements.

MARKET ASPECTS:

Re-sales:

In order to complete the company's sales structure, industrial diamonds, diamond-grinding wheels and various tools have to be sold. Sales volume: US \$ 232,000.

Customers of products:

Metal and wood-working machine-tools: Schools, universities, all industries, laboratories, electricians, architects, households for various do-it-yourself activities. Hardness testing devices are bought by the metal working industry.

Sales organization:

Domestic market: Own sales organization.

Foreign market: Importers who frequently only sell the company's products.

Market and competition:

The establishment supplies some 74 foreign countries with its products. Usually these products last for about 5 years.

Share in the domestic market: Hardness testing devices, lathe chucks, and miniature universal machine tools: between 50 - 55%; the enterprise is the sole domestic producer of such products, the rest is imported. Wood-working machines: 35%.

Export price policy: Under certain circumstances the company sells at prime costs, just to hold its share in the international market.

EXPORT:

Total annual export:

Major products	To Western countries	To Eastern countries	To Developing countries
Miniature universal machine tools	80%	6%	15%
Various wood-working machines	80%	1%	15%
Lathe chucks	90%	9%	2%
Hardness testing devices	70%	2%	20%
Special machines	-	100%	-

Governmental policies:

The government subsidized exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under 11.5, has been situated accordingly.

VII. ANNUAL CONSUMPTION

(1968)	Quantity consumed		% Import	Average input value	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL:					
- Electricity	000 kWh	823			53
- Coke	t	200			21
- Fuel (oil and gasoline)	t	300			1
- Gas	000 m ³	1			31
					0.3
2. Production materials					
TOTAL:					
- Cast iron	t	323			93
- Steel	t	554			217
- Aluminum	t	143	1%		166
- Electric motors	pieces	14,000			246
- Standard parts (e.g. screws, bolts, springs, etc.)	-	-			125
- Various parts (e.g. drill chucks, saw blades, etc.)	-	-			221

3. Other materials & supplies		Total consumption value (000 US \$)
TOTAL:		187
- Packaging material (cartons, boxes, styropor)		73
- Parts, supplies & services		40
- Other materials & supplies		74
4. Business services purchased		TOTAL:
TOTAL:		373
- Transportation, storage & insurance		282
- Communication, advertising & other business services		91
5. Work performed by subcontractors		TOTAL:
TOTAL:		-
TOTAL VALUE OF CONSUMPTION:		1,681

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

- Type of services
- | | | |
|-------------------------------|---------------------------------------|--------------------------------|
| 1. Engineering studies | 7. Technical and managerial personnel | 8. Paper and copy material |
| 2. Financial assistance | 8. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 9. Technical consultancy | |
| 4. Equipment supply | | |
| 5. Installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

1. Services performed during the past five years:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
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XII. SUPPLEMENTS & NOTES

Average liquid assets:	(000 US \$)	Desired working capital:	(000 US \$)	Equivalent no. of months
Cash on hand and in bank	34	Production material	227	}
Accounts receivable from delivery of goods and services	741	Other materials and supplies	11	
Other accounts receivable	77	Finished products	1,180	
Prepaid expenses	2	Wages for primary operative workers	77	
Total average liquid assets	799	Other wages and salaries	22	
		Training costs	—	
		Administrative costs, office costs and contingencies	203	
		Other special items	106	
		Total	2,426	

Training:

A labour training programme is planned for the future; the annual expenditures are estimated at US \$ 6,600. At present only engineers and experts are trained.

Depreciation policy:

According to the income tax law, buildings and machinery are depreciated at 10%, furniture at 20% per annum.

Governmental policies.

Machinery for the plant is exempted from custom duties and sales taxes. During the first five years of operation, imported materials are exempted from customs duties.

Major Products: Television sets.
Capable of producing annually 10,000 sets based on one-shift operation. Full-capacity output amounts to US \$ 2.5 million.

Reporting Unit: A one-establishment enterprise, privately owned; founded in 1956. No foreign capital participation. Commercial production was first started in 1966. Break-even point was surpassed for the first time in 1968 at an annual output level of US \$ 2.3 million. No exports. No possibility of merging; possibility of further specialization.

I. FIXED CAPITAL ASSETS

(End of 1968)

	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average (Yrs.)
1 Primary process equipment (including installation cost)	60	47 1/2	..
TOTAL	52	46	3
- Process equipment *	3	1	..
- Hand tools & apparatuses			
2 Buildings	243	207 1/2	10
TOTAL	219	183	10
- Primary industrial buildings (total floor space: 3,600 m ²)	5	3	10
- Auxiliary buildings	6	38	10
- Warehouses	17	12	10
- Office administration buildings	2	1	10
- Housing			
3 Auxiliary facilities (excl. buildings)	56	33 1/2	..
TOTAL	15	15	..
- Internal power equipment			
- Laboratory facilities			
- Means of transportation	33	11	..
- Office equipment	8	7	..
TOTAL PHYSICAL FIXED ASSETS (excluding land)	414	287 1/2	
4 Other fixed capital assets	145	156	
TOTAL	145	156	
- Land (total acreage: 13,800 m ²)			
- Land improvements			
- Others			

1/2 Book value

*NB Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1968 monthly average)

	up to 53 US\$	53 - 73 US\$	73 - 105 US\$	105 - 132 US\$	132 - 195 US\$	over 195 US\$
1. Local non-operatives						
- Managers					1	
- Engineers						
- Technicians			2	1		
- Accountants				1		
- Sales officers		1		1		
- Clerks and typists						
- Others		4				
2. Local operatives					1	
- Supervisors			1	1	3	
- Foremen	1	1	1			
- Others						
- Machine operators	10	10	56			
- Craftsmen			1			
- Truck drivers			2			
- Unskilled operatives	2					
- Other full-time operatives	2					
- Part-time operatives						
3. Foreign employees						
- Managerial staff						
- Technical staff						
- Other skilled operatives						
- Unskilled operatives						

EXTERNAL CONDITIONS:

Transport:	external long distance	fair
	internal long distance	fair
	local and city	fair
Utilities:	electricity	poor
	water	fair
	gas	-
Community:	residence	fair
	health and recreation	fair
	education	fair
Own Welfare Facilities:		-

III. INVENTORIES

(End of 1968)

	Actual value (000 US \$)	Number of months
Inventories	125	
TOTAL	595	..
- Production materials		..
- Other input materials		..
- Work-in-process	91	..
- Finished products	39	..

(See XII. Supplement)

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift hours/day	8	-	-	hours
Actual hours/year	2,165	-	-	hours
Normal days/yr	292	-	-	days

IV. MANNING TABLE

(Number of persons)

Shift categories: A Supervisory staff and foremen (for all shifts)
B Machine operators
C Other operatives
D

(1968 average)

	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	B-D	B-D
ALL SHOPS & UNITS:	104	11		92			
1. Primary operative shops	82	6	63	13			
Printing shop	4	-	3	1			
Coil winding shop	13	1	10	2			
Assembling	37	2	33	2			
Testing	10	1	8	1			
Finishing	10	1	8	1			
Controlling	5	1	1	3			
Packing	3			3			
	10			10			
2. Auxiliary operative units							
- Repair & maintenance							
- Mechanical shop							
- Tooling shop							
- Utilities control							
- Product & material storage	3			3			
- Off-site transport	6			6			
- Guards, cleaners, etc.	1			1			
	12	12					
3. Auxiliary non-operative units							
- Production management	1	1					
- Research & development	1	1					
- Sales unit	1	1					
- Accounting	2	2					
- General administration	3	3					
- Other units	4	4					

V. ANNUAL PRODUCTION

(1968) Products (or group of products)	Yr. of first prod.	Quantity produced		Av. unit price ex factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Television sets (25")	1964	pcs	1,000	277	277
Television sets (21")	1964	pcs	9,000	238	2,215
TOTAL VALUE OF PRODUCTION:					2,492

VI. VALUE ADDED

(1968)	Total value (000 US \$)	
1. Annual wages & salaries	69	
- Operative workers (92 persons)	57	
- Non-operative workers (12 persons)	12	
2. Other payments for employees	16	
3. Annual depreciation	65	
- Machinery & equipment	10	
- Buildings & other facilities	40	
- Non-physical capital assets	-	
4. Rentals paid	-	
5. Interests & royalties	-	
6. Sales tax	-	
7. Other indirect business taxes	0.1	
8. (-) Subsidies	(-1)13	
9. Corporate income before tax	24	
TOTAL VALUE ADDED:		166

DESCRIPTION OF MAJOR PRODUCTS:

The quality of the television sets produced meets the European standards and is still being improved gradually.
 For a further increase in demand, the construction of television stations in the provinces is required. Spare parts for TV sets, loud speakers, tin and wire are partly imported from Holland; time of delivery 6 to 18 months. Cabinets, metal spare parts of printing board, plastic and fibre parts are manufactured domestically; time of delivery 15 days.

MARKET ASPECTS:

Consumers of products:

Hotels, clubs, families.

Sales organization:

Sales agencies in all provinces and dealers.

Share in the domestic market:

10%.

Competition with imported products:

There is no competition, since the importation of similar products is prohibited.

EXPORT:

Total annual export: None.

Major products	To Western countries	To Eastern countries	To Developing countries

Prospects of exports:

No cost advantage for exports.

VII. ANNUAL CONSUMPTION

(1968)	Quantity consumed		% import	Average import duties (US \$)	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL:					
- Electricity	000 kWh	273	-	-	7
- Gas oil	000 l	45	-	-	5
- Other oil fuels	000 l	35	-	-	1
2. Production materials					
TOTAL:					
- Television parts	series	10,000	100	159	938
- Chassis parts	series	10,000	-	-	234
- Wooden parts	series	10,000	-	-	829
- Plastic parts	series	10,000	-	-	9
- Fibre parts	series	10,000	-	-	26
- Cables	series	10,000	-	-	11
- Zinc and other metallic parts	series	10,000	100	16	35
- Loud speakers	series	10,000	100	5	13
- Clocks	series	5,000	100	22	43
- Others	..	..	-	-	106

	Total consumption value (000 US \$)
3. Other materials & supplies	
TOTAL:	
- Packaging material (wooden and cardboard boxes)	26
- Parts, supplies & services	15
- Other materials & supplies	8
4. Business services purchased	
TOTAL:	
- Transportation, storage & insurance	49
- Communication, advertising & other business services	44
-	5
5. Work performed by subcontractors	
TOTAL:	
-	-

TOTAL VALUE OF CONSUMPTION: 2,126

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (1):

	Number	Original Purchase Value (000 US \$)	Book value (000 US \$)	Avg. Age (yrs)	Remarks	Further details
Testing equipment	55	15	10	3	-	
Printed board machines	13	8.4	7.6	1	-	
Carpentry equipment	20	26	21	5	-	
Coil winding equipment	9	7.9	7.2	1	-	

Supplier countries for machinery and equipment: Netherlands, Japan, Italy, Fed.Rep. of Germany.

CAPACITY POWER:

Process equipment:
- electric motors kW -

Generating equipment:
- installed capacity kVA -

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization		Further details
		Mechan.	Autom.	
Television manufacturing	Printing, coil winding, assembling, testing, finishing, controlling, packing	B	II	

Mechanization:
A. most advanced
B. considerably high standard

C. moderate standard
D. appreciably short of today's standard
E. almost outdated

Automation:
I. fully automated III. non-automated
H. semi-automated

CAPACITY UTILIZATION:

Full-capacity output: US \$ 2,500,000.

Current utilization:

Major products (or processes)	Approximate %									
	up to 20	20 to 40	40 to 60	60 to 70	70 to 80	80 to 90	90 to 100			

The actual over-all capacity utilization rate

can be considered to be 100%.

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output (000 US \$)	No. of persons employed	Total capacity (000 US \$)
1963	-	-	-
1964	-	-	-
1965	-	-	-
1966	450	50	-
1967	1,250	96	-
1968	2,490	104	-

2. Investments in the past:

In	Approximate amount (000 US \$)	Type of investment
In 1966 :	1,320	Supplementary investment of machinery and building to be able to reach the break-even point.

3. Future Plan:

From 1968 to 1970: 1,320 New additions to process machinery and equipment, to other primary production facilities and administration and welfare facilities; technological improvements of other primary and auxiliary production facilities. These investments will be accompanied by an increase of 110 primary operatives and 15 man-years for management and administration.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

* Data of selected establishments representing only part of ISIC-code 370.

(1967) Manufacture of electrical machinery, apparatus, appliances and supplies (ISIC-Code: 370*)

1. Size groups by number of persons employed:	No. of establs.	No. of empl.	Avg. W. & S. per pers. (US \$)	Avg. gross prod. vol./per pers. (US \$)	Avg. value added/gross prod. ratio (%)	Avg. fixed capital per estab. (000 US \$)
up to 50	3	66	107	14,258	40	168
51 - 100	4	332	672	11,088	22	920
over 100	5	867	1,188	11,101	30	1,920
TOTAL:	12	1,265	1,027	11,262	29	-

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services:

- 1. Engineering study
- 2. Financial assistance
- 3. Industrial services
- 4. Equipment supply, installation & maintenance
- 5. Technical and managerial personnel
- 6. Industrial training
- 7. Technical consultancy
- 8. Import and export promotion
- 9. Admission of foreign labour

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

1. Services performed during the past five years:

Type of services	Country or region	No. of projects	Field of industry	Description of projects
------------------	-------------------	-----------------	-------------------	-------------------------

XII. SUPPLEMENTS & NOTES

Average liquid assets:	(000 US \$)	Desired working capital:	(100 US \$)	Equivalent no. of months
Cash on hand and in bank	95	Production materials	3,089	
Accounts receivable from delivery of goods and services	668	Other materials and supplies	40	
<u>Prepaid expenses</u>	<u>76</u>	Finished products and work-in-process	396	
Total	839	Wages of primary operative workmen	32	12
		Other wages and salaries	13	
		Administrative costs, sales costs and contingencies	155	
		<u>Other special items</u>	<u>132</u>	
		Total for 20,000 television sets	3,960	

Depreciation policy:

Machinery and buildings	10%
Office equipment	20%
Laboratory equipment	25%
Transport equipment	35%

Governmental policy:

a) Affecting the profitability of the enterprise: Machinery for the factory is exempted from custom duties and sales taxes. 45% of imported production materials are exempted from custom duties; 50% reduction of the duties applicable to the rest of the imported materials, during the first five years of operation. Industrial loans are made available at relatively favourable terms.

b) Affecting the viability of the enterprise: More TV stations should be constructed and the programmes improved. Government should not give further permissions for the production of similar articles, but give to the existing establishments the possibility of expansion for productivity improvement. Custom duties on raw materials could be further reduced. Universities should co-operate in the training of television technicians.

Major Products: Electric lamps. Capable of producing annually 20,000 lamps on 1-shift operation.

Reporting Unit: A one-establishment enterprise, founded in 1964, private corporation, no participation of foreign capital, business year : June 1966 to May 1967.

I. FIXED CAPITAL ASSETS

(31st May 1967)

	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
1 Primary process equipment			
TOTAL		33	..
- Process equipment		21	
- Hand tools & apparatuses		5	..
- Cost of installation		7	
2 Primary industrial building			
TOTAL		-	-
(total floor space: .. m ²)			
3 Auxiliary facilities			
TOTAL		3	..
- Water, steam, electricity, cooling & storing	1965/66	2	
- Transportation facilities		-	..
- Administrative facilities		1	
- Laboratory facilities			
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		36	..
4 Other fixed capital assets			
TOTAL		-	-
- Land (total acreage: .. m ²)			

DETAIL OF PROCESS EQUIPMENT (incl.)	Supplier country	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
- Folding machine	USA	1965	11	
- Cutter	"	1965	9	
- Compressor	Mexico	1966	1	..
- Stamping press	"	1966	.7	
- Punchers	"	1966	.9	
- Lather	"	1966	.5	
- Others	..	..	.5	

HISTORY OF INVESTMENT:

Trial production started in 1965/66, commercial production in 1966/67.
In 1964/65, approx. US \$ 24,000 were invested in machinery and implements.

CAPACITY POWER:

Process equipment:
- Electric motors: (8) each 12 kW
- Electric furnaces(1) 14 "

Generating equipment:

Installed capacity: - kVA

EXTERNAL CONDITIONS:

Transport: Long distance, local area, fair.
Utilities: Electricity, water, fair.
Community: -

II. INVENTORIES AND WORKING CAPITAL

(in 000 US \$)

(31st May 1967)

	Actual value	2. Liquid assets	Actual value
1. Inventories		TOTAL	76
TOTAL	17		
- Production materials	13	- Cash (hand/bank)	1
- Other input materials	1	- Market. sec. & bonds	-
- Work-in-process	2	- Short-term investment	2
- Finished products	1	- Prepaid expenses	4
		- Accounts receivable	69
3. Devised working capital			
TOTAL		Number of months	Value
			91
- Production materials	3	24	
- Other input materials	3	2	
- Finished products	3	50	
- Wages & salaries	3	8	
- Other special items	3	7	

III. MANNING TABLE

(number of persons)

A - Machine operators
B - Other operatives

(1966/67 average)

	Total	1st shift A	2nd shift B	3rd shift A+B
ALL SHOPS & UNITS:	12	12	-	-
1. Primary operative shops	10	6	4	-
- Cutting department	1	1	-	
- Folding "	2	2	-	
- Assembly "	4	1	3	
- Painting "	2	2	-	
- Finishing "	1	-	1	
2. Auxiliary operative units	..	-	-	-
- Repair and maintenance				
- Mechanical shop				
- Utilities control				
- Product & material storage				
- Off-site transport				
- Guards, cleaners, etc.				
3. Auxiliary non-operative units	2	2	-	-
- Production management	1	1		
- Research & development	-	-		
- Sales unit	-	-		
- General administration	1	1		

WORKING TIME PER OPERATIVE WORKER:

Normal hours/day: 8 hours - Normal days/year: 299 days
Actual hours/year: 2,392 hours

CAPACITY OF OPERATIVE SHOPS:

The operative shops are moderately mechanized.

IV. ANNUAL PRODUCTION

Products (or group of products)	Qty. of final prod.	Quantity produced		Unit price in factory (US \$)	Total production value (000 US \$)
		Unit	Output		
(1966/67)					
Lamps 2 x 40	1966/67	pcs.	6,000	14,000	(average) 28
Lamps 2 x 20	"	"	3,000	6,000	17
TOTAL VALUE OF PRODUCTION					219

CAPACITY UTILIZATION:

In the first year of production the overall rate of utilization approximates 50%.

EXPORTS:

None.

V. ANNUAL CONSUMPTION

(1966/67)	Quantity consumed				Total consumption value (000 US \$)
	Unit	Purchase	% imported	Tariff rate	
1. Energy and water					
TOTAL					4
- Electricity	000 kWh	..			4
2. Production materials					
TOTAL					107
- Sheet metal	t	68			16
- Ballast	pieces	9,000			39
- Fluorescent tubes	"	14,000			16
- Sockets	"	18,000			4
- Paints	l	4,000			4
- Cells	pieces	3,000	100		28

VI. VALUE ADDED

(1966/67)	Value (000 US \$)
1. Wages & salaries	
- Employees in direct production (10 persons)	14
- Other employees (4 persons)	10
2. Other payments for employees	4
3. Annual depreciation	11
4. Rentals paid	-
5. Interests & royalties	6
6. Sales tax	-
7. Other ind. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	44
	89

VII. MONTHLY EARNING RATES

(31st May 1967)	No. of empl.	Average earning rates (US \$)
1. Local non-operatives		
TOTAL	2	..
- Managers	1	..
- Engineers	1	144
- Technicians	-	-
- Accountants	-	-
- Sales officers	-	-
- Other professional staff	-	-
- Clerks & typists	-	-
2. Local operatives		
TOTAL	10	105
- Supervisors	1	280
- Foremen	-	-
- Machine operators	1	90
- Craftsmen	2	12
- Truck drivers	-	-
- Other full-time operatives	-	-
- Unskilled & part-time operatives	-	-
3. Foreign employees		
TOTAL	-	-

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965) Manufacture of electrical machinery, apparatus, appliances and supplies (SIC: 370)						
1. Size groups by number of persons employed	Number of establ.	Number of empl.	Av. W. & S. per pers. (US \$)	Av. gross prod. val. per pers. (US \$)	Av. emp. rate* (%)	
6 - 100	623	16,074	1,163	5,982	79	
over 100	165	60,746	1,048	6,081	86	
TOTAL	2,458	71,000	1,183	6,780	83	
2. Size groups by units of annual production (000 US \$)						
up to 8	6,139	9,910	128	1,025	30	
over 8	976	67,264	1,230	6,505	109	
TOTAL	7,115	77,174	1,088	6,319	82	

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

Major Products: Non-ferrous wires, conductors and cables. Capable of producing annually 10,000 t on 3-shift operation.
Plastic products. Annual capacity 14,000 t on 3-shift operation.

Reporting Unit: A one-establishment enterprise, founded in 1953. 4% foreign and 96% national capital out of which three quarters are public investment.

I. FIXED CAPITAL ASSETS

(End of 1966)	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
1 Primary process equipment			
TOTAL		1,998	1,843
- Process equipment		698	1,843
- Hand tools & apparatuses		-	-
- Cost of installation		included above	included above
2 Primary industrial building	1964	2,440	4,880
TOTAL		2,440	4,880
(total floor space: 15,000 m ²)		2,440	4,880
3 Auxiliary facilities		270	304
TOTAL		270	304
- Water, steam, electricity, cooling & storing		-	-
- Transportation facilities	1964	3	12
- Administrative facilities	1959	267	292
- Laboratory facilities		-	-
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		3,408	7,009
4 Other fixed capital assets		260	408
TOTAL		260	408
- Land (total acreage: 115,000 m ²)		260	408

DETAIL OF PROCESS EQUIPMENT (no.)	Supplier country	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
- Rolling mill	USA	1955	241	513
- Wire drawer	"	1958	31	63
- " "	"	1958	31	63
- Buncher	"	1957	9	20
- Tabulator	Italy	1964	90	100
- Lead press	USA	1959	109	327
- Enamelling machine	Italy	1957	40	122
- Tinner	USA	1963	13	26
- Tabulator	Italy	1963	109	200
- Wrapping machine	"	1964	9	17

HISTORY OF INVESTMENT:

Construction of the factory started in 1954. The first trial run as well as commercial production started in 1954. The following investments were made for expansion purposes: (in 000 US \$)

1956	approx.	1,280
1963	"	2,000
1964	"	2,000
1966	"	2,000
1967	"	1,600

TECHNICAL ADVANTAGES DUE TO PARTICIPATION OF FOREIGN CAPITAL:

- Employment of skilled foreign personnel, training of domestic personnel abroad
- Modern and appropriate equipment
- Patents and "know-how"
- 10% of production materials are imported.

CAPACITY POWER:

Process equipment:	11,000 kW	Generating equipment:	180 kVA
- Electric motors	800 "	- Gas furnaces (reduced capacity)	
- Electric furnaces			

EXTERNAL CONDITIONS:

Transport: Long distance, local area, fair.
Utilities: Electricity, fair.
Community: Residential, fair.

II. INVENTORIES AND WORKING CAPITAL (in 000 US \$)

(End of 1966)	Actual value	2. Liquid assets	Actual value
1 Inventories		TOTAL	10,478
TOTAL	3,642		
- Production materials	6,144	- Cash (hand/bank)	1,112
- Other input materials	328	- Market. sec. & bonds	607
- Work-in-process	1,133	- Short-term investment	1,194
- Finished products	2,037	- Prepaid expenses	1,690
		- Accounts receivable	5,215
3. Desired working capital			
TOTAL: to be added to actual working capital	7,240		
- Production materials	3	1,200	
- Other input materials	3	480	
- Finished products	1	3,200	
- Wages & salaries	1	80	
- Other special items	..	2,280	

III. MANNING TABLE (number of persons)

(1966 average)	Total	1st shift	2nd shift	3rd shift
		A	B	A + B
ALL SHOPS & UNITS:	1,166	992	97	87
1. Primary operative shops	564	265	159	70
- Wire	160	80	50	12
- Cable	14	6	40	17
- Plastic	102	64	26	12
- Magnetic rectified wire	117	55	43	29
2. Auxiliary operative units	339	305	17	17
- Repair and maintenance	200	182	8	8
- Mechanical shop	-	-	-	-
- Utilition control	76	66	5	5
- Product & material storage	10	10	-	-
- Off-site transport	40	40	-	-
- Guards, cleaners, etc.	13	5	4	4
3. Auxiliary non-operative units	263	263	-	-
- Production management	-	-	-	-
- Research & development	57	57	-	-
- Sales unit	94	94	-	-
- General administration	112	112	-	-

WORKING TIME PER OPERATIVE WORKER:

Normal hour/day:	8 hours	Normal days/year:	292 days
Actual hours/year:	2,336 hours		

CAPACITY OF OPERATIVE SHOPS: based on 3-shift operation

Shop	Capacity	Utilization rate	Automation and mechanization
Rolling mill (hot)	1400 t/month	40%	high
Drawing	2500 t/"	76%	moderate
Average		50%	high

Factory has surplus capacity of 50% due to lack of demand.

IV. ANNUAL PRODUCTION

(1966) Products (or group of products)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price in factory (US \$)	Total production value (000 US \$)
		Unit	Output			
- Copper conductors	..	t	2,477	..	..	461
- Copper wires and cables	..	t	5,023	..	..	1,146
- Plastic products	..	t	6,642	..	..	1,141
- Magnetic rectified round wire	..	t	3,756	..	..	4,480
- Aluminium cable	..	t	1,479	..	..	1,263
- Telephone cable	..	t	1,091	..	..	2,207
- Others	..	t	939	..	..	1,127
TOTAL VALUE OF PRODUCTION						10,675

EXPORTS:

Products: Plastic products
Telephone cables
Magnetic rectified round wire
Copper wires and cables

BENEFITS DUE TO EXPORTS:

Subsidies.
No import duties or income taxes.

VI. VALUE ADDED

(1966)	Value (000 US \$)
1. Wages & salaries	
- Employees in direct production (647 persons)	177
- Other employees (519 persons)	1,371
2. Other payments for employees	111
3. Annual depreciation	1,115
4. Rentals paid	28
5. Interests & royalties	1,083
6. Sales tax (not incl. in NETAL)	1,411
7. Other ind. bus. taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	3,406
	9,404

VII. MONTHLY EARNING RATES

(End of 1966)	No. of pers. empl.	Average earning rate (US \$)
1. Local non-operatives		
TOTAL	474	631
- Managers	3	1,440
- Engineers	30	480
- Technicians	27	240
- Accountants	4	400
- Sales officers	42	400
- Other professional staff	2	600
- Clerks & typists	93	160
2. Local operatives		
TOTAL	688	115
- Supervisors	1	900
- Foremen	40	180
- Machine operators	362	113
- Craftsmen	129	120
- Truck drivers	10	136
- Other full-time operatives	146	92
- Unskilled & part-time operatives	-	-
3. Foreign employees		
TOTAL	1	120
- Engineers, trainers and other technical control staff	1	120

V. ANNUAL CONSUMPTION

(1966)	Quantity consumed				Total consumption value (000 US \$)
	Unit	Purchases	% imported	Tariff rate	
1. Energy and water					457
TOTAL:					457
- Electricity	000 KwH	1,896	..	..	319
- Liquid fuels and lubricants	..	..	..	..	107
- Water	000 m3	561,907	..	..	31
2. Production materials					19,646
TOTAL					19,646
- Electrolytic copper	t	15,275	..	..	14,012
- Aluminum	t	1,641	..	..	953
- Galvanized steel wires and cables	t	478	..	..	203
- P.V.C.	t	1,672	..	..	1,169
- Polyethylene	t	388	..	..	276
- Lead	t	2,296	..	..	532
- Others	t	1,525	..	..	2,501

3. Other materials & supplies

	Total consumption value (000 US \$)
TOTAL	885
- Packaging	509
- Repair & maintenance	173
- Non-factor service inputs	303
4. Business services purchased	
TOTAL	283
- Transport, storage & insurance	122
- Communication, advertisements, etc.	161
5. Work performed by sub-contractors	
TOTAL	-
	21,371

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965) Manufacture of electrical machinery, industry group: apparatus, appliances and supplies (ISIC: 370)						
1. Size groups by number of persons employed	Number of units	Number of empl.	Av. W. & S. per pers. (US \$)	Av. gross prod. val. per pers. (US \$)	Av. emp. gross prod. rate* FM	Total consumption value (000 US \$)
up to 5	1,670	4,250	405	3,834	37	
6 - 100	623	16,004	1,163	5,982	79	
over 100	165	60,746	1,048	6,081	86	
TOTAL	2,458	71,000	1,183	6,780	83	
2. Size groups by units of annual production (000 US \$)						
up to 8	6,139	9,910	128	1,025	30	
over 8	976	67,264	1,230	6,505	109	
TOTAL	7,115	77,174	1,088	6,319	82	

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

Government policies:

Export subsidies should be increased. Enforcement of import substitution is desirable.
Interest rates on loan capital are too high to attract additional investments.

Major Products: Stationary small-plate batteries for telephone exchanges and starter batteries for motor vehicles;
in 1967 the company produced 5,400 starter batteries on 1-shift operation.

Reporting Unit: A one-establishment enterprise, privately owned, founded in 1894; approx. 20 employees; no exports.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average (Yrs.)
1 Primary process equipment (including installation cost)			
TOTAL	37	5	-
- Process equipment *	28	38	-
- Hand tools & apparatuses	9	12	4
2 Buildings			
TOTAL	16	23	-
- Primary industrial buildings	16	23	132
- total floor space: (495 m ²)			
- Auxiliary buildings	-	-	-
- Warehouses	-	-	-
- Office administration buildings (*)	-	-	-
- Housing	-	-	-
(*) Figures included in primary industrial buildings			
3 Auxiliary facilities (excl. buildings)			
TOTAL	16	29	-
- Internal power equipment	1	13	45
- Laboratory facilities	-	-	-
- Means of transportation	9	9	3
- Office equipment	6	17	60
TOTAL PHYSICAL FIXED ASSETS (excluding land)	<u>69</u>	<u>112</u>	
4 Other fixed capital assets			
TOTAL	41	122	-
- Land (total acreage: 400 m ²)	-	-	-
- Land improvements (total: 650 m ²)	2	5	-
- Others	39	117	-

*NB: Details of process equipment and value of primary operative shops are given on Page Three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(1967 monthly average)	Number of persons					
	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1 Local non-operatives						
- Managers	-	-	-	-	-	-
- Engineers	-	-	-	1	1	-
- Technicians	-	-	1	-	1	-
- Accountants	-	-	-	1	1	-
- Sales officers	-	-	-	-	-	-
- Clerks and typists	-	-	1	-	-	-
2 Local operatives						
- Supervisors	-	-	-	-	-	-
- Foremen	-	-	-	-	-	-
- Skilled operatives	-	-	-	-	-	-
- Machine operators	-	-	2	8	4	-
- Craftsmen	-	-	-	1	-	-
- Truck drivers	-	-	-	1	-	-
- Unskilled operatives	-	-	-	-	-	-
- Other full-time operatives	-	-	-	-	-	-
- Part-time operatives	-	-	-	-	-	-
3 Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

EXTERNAL CONDITIONS.

Transport	external long distance	poor (*)
	internal long distance	excellent
	local and city	"
Utilities	electricity	excellent
	water	"
	gas	"
Community	residence	fair
	health and recreation	excellent
	education	"
Own Welfare Facilities		-

(*) No access for heavy duty trucks to premises;
no increases in costs noticeable as yet.

III. INVENTORIES

(End of 1967)	Actual value (000 US \$)	Number of months
Inventories		
TOTAL	26	-
- Production materials	12	2
- Other input materials	-	-
- Work-in-process	4	1
- Finished products	10	0.5

WORKING TIME PER OPERATIVE WORKER

	1st shift	2nd shift	3rd shift	
Shift hours/day (*)	7	-	-	hours
Actual hours/year	1,900	-	-	hours
Actual days/year	232	-	-	days

(*) Normal; Actual: 8.7 hrs day due to cleaning periods (lead) ordered by law.

IV. MANNING TABLE

(1967 average)	Number of persons					
	Total	A	B	C	D	3rd Shift
ALL SHOPS & UNITS.	23	7	16	-	-	-
1 Primary operative shops	14	-	14	-	-	-
- Foundry	1	-	1	-	-	-
- Pasting shop	3	-	3	-	-	-
- Moulding shop	4	-	4	-	-	-
- Assembly	3	-	3	-	-	-
- Battery charging station	2	-	2	-	-	-
- In-assembly	1	-	1	-	-	-
2. Auxiliary operative units	3	1	2	-	-	-
- Repair & maintenance	-	-	-	-	-	-
- Mechanical shop	-	-	-	-	-	-
- Tooling shop	-	-	-	-	-	-
- Utilities control	1	1	-	-	-	-
- Product & material storage	1	-	-	-	-	-
- Off-site transport	1	-	1	-	-	-
- Guards, cleaners, etc.	1	-	1	-	-	-
3. Auxiliary non-operative units	6	6	-	-	-	-
- Production management	1	1	-	-	-	-
- Research & development	-	-	-	-	-	-
- Sales unit	2	2	-	-	-	-
- Accounting	2	2	-	-	-	-
- General administration	1	1	-	-	-	-

Skill categories: A Supervisory staff and foremen (for all shifts)
B Skilled operatives
C Semi-skilled operatives (machine operators)
D Unskilled operatives

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (I.I.):

Number	Original Purchase Value (000 US \$)	Book value (000 US \$)	Avr. Age (yrs)	Remarks	Further details of most recent machinery:		
					Supplier country	Year of installation	Daily running time
Milling machines	42	294	147	6	FR.Germ.	1966	2-shifts
Grinding machines	27	159	77	8	Austria	"	1-shift
Turning lathes	26	139	70	10	Switzerl.	1967	2-shifts
Turning lathes (automated)	12	116	58	4	FR.Germ.	1968	2-shifts
Turning lathes (semi-automated)	5	43	23	8	Austria	1966	2-shifts
Drilling machines	19	50	23	10	"	"	2-shifts
Shaping machines	2	12	4	10	FR.Germ.	1967	1-shift
Work benches	25	4	2	10	Sweden	1966	1-shift
Crane way	9	10	9	6			
Compression stations	4	3	2	10			
Salt-bath furnaces and reheat furnaces	3	10	5	12			
Transportation unit (stacker trucks)	1	6	3	4			
Special machines (High temperature quenching tumbling tub)	2	5	2	8			
Oil tanks	2	3	2	5			
Cleaning works	2	3	1	5			

CAPACITY POWER:
 Process equipment:
 - electric motors 340 kW
 Generating equipment:
 installed capacity - kVA

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechan.	Autom.	Further details:
Turning		B	II	
Milling		B	II	
Drilling		C	III	
Annealing		C	III	
Assembly		C	III	
Painting		C	III	
Tool shop		B	III	
Lathe chucks		B	II	
Grinding		B	II	
Hardening - Testing		B	III	

CAPACITY UTILIZATION:

Full-capacity output: US \$ 3,870,000
 based on 1 - 2 shift operation.

Current utilization:

Major products for process	Approximate %						
	up to 30	40	50	60	70	80	90
Turning (2-shifts)							X
Milling (")							X
Drilling (")					X		
Annealing (1-shift)							X
Assembly (")							X
Painting (")							X
Tool shop (")							X
Lathe chucks (1-2 shifts)							X
Grinding (2-shifts)					X		
Hardness testing (1-shift)							X

IX. HISTORY & PLAN

	Total output (000 US \$)	No. of persons employed	Total exports (000 US \$)
1. Performance in the past:			
Year: 1963	2,250	301	1,450
1964	3,040	309	1,820
1965	3,520	324	2,240
1966	4,070	424	2,480
1967	4,250	422	3,090
1968	4,060	353	2,850
2. Investments in the past:			
From 1958 to 1968:	1,200		Buildings and machinery Extension and rationalization
1968:	160		Buildings, machinery, tools, auxiliary facilities
3. Future Plan:			
From 1969 to 1970:	350		Extension and rationalization of process and other equipment.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1964)

Industrial machinery (ISIC-Code: 360)						2. Size groups by annual scale of production (000 US \$):					
1. Size groups by number of persons employed:	No. of establ.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)	No. of establ.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)	
up to 19	1,302	5,536	1,959	6,445	51	up to 20	707	995	885	5,351	57
20 - 99	262	11,451	1,709	7,224	54	20 - 40	276	1,330	1,146	5,667	54
100 - 499	93	19,866	1,977	8,532	50	40 - 200	402	5,781	1,435	5,983	54
500 - 999	9	5,776	2,161	6,460	54	200 - 400	102	4,198	1,745	6,569	55
over 1,000	9	12,564	2,022	6,892	53	400 - 2,000	135	14,177	1,894	7,555	54
						over 2,000	53	28,717	2,061	8,095	49
TOTAL:	1,675	55,198	1,885	7,511	51	TOTAL:	1,675	55,198	1,885	7,511	51

V. ANNUAL PRODUCTION

(1967) Products for group of products	Yr of first prod	Quantity produced		Av unit price in factory (US \$)	Total output value (1000 US\$)
		Unit	Quantity		
Stationary small-scale batteries	1958	pieces	..	..	4
Starter batteries	"	"	5, 100	38	187
TOTAL VALUE OF PRODUCTION:					191 *****

VI. VALUE ADDED

(1967)	Total value (1000 US \$)
1 Annual wages & salaries	82
- Operative workers	76
1 (16 persons)	
- Non-operative workers	6
1 (7 persons)	
2 Other payments for employees	1
3 Annual depreciation	4
- Machinery & equipment	
- Buildings & other facilities	
- Non-physical capital assets	
4 Rentals paid	
5 Interests & royalties	
6 Sales tax	10
7 Other indirect business taxes	1
8 () Subsidies	
9 Corporate income before tax	16
TOTAL VALUE ADDED	

DESCRIPTION OF MAJOR PRODUCTS:

Stationary small-scale batteries for telephone exchanges. Produced in small series only.

Starter batteries of various sizes and voltages for motor vehicles; serial production; standard quality.

Time of delivery: prompt.

MARKET ASPECTS:

Re-sales:

Various kinds of batteries to supplement product-mix. Company's own production programme was standardized.

Consumers of products:

railway company, army, communities, private consumers (car owners), owners of medium-sized private branch exchanges.

Sales organisation:

Direct sales only, no wholesale.

Durability of products:

3 years.

Extent of the market:

The establishment could supply 200 regular and about 2,000 casual customers.

Share in the domestic market:

Keen competition. Company belongs to a cartel. Almost no quality competition possible except with outsiders such as discount houses. Price competition almost negligible due to public orders.

EXPORT: No exports reported.

Total annual export

Major products	To Western countries	To Eastern countries	To Developing countries

VII ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import dollar	Total consumption value (1000 US \$)	Total consumption value (1000 US \$)
	Unit	Quantity				
1. Energy and water						
TOTAL					6	
- Electricity	000 kWh	121	-	-	4	
- Coal	t	22			1	
- Gas	000 m3	16			1	
- Water	000 m3	2			-	
2. Production materials						
TOTAL					67	
- Lead and lead oxide	t	128	-	-	20	
- Multiple containers	pieces	4,590	-	-	11	
- Separator	"	623,700	-	-	6	
- Others	-	-	-	-	2	
- Re-sales	pieces	600	-	-	28	
3. Other materials & supplies						
TOTAL					8	
- Packaging material					-	
- Parts, supplies & services					5	
- Other materials & supplies					3	
4. Business services purchased						
TOTAL					11	
- Transportation, storage & insurance					3	
- Communication, advertising & other business services					8	
5. Work performed by subcontractors						
TOTAL					6	
TOTAL VALUE OF CONSUMPTION:						98 *****

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (8.1)

Number	Original Purchase Value (000 US \$)	Replacement value (000 US \$)	Av. Age (yrs)	Remarks		Supplier country	Year of installation	Daily running time
				20 Purchased second-hand	21 Rented			
Lead crucible	2	5	5	2	-	Austria	1965	9 hrs
Casting machine	1	6	6	1	-	FR.Germ.	1966	9 "
Pasting machine	1	7	7	-	-	Austria	1967	2 "
Mixer	1	1	4	30	-	Austria	1938	3 "
Moulding equipment	1	0.2	2	25	SC/ob		1946	24 "
Exhauster	1	6	12	..	SC		..	..
Rectifiers	2	3	2	15	-		..	..

CAPACITY POWER:
Process equipment:
- electric motors 87 kW

Generating equipment:
installed capacity - LVA

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechan.		Autom.		Further details
		A	B	C	D	
Foundry				II		
Pasting shop				III		
Moulding shop				III		
Assembly				III		
Battery charging station				III		
Disassembly				III		

CAPACITY UTILIZATION

Full capacity output US \$ 190,000.

Current utilization based on 1-shift operation.

Major products (or processes)	Approximate %							
	up to 30	40	50	60	70	80	90	100
Stationary small-scale batteries								X
Starter batteries								X

IX. HISTORY & PLAN

	Total output (000 US \$)	No. of persons employed	Total exports (000 US \$)
1. Performance in the past:			
Year: 1963	170	26	-
1964	180	25	-
1965	215	24	-
1966	215	24	-
1967	200	23	-
1968	230	22	-
2. Investments in the past:			
From 1965 to 1967:	22	Machinery and fixtures	
1967:	8	Machinery and fixtures	
3. Future Plan:			
From 1968 to 1971:	23	Replacement of moulding and etching machinery as well as of battery charging station.	
Two more operatives will be employed on the 1st shift.			

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C - Confidential; figures of this size group are included in those underlined.

(1964) Manufacture of electrical machinery, apparatus, appliances and supplies (ISIC-Code: 370)

1. Size groups by number of persons employed:						2. Size groups by annual scale of production (000 US \$):					
No. of estab.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)		No. of estab.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)	
up to 19	62	308	1,054	5,881	54	up to 20	39	94	734	3,801	57
20 - 99	17	674	1,516	5,631	55	20 - 40	9	58	996	2,833	57
100 - 499	7	1,491	1,889	6,429	60	40 - 200	19	297	1,296	5,631	57
500 - 999	3	C	C	C	C	200 - 400	12	618	1,469	5,054	55
over 1,000	5	12,930	2,113	10,572	35	400 - 2,000	5	822	1,912	5,641	65
						over 2,000	10	13,514	2,108	10,502	36
TOTAL	94	15,403	2,044	9,867	37	TOTAL	94	15,403	2,044	9,867	38

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services:

- | | | |
|---|---------------------------------------|---------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export assistance |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultation | |
| 4. Equipment supply, maintenance & assistance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of services	Country or region	No. of projects	Field of industry	Description of projects
2, 3				The establishment is willing to render industrial services if costs are paid. However, know-how is usually furnished by machine producers.
6				Training of unskilled foreign operatives could be provided if difficulties such as language requirements and housing could be solved.
8				The enterprise is willing to import raw materials provided that prices and quality meet standards. Supply has to be ensured for a longer period.

XII. SUPPLEMENTS & NOTES

Off-plant training:

A few workers attended courses organized by different economic institutions.

Depreciation policy:

The company applies the straight-line method only.

Bottlenecks and current problems:

No major bottlenecks reported.

Commission work:

Sub-contractors melted scrapped lead based on short-term agreements.

Major Products:

Power transmission cables and lines, telecommunication cables and lines, cable fittings. Capable of producing annually approximately 5,500 t of power transmission cables, 1,800 t of power transmission lines and wires, 2,400 t of telecommunication cables and 860 t of telecommunication lines and wires. Full-capacity output amounts to US \$ 15.5 billion based on 3-shift operation.

Reporting Unit:

A branch of a centralized multi-establishment enterprise. Although originally founded before 1900 machinery and equipment meet considerably high standards of mechanisation. Majority of share capital is privately owned, the rest belongs to the public. Favourable location. Considerable share of national market. About 35% of output is exported. Very little production under license. Technical co-operation agreement with foreign group.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average (Yrs.)
1. Primary process equipment (including installation cost)			
TOTAL	5,259	7,682	14
- Process equipment *	5,259	7,682	-
- Hand tools & apparatuses	-	-	-
2. Buildings	1,960	2,101	70
TOTAL			
- Primary industrial buildings (total floor space: 24,591 m ²)			
- Auxiliary buildings	1,560	2,101	-
- Warehouses	-	-	-
- Office administration buildings	-	-	-
- Housing	-	-	-
3. Auxiliary facilities (excl buildings)	1,545	1,883	3
TOTAL			
- Internal power equipment	952	-	5
- Laboratory facilities	275	1,883	4
- Means of transportation	200	-	10
- Office equipment	118	-	-
TOTAL PHYSICAL FIXED ASSETS (excluding land)	8,763	11,666	
4. Other fixed capital assets	269	221	-
TOTAL			
- Land (total acreage: 81,000 m ²)	148	221	-
- Land improvements (t. acc. 35,465 ")	69	-	-
- Others	52	-	-

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII).

II. MONTHLY GROSS WAGE AND SALARIES

(Number of persons)

(1967 monthly average)	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1. Local non-operatives						
- Managers	-	6	6	8	8	1
- Engineers	-	5	10	9	8	-
- Technicians	-	-	6	8	-	1
- Accountants	-	20	-	-	3	2
- Sales officers	2	12	10	6	3	4
- Clerks and typists	-	-	-	9	-	-
- Supervisors	-	-	-	7	4	3
- Administrative personnel	-	-	-	-	-	-
2. Local operatives						
- Supervisors (*)	-	-	-	18	-	-
- Foremen	-	-	-	-	-	-
- Skilled operatives	-	-	130	43	-	-
- Machine operators	-	-	-	45	27	-
- Craftsmen	-	-	-	6	-	-
- Truck drivers	-	209	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-
- Other full-time operatives	-	-	-	-	-	-
- Part-time operative	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operative	-	-	-	-	-	-

(*) Company considers supervisors as "non-operatives"

EXTERNAL CONDITIONS:

Transport:	external long distance	fair
	internal long distance	excellent
	local and city	"
Utilities:	electricity	excellent
	water	fair
	gas	"
Community:	residence	fair
	health and recreation	excellent
	education	fair

Own Welfare Facilities: Clinic, sports-field, canteen, photo-club, chess-club.

III. INVENTORIES

(End of 1967)	Actual value (000 US \$)	Number of months
Inventories	2,140	2
TOTAL		
- Production materials	697	2.5
- Other input materials	116	2
- Work-in-process	735	1.5
- Finished products	592	2

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift hours/day	8.5	8.5	6.4	hours
Actual hours/year	2,064	2,065	2,038	hours
Actual days/year	242	242	242	days

IV. MANNING TABLE

(number of persons)

Shift categories: A. Supervisory staff and foremen (for all shifts)
B. Skilled operatives
C. Semi-skilled operatives (machine operators)
D. Unskilled operatives

(1967 average)	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	B-D	B-D
ALL SHOPS & UNITS:	646	168	353	23	23	32	
1. Primary operative shops	320	15	197		87	21	
- Metal works	31	2	24		4	1	
- Power transmission cables, lines and wires	113	6	59		37	11	
- Telecommunication cables, lines and wires	62	3	35		19	5	
- Plastic insulated cables, lines and wires	103	4	69		26	4	
- Cable fittings	11	-	10		1	-	
2. Auxiliary operative units	227	54	156		6	11	
- Repair & maintenance	35	3	22		1	9	
- Mechanical shop	-	-	-		-	-	
- Tooling shop	10	10	-		-	-	
- Utilities control	27	-	27		-	-	
- Product & material storage	5	-	5		-	-	
- Off-site transport	21	-	14		5	2	
- Guards, cleaners, etc.	129	41	88		-	-	
- Other operative							
3. Auxiliary non-operative units	99	99					
- Production management	6	6					
- Research & development	-	-					
- Sales unit	59	59					
- Accounting	34	34					
- General administration	-	-					

V. ANNUAL PRODUCTION

Products (or group of products)	Yr. of first prod.	Quantity produced		Av. unit price ex factory (US \$)	Total output value (1000 US \$)
		Unit	Quantity		
Power transmission:					
Cables	before 1900	t	5,000	1,250	6,250
Insulated lines and wires	"	"	1,268	1,196	1,517
Telecommunication:					
Cables	"	"	1,900	1,173	2,268
Insulated lines and wires	"	"	600	398	239
Others	"	"	1,300	1,211	1,575
Revenues from commission work			..	..	54
TOTAL VALUE OF PRODUCTION:					11,903

VI. VALUE ADDED

(1967)	Total value (1000 US \$)
1. Annual wages & salaries	1,410
- Operative workers (478 persons)	911
- Non-operative workers (168 persons)	499
2. Other payments for employees	443
3. Annual depreciation	564
- Machinery & equipment	564
- Buildings & other facilities	
- Non-physical capital assets	
4. Rentals paid	253
5. Interest & royalties	33
6. Sales tax	232
7. Other indirect business taxes	205
8. (-) Subsidies	-
9. Corporate income before tax	517
TOTAL VALUE ADDED: 3,666	

DESCRIPTION OF MAJOR PRODUCTS:

Power transmission cables:	paper insulated and lead covered up to 60 kV or plastic insulated up to 10 kV.
Control cables and signal cables:	paper insulated and lead covered or plastic insulated.
Telecommunication cables:	for local and trunk calls.
Insulated lines:	plastic or rubber insulated.
Insulated wires:	paper, cotton, silk, rayon, or glass silk etc. insulated for construction of machines and apparatus.
Enamelled wires:	with normal, multiple insulation or heat proof insulation, respectively.
Ropes for overhead lines:	made of copper, aluminium or aldrej, steel aluminium rope and steel aldrej rope.
Cable fittings:	such as terminal and junction boxes.
Mountings	of power current cables up to 130 kV as well as of long distance networks.

Mainly serial production. Only very small portion of output manufactured under licence agreements. Products packed in wooden drums, storable in open air. Terms of delivery: 2 months.

MARKET ASPECTS:

Re-sales:

Frequently special cables, lines, wires, fittings, and semi-products have to be purchased from international manufacturers in order to complete the company's sales programme.

Customers of products:

Public utilities, power stations, railway companies, post, telephone and telegraph companies, and whole-salers.

Sales organization:

Own sales organization. Direct sales to final consumers are preferred. The establishment works to order but also on stock, in order to be able to deliver the most common types of cables rather quickly.

Market and competition:

The establishment supplies some 50 major customers with its products. Usually these products last for about 50 years and longer. Share in the domestic market: cables 25%, lines 16%. Three other domestic producers of lead-cables are in the market. Plastic insulated cables are manufactured by 6 different companies as well. Almost no foreign competition.

Export price policy:

Export prices depend almost entirely on quotations of international copper markets.

EXPORT:

Total annual export: US \$ 4,300,000

Major products	To Western countries	To Eastern countries	To Developing countries
Power transmission cables	36%	41%	-
Plastic cables	10%	3%	1%
Telecommunication cables	-	5%	-
Telecommunication lines	4%	-	-

Governmental policies:

The government subsidizes exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under VI.6. has been adjusted accordingly.

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import duties (1000 US \$)	Total consumption value (1000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL: 217					
- Electricity	000 kWh	6,243	-	-	143
- Fuel oil (heavy)	t	2,280	-	-	90
- Gas	000 m3	26	-	-	1
- Steam (at 15 ata/220°C)	000 m3	4,160 (**)	-	-	-
- Water	000 m3	775 (**)	-	-	23
2. Production materials					
TOTAL: 7,581					
- Copper (bars)	t	3,652	70	-	5,200
- Lead	"	2,568	90	-	994
- Aluminium	"	518	-	-	339
- Strap iron	"	1,400	-	-	286
- Plastic	"	1,300	50	77	561
- Paper	"	500	-	-	155
- Textiles	"	130	-	-	46

(*) Completely internally supplied.

(**) 600,000 m3 internally supplied.

3. Other materials & supplies		62
TOTAL:		39
- Packaging material (wooden drums)		
- Parts, supplies & services		15
- Other materials & supplies		8
4. Business services purchased		377
TOTAL:		321
- Transportation, storage & insurance		
- Communications, advertising & other business services		56
5. Work performed by subcontractors		-
TOTAL:		-
TOTAL VALUE OF CONSUMPTION:		8,237

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (I.I.):

	Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Avg. Age (yrs)	Remarks	Supplier country	Year of installation	Daily running time	Output capacity	
Wire drawing machines	7	232	530	13	-	FR.Germ.	1955	1.5 shifts	300 t/m.	
Stranding machines	4	236	310	10	-	" "	1958	2 "	170 "	
Paper lapping machines	4	189	348	33	SH/Ob	" "	1935	1.5 "	170 "	
Drying and impregnation units	10	337	484	6	-	" "	1962	3 "	800 "	
Lead pressing machines	3	308	341	34	Ob	" "	1934	2.5 "	1 t/hr.	
Armouring machines	4	526	600	7	-	Austria	1961	1.5 "	800 t/m.	
Cabling machines	8	529	851	14	-	Austria, FR.Germ., France, Switzerl.	1954	1.8 "	600 t/m.	
Plastic extruders	10	241	499	9	-	FR.Germ.	1959	1.5 "	1,300 t/yr.	
Spinning machines	64	206	286	11	-	Switzerl., FR.Germ., France, Austria	1957	1.8 "	2,000 "	
Star-quad twisting machines	8	187	387	9	partly Ob	FR.Germ., Switzerl.	1956	1.8 "	2,000 "	
Turning lathes	5	2,268	3,046	10	-					
Drilling machines	4			10	partly Ob					
Flaming machines	2			10	"					
Milling machines	4			10	"					
Craneway	20			10	"					
Pumping stations	5			8	"					
Tanks for oil and compounds	6			10	"					
Transportation units	13			5	partly Ob					

CAPACITY POWER:
 Process equipment:
 - electric motors kW 3,260
 Generating equipment:
 - installed capacity kVA -

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Machin.	Autom.	Output capacity	Capacity utilization
Wire drawing shop (copper)	Drawing of copper wires and annealing	A	II	300 t copper wire/month	75%
Stranding shop	Winding of wires; stranding	B	III	170 t cable wire/month	90%
Cable shop	Lapping of cable wires with paper; cabling	B	III	600 t cables/month	75%
Drying and impregnation shop	Drying and impregnating of cables	B	II	800 t cables/month	150%
Lead pressing shop	Coating with lead	C	III	1 t lead/hr.	125%
Armouring shop	Coating with tar, strap iron, juts, etc.	B	III	800 t cables/month	75%
Synthetic resin shop	Extruding and coating with plastic	C	II	1,300 t resin/year	75%
Testing section	Testing, cutting into appropriate length	C	II	..	..
Dispatch section	Planing of reels	C	III	..	..

CAPACITY UTILIZATION:

Full-capacity output US \$ 15.5 million. Could only be achieved with 5 additional non-operatives (1st shift) and 100 operatives (2nd shift: 40; 3rd shift: 60).

Current utilization:

Major products (or processes)	Approximate %									
	to 20	40	60	70	80	90	100			
Power transmission cables										X
Power transmission lines and wires										X
Telecommunication cables										X
Telecommunication lines and wires										X
Cable fittings			X							

The current rate of utilization is based on 2-shift operation. The total value of production of close to US \$ 12 million could only be achieved due to favourable supply of raw materials and strong demand for the products manufactured. Lack of skilled operatives frequently caused lower utilization of machinery and equipment.

IX. HISTORY & PLAN

1. Performance in the past:

Year:	Total output (1000 US \$)	No. of persons employed	Total exports (1000 US \$)
1963	5,010	660	3,250
1964	10,820	610	3,910
1965	12,740	690	4,720
1966	13,680	670	5,420
1967	11,920	650	4,000
1968	13,470	650	4,300

2. Investments in the past:

From 1958 to 1967:	Approximate amount (1000 US \$)	Type of investment
1958 to 1967:	1,450	Machinery, standardisation of products
" 1961 " 1965:	2,760	"
" 1966 " 1967:	770	"
1968:	240	"

3. Future Plan:

From 1969 to 1972: 2,320
 Installation of new extruders to improve production and productivity. Modernisation of auxiliary operative shops. Expansion of welfare facilities.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C = Confidential; figures of these size groups are included in underlined ones.

(1964) Industry Electric wires and cables manufacturing (ISIC Code: 370)

1. Size groups by number of persons employed:	No. of estab.	No. of empl.	Avg. W. & S. per pers. (US \$)	Avg. gross prod. val./per pers. (US \$)	Avg. value added/gross prod. ratio (%)	2. Size groups by annual rate of production (1000 US \$):	No. of estab.	No. of empl.	Avg. W. & S. per pers. (US \$)	Avg. gross prod. val./per pers. (US \$)	Avg. value added/gross prod. ratio (%)
up to 19	1	C	C	C	C	up to 20	-	-	-	-	-
20 - 99	5	289	1,936	10,680	45	20 - 40	1	C	C	C	C
100 - 499	6	<u>3,788</u>	<u>2,155</u>	<u>12,528</u>	<u>42</u>	40 - 200	1	C	C	C	C
500 - 999	3	C	C	C	C	200 - 400	1	C	C	C	C
over 1,000	-	-	-	-	-	400 - 2,000	4	<u>363</u>	<u>1,973</u>	<u>2,397</u>	<u>47</u>
						over 2,000	9	3,694	2,156	12,692	42
TOTAL:	15	4,057	2,140	12,397	42	TOTAL:	15	4,057	2,140	12,397	42

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services:

- | | | |
|--|---------------------------------------|-----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export transactions |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply
materials & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
3				<p>Company could render various industrial services:</p> <ol style="list-style-type: none"> i) Production of cables and wires (lead or PVC insulated) ii) Design of cables and wires iii) Pre-investment and feasibility studies for cable works iv) Delegation of experts to existing cable works.
7				"Know-how" agreements could be signed at any time.
8				The company reports great interest to import copper on long-term contracts in order to ensure stable and cheaper import prices. Export prices are very much affected by changes in international market prices. If necessary acceptance of copper in return for cables and wires.

XII. SUPPLEMENTS & NOTES

Depreciation policy:

Both the straight-line and the accelerated methods are applied.

Contract and commission work:

The establishment drew wires for other companies on commission basis. Total commission received: US \$ 54,000. The work is based on long-term agreements.

Bottlenecks and current problems:

Main bottlenecks which occurred in the drying and impregnation shop could be abolished. At present efforts are being made to reduce costs through economizing various production processes.

Inventory policies:

The most common products are not only manufactured to order but also on stock. Frequently they are stocked up to two months. Nevertheless on the average the value of inventories of finished products amounts only to 5% of the total value of production.

Technological features:

Two cable manufacturing processes can be differentiated:

1. Manufacturing of cables and cable elements out of preformed semi-finished products of great length.
Technical requirements: Drawing machines, stranding machines, paper lapping machines, armouring machines, cabling machines, spinning machines, star quad twisting machines.
2. Thermoplastic insulation of cables and cable elements. Technical requirements: Drawing machines, lead presses, plastic extruders, impregnation units.

Major Products:

Refrigerators, freezers, automatic washing machines, electric motors, automatic grinders.
Full capacity output amounts to approximately US \$ 17 million based on 3-shift operation.
Business year: 1/4/1967 - 31/3/1968.

Reporting Unit:

A one-establishment enterprise, privately owned; founded in 1959. 1,065 employees. Moderate company-conducted research activity. Large growth rate of production. Production partly under license agreements. Rather large participation of foreign capital. 80% exports.

I. FIXED CAPITAL ASSETS

(End of 1968)	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average age (Yrs.)
1 Primary process equipment (including installation cost)			
TOTAL	1,222	1,689	
- Process equipment *	1,024	1,534	6
- Hand tools & apparatus	151	155	-
2 Buildings			
TOTAL	583	3,462	
- Primary industrial buildings (total floor space: 14,000 m ²)	300	1,500	30
- Auxiliary buildings	48	242	30
- Warehouses	77	387	7
- Office administration buildings	19	97	25
- Housing	139	836	60
3 Auxiliary facilities (excl. buildings)			
TOTAL	176	276	
- Internal power equipment (water, steam, energy)	132	220	30
- Laboratory facilities	22	28	3
- Means of transportation	17	21	5
- Office equipment	5	7	4
TOTAL PHYSICAL FIXED ASSETS (excluding land)	1,981	5,427	
4 Other fixed capital assets			
TOTAL	72	208	
- Land (total acreage: 30,000 m ²)	57	171	-
- Land improvements (t. acc. 24,000 m ²)	9	27	-
- Others (7 cranes)	6	10	30

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(1968 monthly average)	Number of persons					
	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1. Local non-operatives						
- Managers	-	-	-	-	-	5
- Engineers	-	-	-	-	25	-
- Technicians	-	2	2	20	21	-
- Accountants	-	-	-	-	7	-
- Sales officers	-	-	-	18	14	-
- Clerks and typists	-	3	7	19	-	-
- Supervisors	-	-	-	-	32	-
2. Local operatives						
- Supervisors (*)	-	-	-	-	-	-
- Foremen	-	-	-	13	-	-
- Skilled operatives	-	-	-	117	-	-
- Machine operators	-	-	6	658	-	-
- Craftsmen	-	-	-	-	-	-
- Truck drivers	-	-	-	-	-	-
- Unskilled operatives	-	35	18	13	-	-
- Other full-time operatives	-	-	-	-	-	-
- Part-time operatives	-	-	-	-	-	-
- Apprentices	30	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

(*) Included in local non-operatives.

EXTERNAL CONDITIONS:

Transport:	external long distance	fair
	internal long distance	"
	local and city	excellent
Utilities:	electricity	excellent
	water	"
	gas	fair
Community:	residence	fair
	health and recreation	"
	education	poor (*)
Own Welfare Facilities:	Housing, clinic, canteen, recreation centre, soccer club.	
(*) Off-plant facilities for further training are lacking.		

III. INVENTORIES

(End of 1968)	Actual value (000 US \$)	Number of months
Inventories		
TOTAL	1,402	
- Production materials	703	1
- Other input materials	45	1.5
- Work-in-process	67	1
- Finished products	587	0.5

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift hours/day (*)	7.8	7.8	7.7	hours
Actual hours/year	2,070	2,070	2,050	hours
Actual days/year	276	276	276	days

(*) Actual

IV. MANNING TABLE

(1968 average)	Total	Skill categories: A. Supervisory staff and foremen (for all shifts) B. Skilled operatives C. Semi-skilled operatives (machine operators) D. Unskilled operatives						
		1st Shift				2nd Shift	3rd Shift	
		A	B	C	D	B-D	B-D	
ALL SHOPS & UNITS:	1,065	175	690				174	26
1. Primary operative shops	795	54	139	416	4	163	19	
- Freezers and refrigerators	512	31	104	248	2	108	19	
- Automatic washing machine shop	26	3	5	18	-	-	-	
- Electric motors	257	20	30	150	2	55	19	
2. Auxiliary operative units	172	23	131				11	7
- Repair & maintenance	38	1	34				2	1
- Mechanical shop	-	-	-				-	-
- Tooling shop	-	-	-				-	-
- Utilities control	12	6	4				1	1
- Product & material storage	55	14	41				-	-
- Off-site transport	16	1	13				2	-
- Quards, cleaners, etc.	15	-	11				2	2
- Others	36	1	28				4	3
3. Auxiliary non-operative units	94	98	-				-	-
- Production management	2	2	-				-	-
- Research & development	15	15	-				-	-
- Sales unit	21	21	-				-	-
- Accounting	48	48	-				-	-
- General administration	12	12	-				-	-

V. ANNUAL PRODUCTION

(1968)	Yr. of first prod.	Quantity produced		Av. unit price ex factory (US \$)	Total output value (000 US\$)
		Unit	Quantity		
Refrigerators	1960	pieces	63,540		3,275
Freezers (chests)	1962	"	48,151		4,959
Freezers (cabinets)	1967	"	7,103		528
Automatic washing machines	1964	"	4,883		1,901
Electric motors	1962	"	156,527		2,158
Automatic grillers	1967	"	4,215		125
TOTAL VALUE OF PRODUCTION:					12,046

VI. VALUE ADDED

(1968)	Total value (000 US \$)
1. Annual wages & salaries	
- Operative workers (490 personal)	1,504
- Non-operative workers (167 personal + 8 apprentices)	440
2. Other payments for employees	430
3. Annual depreciation	570
- Machinery & equipment	507
- Buildings & other facilities	28
- Stationary machinery	15
4. Rentals paid	3
5. Interests & royalties	7
6. Sales tax (see also page 1,211)	22
7. Other indirect business taxes (*)	142
8. (-) Subsidies	-
9. Corporate income before tax	683
TOTAL VALUE ADDED: 3,809	

(*) Pay-roll, transport tax

DESCRIPTION OF MAJOR PRODUCTS:

Product	Type of production	License agreement	Characteristics	Terms of delivery
Refrigerators	Serial	No	Defrosting system	2 months
Freezers	"	"	Constant freezing capacity	" "
Automatic washing machines	"	Yes	Programme selection	" "
Electric motors (up to 10 kW)	"	"	100°C boiling temp.	" "
Automatic grillers	"	"	Special testing method	" "
			Tie switch	" "

MARKET ASPECTS:

Consumers of products:

Households, electro-technical industry (electric motors), tourist industry.

Sales organization:

Domestic market: Own staff of salesmen and representatives.
Foreign markets: Through parent company.

Share in the domestic market:

25%.

Sales areas:

Western Europe, Eastern Europe (especially Czechoslovakia), Indonesia, South Africa, South America.

Durability of products:

10 years. Higher quality than most of the imports.

EXPORT:

Total annual export: US \$ 8.4 millions.

Major products	To Western countries	To Eastern countries	To Developing countries
Refrigerators	86%	5%	10%
Freezers	100%	-	-
Electric motors	100%	-	-
Automatic grillers	20%	80%	-
Automatic washing machines	100%	-	-

Price policy:

Keen international competition (Italy). Company reports losses resulting from domestic sales. Since substantial over-all profits still prevail, exports are likely to be rather attractive.

VII. ANNUAL CONSUMPTION

(1968)	Quantity consumed		% import	Average import duties in \$ (**)	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL: 126					
- Electricity	000 kWh	3,262	-	-	76
- Fuel oil	t	852	-	-	23
- Peat	t	46	-	-	8
- Gas	000 m ³	10,693	-	-	15
- Water	000 m ³	68,000 (*)	-	-	4
2. Production materials					
TOTAL: 7,309					
Parts of:					
- Refrigerators	pieces	63,540	61	9	2,262
- Freezers (chests)	"	48,151	61	14	3,050
- Freezers (cabinets)	"	7,103	61	8	261
- Automatic washing machines	"	4,883	92	12	803
- Electric motors	"	141,964	47	20	862
- Automatic grillers	"	4,215	95	20	71

(*) Not including internal supply of 1,020 million m³ of water and 107.7 million m³ of steam.

(**) The import compensation tax equivalent to the domestic sales tax is not included. In case finished products are exported, import duties as well as the import compensation tax are refunded to the company.

3. Other materials & supplies		TOTAL: 304
- Packaging material		77
- Parts, supplies & services		210
- Other materials & supplies		17
4. Business services purchased		TOTAL: 498
- Transportation, storage & insurance		269
- Communication, advertising & other business services		209
5. Work performed by subcontractors		TOTAL: -
TOTAL VALUE OF CONSUMPTION:		8,237

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (I.I.):	Number	Original Purchase Value (1960 US \$)	Replacement value (1960 US \$)	Av. Age (yrs)	Remarks	Year of installation	Daily running time	Output capacity
Grinding machines	95	87.1	124.4	7	SH			
Drilling machines	105	39.8	46.9	7	SH			
Welding machines	52	30.9	44.2	7	SH	1964, 1969	16 hrs	1,000 pcs.
Spraying machines	3	22.8	32.6	7	-			
Drawing machines	2	11.4	16.3	7	SH			cooling
Presses	3	22.4	32.0	7	-	1962	16 "	500 systems
Wire stripping machines	7	15.1	21.5	5	SH			
Balancing machines	4	13.6	19.5	5	partly SH			
Pressure casting machines	2	30.1	43.0	5	-	1964	16 "	800 pcs.
Foaming plant for polyurethan (a)	3	41.3	59.1	2	-			
Foaming plant for styropor (a)	2	47.2	67.5	5	SC			
Cooling system production plant (b)	1	33.5	47.8	8	SC	1964	16 "	800 pcs.
Automatic case processing machine (c)	1	17.7	25.3	4	SH			
Transmission bearing processing machine (d)	1	59.4	84.9	4	SH			
Assembly lines	7	47.5	67.9	7	SC			
Drying and spraying cabinets (e)	2	123.3	176.1	4	SH, SC	1963	16 "	1,000 pcs.
Bonding machine	1	39.8	56.9	4	SH, SC			
Other specialised machines	40	32.5	46.4	8	partly SH			
Lathes	41	94.6	135.1	6	-			
Presses	46	154.2	220.4	6	partly SC			
Dies	7	14.3	20.5	6	SH			
Sawing machines	12	12.6	18.0	8	SH			
Planing machines	7	6.8	9.7	6	SH			
Shaping machines	12	32.4	46.4	6	partly SH			
Other common type machines	35	40.6	58.1	9	partly SH			

CAPACITY POWER:
 Process equipment:
 - electric motors 937 kW
 Generating equipment:
 installed capacity 240 kVA

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization		Automation			Further details:
		A most advanced	B considerably high standard	C modern standard	D appreciably short of today's standard	E almost outdated		F fully automated	SH semi-automated
Freezers and refrigerators	Assembly-line production: Pressing - punching - drawing - welding - bonding - painting - assembly of semi-finished products foaming of polyurethan - spraying - final assembly - packaging	A		II			
Automatic washing machines		A		II			
Electric motors		A		II			

CAPACITY UTILIZATION:

Full-capacity output: Estimated at some US \$ 17 million annually. This output would assume a three-shift operation. US \$ 1 million will have to be invested between 1969-1971 in order to achieve this full-capacity output estimate.

Current utilization: Based on two-shift operation (3rd shift operating at less than full capacity)

Major products (or processes)	Approximate %							
	to 30	40	50	60	70	80	90	100
Refrigerators								X
Presses								X
Automatic washing machines			X					
Electric motors						X		
Automatic grinders			X					

Low capacity utilisation mainly due to keen foreign competition and insufficient supply of raw materials.

IX. HISTORY & PLAN

1. Performance in the past:	Total output (1960 US \$)	No. of persons employed	Total exports (1960 US \$)
Year: 1963	7,640	989	3,680
1964	9,460	1,088	5,090
1965	8,290	1,047	5,320
1966	9,940	1,076	6,830
1967	12,040	1,061	8,380
1968	14,220	1,214	10,150

2. Investments in the past:	Approximate amount (1960 US \$)	Type of investment
From 1959 to 1967:	4,260	Buildings, machinery and equipment, tools.
1968:	147	"

The break-even point was surpassed for the first time in 1962 with sales exceeding US \$ 4,970,000.

3. Future Plan:	From 1969 to 1971:	Expansion, rationalisation and specialisation of product-mix, machinery and equipment, processing methods and operational shops. Employment of additional operatives necessary: 1st shift: + 200; 2nd shift: + 50; 3rd shift: + 20.
	970	

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1964)							Industry: Manufacture of electrical machinery (ISIC Code: 370)						
1. Size groups by number of persons employed:		No. of estab.	No. of empl.	Avg. gross W. & E. per pers. (1960 US \$)	Avg. gross prod. val. per pers. (1960 US \$)	Avg. value added/gross prod. ratio (%)	2. Size groups by annual rate of production (1960 US \$):		No. of estab.	No. of empl.	Avg. W. & E. per pers. (1960 US \$)	Avg. gross prod. val. per pers. (1960 US \$)	Avg. value added/gross prod. ratio (%)
up to	19	694	3,070	1,732	7,103	51	up to	20	376	571	856	5,582	51
20 -	99	121	5,404	1,661	7,024	52	20 -	40	129	617	1,142	5,831	52
100 -	499	62	12,669	1,776	7,467	53	40 -	200	228	3,201	1,385	6,008	54
500 -	999	13	9,267	1,879	7,974	50	200 -	400	53	2,298	1,696	6,305	57
over	1,000	12	25,359	1,901	7,919	38	400 -	2,000	75	9,857	1,698	6,663	55
							over	2,000	41	39,278	1,901	8,216	42
TOTAL:		902	55,769	1,809	7,686	45	TOTAL:		902	55,769	1,809	7,686	45

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service:

- | | | |
|---|---------------------------------------|--------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export promotion |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
1				The company is willing to prepare engineering studies for machine tool factories.
2				Extended terms of payment can be granted and public export promotion credits be secured.
3				"Know-how" agreements could be signed. Lay-out and installation of complete factories.
5				Staff could be provided at any level for the implementation of plants.
6				Can be furnished.
7				Pre-investment studies can be prepared within the framework of a comprehensive co-operation agreement.
8				All products are available for exports.
9				Foreign operatives could be admitted, however, language problems have to be considered.

XII. SUPPLEMENTS & NOTES

Contract and commission work:

The establishment anneals various parts for other companies on commission basis. Total commission received: US \$ 1,780. The work is based on short-term agreements.

Bottlenecks and current problems:

Main bottlenecks which occurred in the milling and grinding section could almost be abolished. Personnel and space problems are still prevailing.

Technological features:

Parts are manufactured in series. Two different methods can be differentiated depending on the product concerned:

1. Production of parts with machines placed in serial connection.
Technical requirements: Mainly single-purpose machines.
2. Production of parts with machines placed in groups (turning, milling, grinding, etc), semi-finished parts are stocked until final assembly.
Technical requirements: Mainly multi-purpose machines.

V. ANNUAL PRODUCTION (Description of Major Products) (cont'd):

Miniature universal machine tools: The basic unit together with a few attachments permits almost all metalworking and woodworking operations. Designed for amateurs.

Hardness testing devices: Manual devices: portable instruments, unaffected by vibrations. Sample checking. Various types which can be used for testing of lathe bed guide ways, rails and welded rail joints, wheel rims, internal surfaces, cylinder bores, tooth flanks on internal gears, etc.

Automatic hardness testing devices: Various models are manufactured to test specified hardness values of mass-produced parts. Replace sample checking by a 100% production check.

XII. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|----------------------------|--------------------------------------|-------------------------------|
| 1 Engineering study | 5 Technical and managerial personnel | 8 Import and export promotion |
| 2 Financial assistance | 6 Industrial training | 9 Admission of foreign labour |
| 3 Industrial services | 7 Technical consultation | |
| 4 Equipment supply | | |
| installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of services	Country or region	No. of projects	Field of industry	Description of projects
------------------	-------------------	-----------------	-------------------	-------------------------

At present no areas for co-operation with developing countries are reported since the establishment has still difficulties to expand its capacity and to train operatives.

XIII. SUPPLEMENTS & NOTES

Depreciation policy:

In 1968 annual depreciation amounted to US \$ 570,000. Both the straight-line (US \$ 494,000) and the accelerated methods (US \$ 76,000) were applied. Although investments were not higher than US \$ 147,000 in the reporting year future investments (1969 - 1971) seem to require some financial reserves.

Bottlenecks and current problems:

Lack of skilled administrative and technical personnel. Only limited labour market with almost no reserves. Retraining of miners and steel-workers envisaged. No public vocational schools available within proximity. Insufficient supply of raw materials. Unfavourable infrastructure with regard to roads, railways, postal service and automated telephone service. A most advanced internal transport system is under construction now.

Inventory policies:

On the average the value of finished products amounts to 5% of the total value of production. Inventories of finished products usually last no longer than 1/2 month.

Training:

Company has own apprenticeship and presently trains 8 apprentices. Off-plant facilities such as vocational schools are lacking. Company conducts own courses and delegates professionals to meetings organized by private institutions.

Future plans:

Increase of production and reduction of unit costs to secure stability of employment. Training of skilled workers. Expansion of production programme. Construction of residential estates as well as of canteens.

Governmental policies:

The government subsidizes exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under VI.6. has been adjusted accordingly.

Major Products: Bulbs, fluorescent lamps, radio valves, molybdenum wires, etc.
 Annual output amounted to approximately 10.5 million bulbs, 370,000 fluorescent lamps, 100,000 radio valves and about 20,5 km of molybdenum wire partly based on 1- to 2-shift operation.

Reporting Unit: A one-establishment enterprise, founded in 1941, privately owned, joint stock company, 100% foreign capital participation, approx. 400 employees; largest national manufacturer of its branch; company manufactures over 30% of the output regulated by a cartel; 45 - 50% of production is exported. Company has license agreements with foreign enterprises both as licensee and licensor. No research activities.

I. FIXED CAPITAL ASSETS

(End of 1968)

	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average (Yrs)
1 Primary process equipment (**) (including installation cost) TOTAL	1,219	2,165	
- Process equipment *	1,213	1,165	13
- Hand tools & apparatus			
2 Buildings TOTAL	111 (***)	390	
- Primary industrial buildings (total floor space: see "land" m ²)	87 (***)	377	30
- Auxiliary buildings	24 (***)	11	10
- Warehouses	10 (***)	100	20
- Office administration buildings	6 (***)	14	25
- Housing			
3 Auxiliary facilities (excl. buildings) TOTAL	..	..
- Internal power equipment	..	..
- Laboratory facilities	..	..
- Means of transportation	16	17	
- Office equipment	..	..
TOTAL PHYSICAL FIXED ASSETS (excluding land)	1,330	2,555	
4 Other fixed capital assets TOTAL	..	..
- Land (total acreage: 1,112 m ²)	..	..
- Land improvements	..	..
- Others	..	..

Values are included in primary industrial buildings and auxiliary buildings

(**) including "Other fixed capital assets" except land.
 (***) estimated values.

NOTE: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1968 monthly average)	up to 100 US\$	100 - 140 US\$	140 - 240 US\$	240 - 360 US\$	360 - 560 US\$	over 560 US\$
1. Local non operatives						
- Managers	-	-	-	-	2	1
- Engineers	-	-	-	6	-	-
- Technicians	-	-	9	9	-	-
- Accountants	-	-	8	9	-	-
- Sales officers	-	1	2	7	18	-
- Clerks and typists	-	-	-	4	6	-
- Others (supervisors)	-	-	-	7	-	-
2. Local operatives						
- Supervisors	-	-	-	11	-	-
- Foremen	-	-	-	21	-	-
- Skilled operatives	-	-	275	12	-	-
- Machine operators	-	-	-	-	-	-
- Craftsmen	-	-	-	-	-	-
- Truck drivers	-	4	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-
- Other full-time operatives	-	-	-	-	-	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	included in 1. and 2.
- Technical staff	-	-	-	-	-	
- Other skilled operatives	-	-	-	-	-	
- Unskilled operatives	-	-	-	-	-	

EXTERNAL CONDITIONS:

Transport	external long distance	excellent
	internal long distance	"
	local and city	"
Utilities:	electricity	"
	water	"
	gas	"
Community:	residence	fair
	health and recreation	excellent
	education	"
Own Welfare Facilities:		cafeteria, shower rooms

III. INVENTORIES

(End of 1968)

	Actual value (000 US \$)	Number of months
Inventories TOTAL	1,214	
- Production materials	242	3-4
- Other input materials		
- Work-in-process	135	0.5
- Finished products	837	5

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	
Shift hours/day: (*)	8,75	5	-	hours
Actual hours/year	2,050	1,150	-	hours
Actual days/year	236	236	-	days
(*) Actual; normal (1st shift):	men work 9 hrs, women 8,8 hrs			

IV. MANNING TABLE

(number of persons)

Shift categories: A. Supervisory staff and foremen (for all shifts)
 B. Skilled operatives
 C. Semi-skilled operatives (machine operators)
 D. Unskilled operatives

(1968 average)	Total	1st Shift			2nd Shift	3rd Shift	
		A	B	C	D	B-D	B-D
ALL SHOPS & UNITS:	359	90	243			26	-
1. Primary operative shops	215	2	180			26	-
- Bulb department	136	5	113			12	-
- Fluorescent lamp dept.	46.5	1.5	32			13	-
- Wire drawing and spiral manufacturing dept.	25	1	23			1	-
- Chemistry dept.	7.5	1.5	6			-	-
2. Auxiliary operative units	76	13	63			-	-
- Repair & maintenance	14.5	2.5	12			-	-
- Mechanical shop	-	-	-			-	-
- Tooling shop	-	-	-			-	-
- Utilities control	7.5	2.5	5			-	-
- Product & material storage	17	3	14			-	-
- Off-site transport	14	2	12			-	-
- Guards, cleaners, etc.	20	-	20			-	-
- Others (TV-repair shop)	3	3	-			-	-
3. Auxiliary non-operative units	68	68	-			-	-
- Production management	2	2	-			-	-
- Research & development	-	-	-			-	-
- Sales unit	32	32	-			-	-
- Accounting	12	12	-			-	-
- General administration (work programming, technical office)	22	22	-			-	-

V. ANNUAL PRODUCTION

(1968)	Yr. of first prod.	Quantity produced		Av. unit price as factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Bulbs	..	100 per	10,462	..	1,462
Fluorescent lamps	..	" "	160	..	24
Radio valves	..	" "	157	..	24
Molybdenum wire (commission work)	..	" "	1,154	..	84
Others (semi-finished products, mercury vapour lamps)					9
TOTAL VALUE OF PRODUCTION:					2,068

VI. VALUE ADDED

(1968)	Total value (000 US \$)
1. Annual wages & salaries	508
- Operative workers (375 persons)	311
- Non-operative workers (10 persons)	197
2. Other payments for employees	14
3. Annual depreciation	68
- Machinery & equipment	10
- Buildings & other facilities	5
- Non-physical capital assets	53
4. Rentals paid	10
5. Interests & royalties	14
6. Sales tax	12
7. Other indirect business taxes (*)	2
8. (-) Subsidies	-
9. Corporate income before tax	11
(*) Land tax, property tax	1,116
TOTAL VALUE ADDED:	1,116

DESCRIPTION OF MAJOR PRODUCTS:

Bulbs: The company has a broad production programme which includes standard-sized bulbs, low-voltage bulbs, candle, pear, pear and ball shaped bulbs, various types of miniature bulbs to illuminate technical equipment, and bulbs as used by the automobile industry. Serial production; high quality, up to 1,000 hrs burning time for standard lamps and 17,500 hrs burning time for special bulbs; prompt delivery for domestic consumption, terms of delivery for exports between 3 - 6 months. Packed in units of 8 - 10 pieces.

Fluorescent lamps of various shades and wattages. Serial production. Terms of delivery same as for bulbs.

Radio valves: Packed in units of 10 - 100 pieces; terms of delivery same as for bulbs. Production of radio valves was terminated by the end of the reporting year.

MARKET ASPECTS:

Re-sales:

Fluorescent lamps, special discharge lamps, head lights, miniature lamps, dry-cell batteries, TV-sets, stereorecorders, tape recorders, lamps.

Consumers of products:

95% private households, 5% industrial enterprises and public utilities.

Sales organization:

Domestic: Representatives, sales depots. Abroad: Direct selling to large-scale enterprises, sometimes employment of market research agencies. Production only to order.

Extent of the market:

Approximately 1,500 domestic wholesalers are supplied.

Share in the domestic market:

The enterprise supplies about 26% of the domestic market (including imports) which is about equal to 31% of the domestic production as fixed by the cartel agreement. Slight pressure on prices due to imports.

EXPORT:

Total annual export: 1,116,000 US \$

Major products	To Western countries	To Eastern countries	To Developing countries
Bulbs	100%	-	-
Fluorescent lamps	100%	-	-
Radio valves	60%	40%	-

Governmental policies:

The government subsidizes exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under VI.6. has been adjusted accordingly.

VII. ANNUAL CONSUMPTION

(1968)	Quantity consumed		% import	Average import duties (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL:					
- Electricity	000 kWh	1,200			32
- Coke	t	208			6
- Petrol, diesel oil	000 l	16			2
- Gas	000 m ³	335			10
- Water	000 m ³	28			3
2. Production materials					
TOTAL:					
- Glass bulbs	000 pos	13,075	100	9	146
- Pump valves, glass rods	t	21.6	100	0.5	41
- Electrodes	000 pos	28,865	100	5	29
- Spirals	" "	13,045	100	12	114
- Lamp sockets	" "	12,280	100	-	113
- Soldering wires	t	2.7	100	1	7
- Thin mica plates	000 pos	803	100	1	6
- Cathode valves	" "	446	100	1	7
- Others	" "	-	-	-	111

3. Other materials & supplies		TOTAL:	27
- Packaging material (included in VII.2)			-
- Parts, supplies & services			27
- Other materials & supplies			58
4. Business services purchased		TOTAL:	128
- Transportation, storage & insurance			90
- Communication, advertising & other business services			149
5. Work performed by subcontractors		TOTAL:	-
TOTAL VALUE OF CONSUMPTION: 952			

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (I.I.):	Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Av. Age (yrs)	Remarks		Year of installation	Daily running time	Capacity output
					2H Purchased second-hand	2C Self constructed			
Standard size bulb processing automat	1	199	199	1		Hungary	1967	8 hrs 48 min.	2,000 pcs/hr
Bulb processing automata (gas and high vacuum bulbs)	6	16	35	18	0b	UK, USA, Hungary	1935-1965	"	4,200 " "
Fluorescent lamp processing automat	1	35	35	1.5	SC	-	1966-1967	"	2,200 " /day
Spiral producing equipment	71	..	..	23	partly SC	Hungary	1936-1955	"	2,200 " /day
Wire drawing equipment	14	..	..	23	partly SC	partly Hungary	1936-1955	"	Supplier of the spiral manufacturing department

CAPACITY POWER:
 Process equipment:
 - electric motors kW 210
 Generating equipment:
 installed capacity kVA -

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Machin.	Autom.	Further details: Capacity output	
				Capacity output	utilization
Bulb department	Standard process	B	I	11,000,000 pcs/yr	90%
Fluorescent lamp department	Standard process	A	II	450,000 pcs/yr	100%
Chemistry department	Processing and testing of putties and paints, painting, and applying reflecting coatings	C	II	1,000,000 pcs/yr	100%
Wire drawing and spiral manufacturing department	Molybdenum and tungsten wires of large diameters are reduced	C	I	8,000,000 spirals/yr	87%

CAPACITY UTILIZATION:

Full capacity output: Estimated to be US \$ 2,400,000.

Current utilization: Based on 1-shift operation.

Major products (or process)	Approximate %					
	up to 20	40	60	80	90	100
Bulbs						X
Fluorescent lamps						X
Radio valves						X
Molybdenum wire						X

In order to reach full-capacity output 30 additional operatives will have to be employed.

IX. HISTORY & PLAN

1. Performance in the past:	(*) Total output (1000 US \$)		No. of persons employed		(*) Total output (1000 US \$)		
	Year	1963	1964	1965	1966	1967	1968
Year: 1963	1,300	521	750				
1964	1,350	516	718				
1965	1,390	486	790				
1966	1,420	430	810				
1967	1,350	464	800				
1968	1,500	420	990				

(*) Production coats only!

2. Investments in the past:	Approximate amount (1000 US \$)		Type of investment	
	Up to 19 65:	74	Buildings, machinery and office equipment	
1966:	70	Machinery and office equipment		
1967:	250	Machinery and office equipment		

3. Future Plan:
 From 19 69 to 19 71: 1,080
 Factory will be completely rebuilt in order to modernize the production process. Increase of international competitiveness. Reduction of personnel employed.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1964)

Industry: Manufacture of electrical machinery (SIC Code: 370)

1. Size groups by number of persons employed:	No. of establ.	No. of empl.	Av. W & S. per pers. (US \$)		Av. value added/empl. prod. rate (%)
			1,232	7,103	
up to 19	694	3,070	1,232	7,103	51
20 - 99	121	5,404	1,661	7,024	52
100 - 499	62	12,669	1,776	7,467	53
500 - 999	13	9,267	1,879	7,924	50
over 1,000	12	25,399	1,901	7,919	38
TOTAL:	902	55,769	1,809	7,686	45

2. Size groups by annual value of production (1000 US \$):	No. of establ.	No. of empl.	Av. W & S. per pers. (US \$)		Av. value added/empl. prod. rate (%)
			896	5,582	
up to 20	376	578	896	5,582	51
20 - 40	129	617	1,142	5,831	52
40 - 200	228	3,201	1,385	6,008	54
200 - 400	53	2,298	1,696	6,305	57
400 - 2,000	75	9,857	1,698	6,663	55
over 2,000	41	39,278	1,901	8,216	42
TOTAL:	902	55,769	1,809	7,686	45

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|---|---------------------------------------|--------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export promotion |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of services	Country or region	No. of projects	Field of industry	Description of projects
3				Since the enterprise operates as licensee itself, company reports no interest to sign know-how contracts with hub producing companies in developing countries.

XII. SUPPLEMENTS & NOTES

Commission work:

In order to utilise the capacity of the molybdenum wire drawing department as much as possible, the company sometimes engages in wire drawing on commission basis.
Total commission received amounted to US \$ 80,000.

Bottlenecks in the past:

In the past the enterprise mainly suffered from lack of personnel. Within the near future the company intends to reorganise its production process. Particular emphasis will be put on labour-saving investments.

Depreciation policy:

The enterprise applies the straight-line method only.

Inventories policy:

Value of finished products in stock amounts to 12% of the total value of production.

Training courses:

Staff-members are sent to off-plant courses on management development, data processing, etc.

Major Products: Plastic coated cables, plastic coated lines, jumper wires and strands.
In 1967 total output amounted to 840 t of plastic coated cables 22,800 km of plastic coated conductors and 40 t of jumper wires and strands, based on 2-shift operation.

Reporting Unit: A branch of a 2-establishment enterprise, founded in 1949; privately owned; 220 employees; 10% exports; own research and development facilities.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (1000 US \$)	Replacement value (1000 US \$)	Average age (Yrs.)
1 Primary process equipment (including installation cost)			
TOTAL	943	1,131	
- Process equipment *	24	1,157	10
- Hand tools & apparatuses	13	24	-
2 Buildings			
TOTAL	311	532	
- Primary industrial buildings (total floor space: 7,100 m ²)	269	414	8
- Auxiliary buildings	-	-	-
- Warehouse	42	61	6
- Office administration buildings	40	57	5
- Housing	-	-	-
3 Auxiliary facilities (excl. buildings)			
TOTAL	72	93	
- Internal power equipment	-	-	-
- Laboratory facilities	34	14	9
- Means of transportation	7	9	7
- Office equipment	31	40	9
TOTAL PHYSICAL FIXED ASSETS (excluding land):	1,356	1,806	
4 Other fixed capital assets			
TOTAL	170	317	
- Land (total acreage: -)	-	-	-
- Land improvements (acqr. 7,340 m ²)	98	227	-
- Others	72	90	9

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1967 monthly average)

	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1. Local non-operatives						
- Managers	-	-	-	-	1	4
- Engineers	-	-	-	2	4	-
- Technicians	-	-	1	20	16	-
- Accountants	1	-	-	3	3	-
- Sales officers	-	1	1	5	2	-
- Clerks and typists	-	4	6	23	8	-
2. Local operatives						
- Supervisors	-	-	-	-	-	-
- Foremen	-	-	2	3	1	-
- Skilled operatives	-	-	-	-	-	-
- Machine operators	-	57	13	17	-	-
- Craftsmen	-	4	5	13	1	-
- Truck drivers	-	-	-	2	6	-
- Unskilled operatives	6	19	9	7	-	-
- Other full-time operatives	-	4	-	4	-	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	1	-	-	-	-
- Unskilled operatives	1	12	4	-	-	-

EXTERNAL CONDITIONS:

Transport:	external long distance	excellent
	internal long distance	"
	local and city	"
Utilities:	electricity	"
	water	"
	gas	"
Community:	residence	fair
	health and recreation	"
	education	"
Own Welfare Facilities	-	-

III. INVENTORIES

(End of 1967)

	Actual value (1000 US \$)	Number of months
Inventories	653	
TOTAL:		
- Production materials	155	2.5
- Other input materials	-	-
- Work-in-process	155	2.5
- Finished products	343	1.5

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift
Shift hours/day	9.6(*)	9(*)	11.1(*) hours
Actual hours/year	2,133	2,007	2,920 hours
Actual days/year:	223	223	223 days

(*) Actual hours, due to overtime regular working time: 8 hrs.

IV. MANNING TABLE

(number of persons)

Skill categories: A. Supervisory staff and foremen (for all shifts)
B. Skilled operatives
C. Semi-skilled operatives (machine operators)
D. Unskilled operatives

(1967 average)

ALL SHOPS & UNITS:	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	A-D	A-B
ALL SHOPS & UNITS:	219	54	136			27	1
1. Primary operative shops	124	15	3	72	7	27	-
- Stranding department	34	4	-	22	1	7	-
- PVC-processing dept.	2	-	-	2	-	-	-
- Pl-coating dept.	23	3	-	17	3	-	-
- Dryness testing section	12	1	-	6	1	4	-
- Winding dept.	15	1	-	7	1	6	-
- Testing section	11	4	-	7	-	-	-
- Enamelling dept.	4	-	-	2	-	2	-
- Spinning and braiding dept.	22	1	3	9	1	8	-
- Inspection	1	1	-	-	-	-	-
2. Auxiliary operative units	81	26	53			1	1
- Repair & maintenance	22	4	18			-	-
- Mechanical shop	-	-	-			-	-
- Tooling shop	-	-	-			-	-
- Utilities control	7	2	5			-	-
- Product & material storage	19	4	15			-	-
- Off-site transport	9	1	8			-	-
- Guards, cleaners, etc.	9	-	7			1	1
- Others (planning and work programming)	15	15	-			-	-
3. Auxiliary non-operative units	14	13	1			-	-
- Production management	1	1	-			-	-
- Research & development	4	3	1			-	-
- Sales unit	-	-	-			-	-
- Accounting	6	6	-			-	-
- General administration	9	3	-			-	-

V. ANNUAL PRODUCTION

(1967) Products (or group of products)	Yr. of first prod.	Quantity produced		Av. unit price ex factory (US \$)	Total output value (000 US\$)
		Unit	Quantity		
Plastic coated cables	..	t	844	..	1,568
Plastic coated telephone lines	..	km	22,814	..	1,428
Jumper wires and strands	..	t	40	..	228
TOTAL VALUE OF PRODUCTION:					3,624

VI. VALUE ADDED

(1967)	Total value (000 US \$)
1. Annual wages & salaries	240
- Operative workers (165 persons)	207
- Non-operative workers (54 persons)	16.3
2. Other payments for employees	68
3. Annual depreciation	134
- Machinery & equipment	103
- Buildings & other facilities	29
- Non-physical capital assets	1
4. Rentals paid	2
5. Interests & royalties	29
6. Sales tax	175
7. Other indirect business taxes (*)	4
8. (-) Subsidies	-
9. Corporate income before tax (**)	199
(*) Payroll tax, car tax, land tax, etc.	
(**) See page 4/XII	
TOTAL VALUE ADDED:	1,071

DESCRIPTION OF MAJOR PRODUCTS:

Plastic coated cables and lines: Insulated with high quality thermoplastic (PVC), insensitive to humidity and chemicals, highly mechanically resistant, colourproof, incombustible. Single and multi-conductor cables and lines, light and heavy types.

Plastic coated cables have less weight and are easier to lay and cheaper than steel armoured cables. Cables are delivered in drums. Plastic coated lines have less weight and are cheaper than lead-coated lines. Lines are packed in units of 50 and 100 m. Both cables and lines, can be promptly delivered.

Jumper wires: Blank or tinned copper wire insulated with high quality thermoplastic; used for telecommunication and broadcasting engineering; terms of delivery: 2 months; delivered on 200-m reels.

Strands: Delivered on 200-m reels.

All products: Serial production.

MARKET ASPECTS:

Consumers of products:

Postal administration; railroads; ministry of defense; electro-technical industry; wholesalers.

Sales organization:

The enterprise has its own sales department. 3 sales depots and 4 representatives (company employees) service the domestic market.

Share in the domestic market:

The enterprise holds a share of 10 - 15%.

EXPORT:

Total annual export: US \$ 100,000.

Major products	To Western countries	To Eastern countries	To Developing countries
Plastic coated cables	20%	80%	-
Plastic coated telephone lines	20%	80%	-
Jumper wires and strands	20%	80%	-

Export price policy:

Export prices are adjusted according to international competition.

Competition in the market:

No domestic price competition due to cartel agreements. Very little competition resulting from imported products.

Governmental policies:

The government subsidizes exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under VI.6. has been adjusted accordingly.

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import price (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL:					35
- Electricity	000 kWh	920			27
- Gas coke	t	14			1
- Fuel oil	t	90			3
- Gas	000 m ³	60			2
- Water	000 m ³	25			2
2. Production materials					
TOTAL:					2,210
- Thermoplastic	t	948	24.5	9	560
- Copper	t	1,155	-	-	1,638
- Miscellaneous (natural silk, rayon, cotton, steel ropes, paints, etc.)	-	..	-	-	12

	Total consumption value (000 US \$)
3. Other materials & supplies	
TOTAL:	85
- Packaging material (drums, reels, etc)	34
- Parts, supplies & services	42
- Other materials & supplies	9
4. Business services purchased	
TOTAL:	212
- Transportation, storage & insurance	12
- Communication, advertising & other business services	25
- Proportional overhead costs of the central office	175
5. Work performed by subcontractors	
TOTAL:	11
TOTAL VALUE OF CONSUMPTION:	2,553

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (I.1.):	Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Av. Age (yrs)	Remarks	Supplier country	Year of installation	Daily running time
Twisting machines	3	18	22	10		Austria, FR.Germ.	1953-1963	
Stranding machines	19	320	406	11		France, FR.Germ., Austria, FR.Germ.	1955-1960 1967	
PVC processing equipment	1	21	9	1				The total process equipment is utilized 11 hrs/day
PVC extruding machines	13	284	342	9		Switzerl., FR.Germ.	1948-1960	
Dryness testing devices	7	4	6	14		Austria	1954	
Winding machines	16	69	87	12		France, Belgium, Austria	1951-1961	
Wire lacquering furnaces	4	7	10	18	SC	-	1950	
Spinning machines	38	29	43	15		FR.Germ., France, USA	1951-1961	
Braiding machines	35	56	76	10		FR.Germ., France	1957-1962	
Pumping equipment	1	1	92	3				
Paper cutting machine	1	5	31	15		FR.Germ.	1953	
Wire welding machines	23	7	?	9				
Scales	10	2	8	9				
Transport equipment	10	28	2	7				
Others	62	73	22	10				

CAPACITY POWER:

Process equipment:
- electric motors kW 2,200

Generating equipment:
- installed capacity kVA -

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechan.		Autom.		Further details
		A	B	C	D	
Stranding department	No specifications given			C	II	
PVC processing dept.				C	II	
PVC coating dept.				C	II	
Dryness testing section				-	II	
Winding dept.				C	II	
Testing section				C	II	
Enamelling dept.				C	II	
Spinning and braiding dept.				C	II	

CAPACITY UTILIZATION:

Full-capacity output: US \$ 4.7 million.

Current utilization: based on 3-shift operation

Major products (or processes)	Approximate %					
	up to 20	40	60	80	90	100
Plastic coated cables						x
Plastic coated telephone lines						x
Jumper wires					x	
Strands						x

In order to achieve full-capacity output 100 additional operatives would be required: 30 on the 2nd shift and 70 on the 3rd shift.

IX. HISTORY & PLAN

	Total output (1000 US \$)	No. of persons employed	Total exports (1000 US \$)
1. Performance in the past:			
Year: 1963	2,950	235	120
1964	3,630	238	160
1965	3,800	241	170
1966	4,060	219	200
1967	3,600	212	190
1968	3,870	224	390
2. Investments in the past:			
From 1955 to 1967:	1,500	Purchase of land, buildings and machinery.	
3. Future Plan:			
From 1969 to 1973:	390	The company intends to reorganize part of the production process.	

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C = confidential; figures of those size groups are included in those underlined.

(1964)

Industry: Electric wires and cables manufacturing (ISIC Code: 370)

1. Size groups by number of persons employed:	No. of estab.	No. of emp.	Av. W. & S. per pers. (US \$)	Av. gross prod. vol. per pers. (US \$)	Av. value added/gross prod. ratio (%)	2. Size groups by annual value of production (1000 US \$):		Av. W. & S. per pers. (US \$)	Av. gross prod. vol. per pers. (US \$)	Av. value added/gross prod. ratio (%)
						No. of estab.	No. of emp.			
up to 10					C	up to 20				
11 - 20	1	11	1,100	10,630	45	20 - 40	1	C	C	C
21 - 50	1	17	1,300	11,300	43	40 - 400	1	C	C	C
51 - 100	1	103	1,300	11,300	43	400 - 2,000	4	363	1,273	2,397
over 100						over 2,000	1	3,694	2,156	12,692
TOTAL	4	4,057	1,300	11,347	43	TOTAL	15	4,057	2,140	12,397

XII. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|---|---------------------------------------|------------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Imports and export transactions |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
3				The establishment is interested in providing short-term and long-term know-how contracts.
5				The company is prepared to send experts to developing countries.
8				All products could be exported to developing countries.
9				The company employe foreign operatives.

XIII. SUPPLEMENTS & NOTES

Ad VI.9 (VALUE ADDED):

This profile covers only one establishment of a company which consists of two establishments and one central office.

The second establishment is a drawing mill producing copper wires and copper strands. Its total value of production amounts to US \$ 2,045,000. The value added to some US \$ 633,000.

The central office engages in marketing, accounting, purchasing, designing, research and development as well as in general administration. The total overheads of the central office are charged to the accounts of the two manufacturing establishments. The one covered by this profile is charged with US \$ 175,000 on central overheads, the copper wire drawing mill with US \$ 308,000. The corporate income before tax is an imputed one, with zero income for the central office, US \$ 199,000 for the establishment evaluated and US \$ 119,000 for the copper wire drawing.

Commission work:

In cases of bottleneck or breakdown of machinery the company asks subcontractors to take over part of the work programme. In the reporting year, however, commissions paid amounted only to US \$ 11,000.

Current problems:

The enterprise suffers from lack of space.

History of investment:

The company was originally founded in 1940. Up to 1954 its production took place in rented premises. Acquisition of own production facilities and resumption of production in the same year. Accrual of profits in 1955.

Major Products:

Bare and insulated wires and rods of non-ferrous metals.
Capable of producing annually about 2,500 t based on 1- to 3-shift operation. Full-capacity output amounts to US \$ 4,5 million.

Reporting Unit:

A one-establishment enterprise; privately owned; founded in 1930; 190 employees; modest research activity in the field of insulation; most machines are self-constructed; 20% export.

I. FIXED CAPITAL ASSETS

(End of 1967)

	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average age (Yrs.)
1. Primary process equipment (including installation cost)			
TOTAL	..	1,765	13
- Process equipment *	..	1,610	-
- Hand tools & apparatuses	..	155	-
2. Buildings			
TOTAL	336	540	
- Primary industrial buildings (total floor space: 25,000 m ²)	86	224	15
- Auxiliary buildings	-	-	-
- Warehouse	19	26	10
- Office administration buildings	231	290	6
- Housing	-	-	-
3. Auxiliary facilities (excl. buildings)			
TOTAL	132	170	7
- Internal power equipment	74	104	10
- Laboratory facilities	32	35	2
- Means of transportation	26	31	8
- Office equipment	..	..	..
TOTAL PHYSICAL FIXED ASSETS (excluding land):	..	2,475	..
4. Other fixed capital assets			
TOTAL	..	213	-
- Land (total acreage: 46,000 m ²)	..	..	..
- Land improvements (t.ocr. 14,000 " )	..	..	..
- Others	-	-	-

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII.)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1967 monthly average)

	up to 100 100 US\$	100-140 140 US\$	140-160 160 US\$	160-240 240 US\$	240-560 560 US\$	over 560 US\$
1. Local non-operatives						
- Managers	-	-	-	-	-	2
- Engineers	-	-	-	1	-	-
- Technicians	-	2	2	14	2	-
- Accountants	-	-	-	1	-	-
- Sales officers	-	-	-	1	-	-
- Clerks and typists	2	1	2	1	-	-
- Others	1	1	-	-	-	-
2. Local operatives						
- Supervisors	-	1	6	4	-	-
- Foremen	-	3	9	3	-	-
- Skilled operatives	-	-	1	1	-	-
- Machine operators	-	4	5	3	-	-
- Craftsmen	-	-	-	-	-	-
- Truck drivers	-	-	-	-	-	-
- Unskilled operatives	1	-	1	-	-	-
- Other full-time operatives	6	38	22	-	-	-
- Part-time operatives	-	2	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	4	32	6	-	-	-

EXTERNAL CONDITIONS:

Transport: external long distance
internal long distance
local and city

Utilities: electricity
water
gas

Community: residence
health and recreation
education

Own Welfare Facilities: Housing

No information available.

III. INVENTORIES

(End of 1967)

	Actual value (000 US \$)	Number of months
Inventories		
TOTAL:	1,370	
- Production materials	1,355	12
- Other input materials	15	2
- Work-in-process	-	-
- Finished products	-	-

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift hours/day:	8	8	8	hours
Actual hours/year:	2,180	2,180	2,180	hours
Actual days/year:	270	-	-	days

IV. MANNING TABLE

(number of persons)

Skill categories: A: Supervisory staff and foremen (for all shifts)
B: Skilled operatives
C: Semi-skilled operatives (machine operators)
D: Unskilled operatives

(1967 average)

	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	B-D	B-D
ALL SHOPS & UNITS:	187	33	124			24	6
1. Primary operative shops	140	14	15	60	23	23	5
- Rolling mill	18	2	-	13	3	-	-
- Pressing shop	3	1	2	-	-	-	-
- Wire drawing dept.	52	3	7	20	14	6	2
- Rod drawing dept.	17	2	3	12	-	-	-
- Stranding dept.	14	-	1	4	4	5	-
- Insulating dept.	32	5	2	8	2	12	3
- Foundry	4	1	-	3	-	-	-
2. Auxiliary operative units	39	11		26		1	1
- Repair & maintenance (*)	26	4		20		1	1
- Mechanical shop	-	-		-		-	-
- Tooling shop (incl. above)	-	-		-		-	-
- Utilities control	1	1		-		-	-
- Product & material storage	2	1		1		-	-
- Off-site transport	4	1		3		-	-
- Guards, cleaners, etc.	6	4		2		-	-
3. Auxiliary non-operative units	8	8		-		-	-
- Production management	2	2		-		-	-
- Research & development	4	4		-		-	-
- Sales unit	2	2		-		-	-
- Accounting	-	-		-		-	-
- General administration	-	-		-		-	-

(*) Including tool shop

Major Products: Turret and chuck lathes.
Capable of producing annually 58,000 t of machine tools based on 1-shift operation. Full-capacity output approximates US \$ 17.6 million.

Reporting Unit: A one-establishment enterprise; privately owned; founded in 1943; 1,670 employees; licensed production of multiple spindle automatic chucking machines; own research and development activity; 50% exports.

I. FIXED CAPITAL ASSETS

(End of 1967)

	Original purchase value (000 US \$)	Replacement value (000 US \$)	Avg. age (Yrs.)
1. Primary process equipment (including installation cost)	4,886	6,089	
TOTAL	4,516	5,494	7
- Process equipment *	370	595	-
- Hand tools & apparatus			
2. Buildings	2,468	3,300	
TOTAL			
- Primary industrial buildings (total floor space: 31,230 m ²)	1,155	1,680	10
- Auxiliary buildings	64	90	10
- Warehouses	249	325	12
- Office administration buildings	225	335	10
- Housing	33	133	11
3. Auxiliary facilities (excl. buildings)	1,798	1,304	
TOTAL	211	324	10
- Internal power equipment			
- Laboratory facilities	80	52	12
- Means of transportation	33	31	3.5
- Office equipment	98	94	5
TOTAL PHYSICAL FIXED ASSETS (excluding land)	1,142	1,273	
4. Other fixed capital assets	317	311	
TOTAL	1.1	1.1	-
- Land (total acreage: 21,500 m ²)			
- Land improvements (total cost: 1.1 m)			
- Others	130	130	6

*NR Details of process equipment and capacity of primary operating shops are given on Page three, Section VIII.

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1967 monthly average)

	up to 125 US\$	125 - 160 US\$	160 - 200 US\$	200 - 300 US\$	300 - 1,000 US\$	over 1,000 US\$
1. Local non-operatives	-	-	-	-	7	-
- Managers	-	-	-	52	177	-
- Engineers	-	-	8	117	71	-
- Technicians	-	-	-	-	-	-
- Accountants	-	-	-	43	68	-
- Sales officers	-	14	42	71	41	-
- Clerks and typists	-	-	-	-	-	-
2. Local operatives	-	-	-	-	9	-
- Supervisors (*)	-	-	-	29	-	-
- Foremen	-	-	-	-	-	-
- Skilled operatives	-	23	83	89	-	-
- Machine operators	-	32	26	140	-	-
- Craftsmen	-	-	-	-	-	-
- Truck drivers	-	-	-	-	-	-
- Unskilled operatives	-	27	73	31	-	-
- Other full-time operatives	-	27	116	134	-	-
- Part-time operative	-	-	-	-	-	-
3. Foreign employees	-	-	-	-	-	-
- Managerial staff	-	-	-	2	-	-
- Technical staff	-	-	3	16	-	-
- Other skilled operatives	-	-	13	37	-	-
- Unskilled operatives	-	-	-	1	1	-
- Other employees	-	-	-	-	-	-

(*) Included in local non-operatives.

EXTERNAL CONDITIONS:

Transport	external long distance	fair
	internal long distance and city	
Utilities	electricity	excellent
	water	
	gas	
Community	residence	excellent
	health and recreation	fair
	education	excellent
Own Welfare Facilities	-	-

III. INVENTORIES

(End of 1967)

	Actual value (000 US \$)	Number of months
Inventories	6,743	
TOTAL	1,111	3
- Production materials	-	-
- Other input materials	5,148	1.1
- Work-in-process	-	-
- Finished products	400	0.5

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	
Shift hours/day	8.1	-	-	hours
Actual hours/year	1,780	1,780	-	hours
Actual days/year	219	219	-	days

IV. MANNING TABLE

(number of persons)

Skill categories: A. Supervisory staff and foremen (for all shifts)
B. Skilled operatives
C. Semi-skilled operatives (machine operators)
D. Unskilled operatives

(1967 average)

	Total	1st Shift				2nd Shift		3rd Shift	
		A	B	C	D	B-D	B-D		
ALL SHOPS & UNITS:	1,670	721	-	224	-	25	-	-	
1. Primary operative shops	637	100	370	51	91	25	-	-	
- Mechanical department	401	32	180	21	43	25	-	-	
- Assembly	336	68	190	30	48	-	-	-	
2. Auxiliary operative units	538	216	-	372	-	-	-	-	
- Repair & maintenance	18	1	-	17	-	-	-	-	
- Mechanical shop	-	-	-	-	-	-	-	-	
- Tooling shop	-	-	-	-	-	-	-	-	
- Utilities control	61	28	-	33	-	-	-	-	
- Product & material storage	30	3	-	27	-	-	-	-	
- Off-site transport	25	-	-	25	-	-	-	-	
- Guards, cleaners, etc.	52	3	-	49	-	-	-	-	
- Other units	402	131	-	221	-	-	-	-	
3. Auxiliary non-operative units	445	405	-	40	-	-	-	-	
- Production management	9	9	-	-	-	-	-	-	
- Research & development (*)	185	175	-	10	-	-	-	-	
- Sales unit	191	166	-	25	-	-	-	-	
- Accounting	28	27	-	1	-	-	-	-	
- General administration	32	29	-	4	-	-	-	-	

(*) And design.

V. ANNUAL PRODUCTION

Products (or group of products)	Yr. of first prod.	Quantity produced		Av. unit price ex factory (US \$)	Total output value (000 US\$)
		Unit	Quantity		
Copper wire (bare)	1950	t	407	1,551	632
Copper rods (bare)	"	"	59	1,792	106
Copper wire (insulated)	"	"	376	1,884	709
Brass ropes and wire	"	"	150	1,756	263
Aluminium wire (bare)	"	"	82	873	72
Aluminium wire (insulated)	"	"	56	1,971	110
Steel-aluminium ropes	"	"	62	797	49
Other alloys	"	"	133	1,242	165
Revenue from contract and commission work			..	..	522
TOTAL VALUE OF PRODUCTION:					2,628

VI. VALUE ADDED

(1967)	Total value (000 US \$)
1. Annual wages & salaries	478
- Operative workers (152 persons)	331
- Non-operative workers (33 persons)	147
2. Other payments for employees	117
3. Annual depreciation	86
- Machinery & equipment	}
- Buildings & other facilities	
- Non-physical capital assets	
4. Rentals paid	12
5. Interest & royalties	13
6. Sales tax	77
7. Other indirect business taxes	1
8. (-) Subsidies	-
9. Corporate income before tax	204
TOTAL VALUE ADDED:	
	988

DESCRIPTION OF MAJOR PRODUCTS:

Serial production of bare and insulated wires and rods of non-ferrous metals.

Packing units: cable drums and reels.

Short terms of delivery even for special designs, since company is well prepared to manufacture in small series.

MARKET ASPECTS:

Consumers of products:

Electro-technical industry.

Sales organization:

Central sales office; representatives abroad.

Share in the domestic market:

20 - 30%.

Major foreign sales areas:

South-Eastern Europe, Sweden.

Competition in the market:

The company is facing keen domestic and international competition.

EXPORT:

Total annual export: US \$ 416,000.

Major products	To Western countries	To Eastern countries	To Developing countries
Bare and insulated wires	50%	50%	-

Export price policy:

Adaption to world market prices.

Governmental policies:

The government subsidizes exports by way of repaying the sales tax accumulated on all exported goods during the present and previous transactions. The sales tax indicated under VI.6. has been adjusted accordingly.

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import duties (000 US \$)	Total consumption value (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity				
1. Energy and water						
TOTAL:						70
- Electricity	000 kWh	1,600	-	-	32	
- Coal and coke	t	85	-	-	3	
- Fuel oil	t	220	-	-	11	
- Petrol and diesel	t	..	-	-	6	
- Gas	000 m ³	700	-	-	18	
2. Production materials						
TOTAL:						1,316
- Metals, fluxes and insulating material	000 t	-1,400	75	2	1,316	
3. Other materials & supplies						
TOTAL:						82
- Packaging material (cable drums, reels, saw timber, corrugated paper, sodium-paper)						12
- Parts, supplies & services						49
- Other materials & supplies						21
4. Business services purchased						
TOTAL:						172
- Transportation, storage & insurance						121
- Communication, advertising & other business services						51
5. Work performed by subcontractors						
TOTAL:						-
TOTAL VALUE OF CONSUMPTION:						1,640

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (#.1):

	Number	Original Purchase Value (000 US \$)	Replacement value (000 US \$)	Avg. Age (yrs)	Remarks	Supplier country	Year of installation
Vertical press	1	..	54	30	SH	Germany	1940
Welding machines	4	..	43	7	SH(*)	Switzerl.	1966
Stranding machines	4	124	248	9	SH(*)		
Rod drawing machines	5	..	240	8	SH/SC	Italy	1962
Wire drawing machines	15	..	348	12	SH/SC	-	..
Insulating machines	10	..	464	6	SH/SC	-	1965
Gantry cranes	9	..	77	15	SH	-	..
Other conveying systems	..	..	135	15	SH	-	..

(*) partly

(*) So far, almost all machines have been purchased second-hand in order to be adapted to company's requirements. Therefore, the process equipment cannot be compared with equipment otherwise available.

CAPACITY POWER:

Process equipment:
- electric motors kW ..

Generating equipment:
- installed capacity kVA -

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization:		Automation:		Further details:		
		A. most advanced	B. considerably high standard	I. fully automated	II. semi-automated	Capacity output	Capacity utilization	
Rolling mill		C		III		2 shifts	240 t/month	50%
Pressing shop		C		III		1 shift	20 t/month	50%
Wire drawing department		C		II		2 shifts	150 t/month	30%
Rod drawing department		C		III		1 shift	20 t/month	50%
Stranding department		C		III		..	40 t/month	50%
Insulating department		B		II		3 shifts	50 t/month	60%

CAPACITY UTILIZATION:

Full capacity output: US \$ 4,500,000.

Current utilization: Based on 1- to 2-shift operation.

Major products (or processes)	Approximate %						
	up to 30	40	50	60	70	80	90 100
Wires							X
Rods							X
Ropes							X
Plate (mainly commission work)							X

The current under-utilization of the existing capacity is mainly due to lack of demand.

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output (000 US \$)	No. of persons employed	Total exports (000 US \$)
1963	2,480	172	370-390
1964	2,500	174	"
1965	2,610	182	"
1966	2,600	179	"
1967	2,630	185	420
1968	2,710	180	460

2. Investments in the past:

From 1955 to ..	Approximate amount (000 US \$)	Type of investment
..	80 annually	Buildings and machinery

3. Future Plan: No data available.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C = confidential; figures of these size groups are included in those underlined.

(1964)
Industry Electric wires and cables manufacturing (ISIC-Code: 370)

1. Size groups by number of persons employed:	No. of establ.	No. of empl.	Avg. W. & S. per pers. (US \$)	Avg. gross prod. val. per pers. (US \$)	Avg. value added/gross prod. ratio (%)
up to 19	1	0	C	C	C
20 - 99	5	289	1,936	10,680	45
100 - 499	6	3,768	2,155	12,528	43
500 - 999	3	C	C	C	C
over 1,000	-	-	-	-	-
TOTAL:	15	4,057	2,140	12,397	43

2. Size groups by annual sale of production (000 US \$):	No. of establ.	No. of empl.	Avg. W. & S. (US \$)	Avg. gross prod. val. per pers. (US \$)	Avg. value added/gross prod. ratio (%)
up to 20	-	-	-	-	-
20 - 40	1	C	C	C	C
40 - 400	1	C	C	C	C
400 - 2,000	4	363	1,973	9,397	48
over 2,000	9	3,694	2,156	12,692	42
TOTAL:	15	4,057	2,140	12,397	43

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service:

- | | | |
|---|---------------------------------------|---------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export inspection |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
8				The company is interested in exporting its products to developing countries, however, is not able to grant any long-term supplier credits.

XII. SUPPLEMENTS & NOTES

Current problems:

Company reports lack of capital to finance urgent investments. Therefore, new owners of equity capital will soon have to join the company partly replacing retiring one's. Presently, company utilizes only 50% of its capacity. Since most departments are operating on 2 shifts, company tries to improve flexibility of production programming in order to ensure international competitiveness and to increase capacity utilization.

Commission work:

Company draws wires and rods and rolls plates on commission basis. Commission received in 1967 amounted to US \$ 522,000.

Depreciation policy:

Both the straight-line and the accelerated methods of depreciation were applied.

Training:

Courses in management development had been attended by several employees.

Inventory policy:

The enterprise keeps inventories of raw copper for a 12-months period in order to avoid adverse effects of price fluctuations. Finished products are usually not stored.

Major Products: Rolled copper wire (coils). Full-capacity output amounts to 15,000t annually, based on 1-shift operation.

Reporting Unit: A branch of a two-establishment enterprise. Although originally founded in 1911 machinery and equipment meet most advanced standards. Fully automated in 1960. Majority of share capital is privately owned, the rest belongs to the public. Favourable location. 113 employees. Production is entirely based on commission work. The raw material (copper bars) is supplied by some 10 major customers.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average age (Yrs.)
1. Primary process equipment (including installation cost) TOTAL	988	1,444	-
- Process equipment *	988	1,444	..
- Hand tools & apparatuses	-	-	-
2. Buildings TOTAL	93	116	-
- Primary industrial buildings (total floor space: 1,970 m ²)	77	97	59
- Auxiliary buildings	16	19	20
- Warehouses	-	-	-
- Office administration buildings	-	-	-
- Housing	-	-	-
3. Auxiliary facilities (excl. buildings) TOTAL	-	-	-
- Internal power equipment	-	-	-
- Laboratory facilities	-	-	-
- Means of transportation	-	-	-
- Office equipment	-	-	-
TOTAL PHYSICAL FIXED ASSETS (excluding land):	1,081	1,560	-
4. Other fixed capital assets TOTAL	80	120	-
- Land (total acreage: 2,019 m ²)	-	-	-
- Land improvements	80	120	-
- Others	-	-	-

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(1967 monthly average)

	(Number of persons)					
	up to 100 US\$	100 - 140 US\$	140 - 160 US\$	160 - 240 US\$	240 - 560 US\$	over 560 US\$
1. Local non operatives	-	-	-	-	1	-
- Managers	-	-	-	3	2	-
- Engineers	-	2	-	-	-	-
- Technicians	-	3	4	-	1	-
- Accountants	-	1	2	-	1	-
- Sales officers	-	-	-	1	-	-
- Clerks and typists	-	3	3	1	-	-
2. Local operatives	-	-	-	4	1	-
- Supervisors	-	-	-	-	-	-
- Foremen	-	-	-	-	-	-
- Skilled operative	-	-	-	-	-	-
- Machine operators	-	-	10	30	-	-
- Craftsmen	-	-	-	15	-	-
- Truck drivers	-	-	-	-	-	-
- Unskilled operatives	-	26	-	-	-	-
- Other full-time operatives	-	-	-	-	-	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees	-	-	-	-	-	-
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-	-

EXTERNAL CONDITIONS:

Transport:	external long distance	fair
	internal long distance	excellent
	local and city	"
Utilities:	electricity	fair
	water	"
	gas	"
Community:	residence	-
	health and recreation	excellent
	education	fair
Own Welfare Facilities:	Clinic, sportsfield, canteen, photo club, chess club.	

III. INVENTORIES

(End of 196)

Inventories	Actual value (000 US \$)	Number of months
TOTAL:	-	-
- Production materials	-	1/2
- Other input materials	-	1/2
- Work-in-process	-	1/2
- Finished products	-	1/2
	Material is supplied by customers	1/2

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	
Shift hours/day: (*)	8.5	-	-	hours
Actual hours/year	2,038	-	-	hours
Actual days/year	242	-	-	days
(*) Actual				

IV. MANNING TABLE

(number of persons)

Skill categories: A: Supervisory staff and foremen (for all shifts)
B: Skilled operatives
C: Semi-skilled operatives (machine operators)
D: Unskilled operatives

(1967 average)

	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	B-D	C-D
ALL SHOPS & UNITS:	113	29	-	84	-	-	-
1. Primary operative shops	10	2	-	7	1	-	-
- Rod rolling mill	10	2	-	7	1	-	-
2. Auxiliary operative units	86	10	-	76	-	-	-
- Repair & maintenance	24	2	-	22	-	-	-
- Mechanical shop	-	-	-	-	-	-	-
- Tooling shop	-	-	-	-	-	-	-
- Utilities control	1	1	-	-	-	-	-
- Product & material storage	13	-	-	13	-	-	-
- Off-site transport	15	-	-	15	-	-	-
- Guards, cleaners and other auxiliary units	33	7	-	26	-	-	-
3. Auxiliary non-operative units	17	17	-	-	-	-	-
- Production management	1	1	-	-	-	-	-
- Research & development	-	-	-	-	-	-	-
- Sales unit	10	10	-	-	-	-	-
- Accounting	6	6	-	-	-	-	-
- General administration	-	-	-	-	-	-	-

V. ANNUAL PRODUCTION

(1967)	Yr. of first prod.	Quantity produced		Av. unit price in factory (US \$)	Commission WORK (1000 US \$)
		Unit	Quantity		
Products for group of products					
Rolled copper wire (coils), 7 mm width	1911	t	15,391	34	519
TOTAL VALUE OF PRODUCTION:					519

VI. VALUE ADDED

(1967)	Total value (1000 US \$)
1. Annual wages & salaries	241
- Operative workers (94 personnel)	164
- Non-operative workers (29 personnel)	85
2. Other payments for employees	80
3. Annual depreciation	116
- Machinery & equipment	
- Buildings & other facilities	
- Non-physical capital assets	116
4. Rentals paid	-
5. Interests & royalties	-
6. Sales tax	7
7. Other indirect business taxes	-
8. (-) Subsidies	-
9. Corporate income before tax	30
TOTAL VALUE ADDED:	
	482

DESCRIPTION OF MAJOR PRODUCTS:

Copper bars are roughed down to copper wires (coils) of 7mm diameter in a fully automated continuous process. Copper coils can be stocked in open air, however, usually they are shipped immediately to the suppliers of the copper bars.

Transport by rail or road. Short term delivery if raw material is available.

MARKET ASPECTS:

Consumers of products:

Metalworking industry, essentially wire mills which reduce this wire to even lower diameters.

Sales organisation:

The establishment has an own sales organisation. Production only to order with copper bars being supplied by customers. Due to high raw material prices and the large amounts of capital being tied up, the company decided not to produce on stock.

Market and competition:

Presently the enterprise covers only the domestic market. A second shift could be run immediately enabling the establishment to perform commission work for foreign customers as well. The geographic situation is favourable for exports to both Western and Eastern countries. Sales prospects, however, are directly related to costs of transportation since the copper bars as well as the copper wires have to be moved. The share in the domestic market amounts to 100%.

EXPORT:

Total annual export: no exports.

Major products	To Western countries	To Eastern countries	To Developing countries
-	-	-	-

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import duties	Total consumption value (1000 US \$)
	Unit	Quantity			
1. Energy and water					37
TOTAL:					
- Electricity	000 kWh	1,100			21
- Heavy fuel oil	t	70			2
- Light fuel oil	t	400			11
- Water	000 m3	806			3
2. Production materials					-
TOTAL:					

Copper bars are supplied by contractors.

3. Other materials & supplies	-
TOTAL:	
- Packaging material	
- Parts, supplies & services	
- Other materials & supplies	
4. Business services purchased	-
TOTAL:	
- Transportation, storage & insurance	
- Communication, advertising & other business services	
5. Work performed by subcontractors	-
TOTAL:	
TOTAL VALUE OF CONSUMPTION:	
	37

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (8.1):

	Number	Original Purchase Value (1960 US \$)	Replacement value (1960 US \$)	Av. Age (yrs)	Remarks	Supplier country	Year of installation	Output capacity	Daily running time
Oil heated oven	1	56	58	6	-	Germ., F.R.	1960	12 t/hr	1.5 shifts
Roughing mill	1					"	"	"	1 shift
Intermediate mill	1	680	970	6	-	"	"	"	1 "
Finishing mill	1					"	"	"	1 "
Crane	1	135	194	20	-				
Pumping station	2	54	77	10	-				
Lift truck	1	5	8	5	-				
Oil tank	1	27	39	10	-				
Scale	1	12	19	10	-				
Transformer station	1								
Lathe	2	10	12	3	-				

CAPACITY POWER:

Process equipment:
- electric motors kW 1,275

Generating equipment:
- installed capacity kVA -

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Industrialization: A: most advanced B: considerably high standard C: moderate standard D: appreciably short of today's standard E: almost outdated

Automation: I: fully automated II: semi-automated III: unautomated

Major primary operative shops	Kind of process involved	Manua.	Autom.	Further details:
Rolling mill	Copper bars are roughed down to copper wires	A	I	Copper bars are placed into an oil heated copper gravity-discharge oven and heated up to about 800 C. The heated copper bars are carried by automatically regulated rolls to roll sets in which they are roughed down to copper wires of 250 meters length and 7 mm diameter.

CAPACITY UTILIZATION:

Full-capacity output: 30,000 t of copper based on 2-shift operation. Could only be achieved with 1 additional non-operative and 7 operatives on the 2nd shift.

Current utilization:

Major products (or processes)	Approximate %									
	up to 20	40	60	80	70	80	90	100		
Rolled copper wire										X

The current rate of utilization is based on 1-shift operation processing about 15,000 t of copper.

IX. HISTORY & PLAN

1. Performance in the past:

Year	Commission work Total output (1960 US \$)	No. of persons employed	Total capacity (1960 US \$)
1963	420	134	-
1964	420	127	-
1965	430	133	-
1966	460	134	-
1967	520	113	-
1968	540	113	-

2. Investments in the past:

From	To	Approximate amount (1960 US \$)	Type of investment
1958	1960	823	Process equipment
1961	1965	350	

3. Future Plan:

From	To	Approximate amount (1960 US \$)	Type of investment
1969	1972	310	Process equipment

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C = confidential; figures of those size groups are included in those underlined.

(1964)

Industry Electric wires and cables manufacturing (SIC-Code: 370)

1. Size groups by number of persons employed:	No. of estab.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)	2. Size groups by annual scale of production (1960 US \$):	No. of estab.	No. of empl.	Av. W. & S. per pers. (US \$)	Av. gross prod. val./per pers. (US \$)	Av. value added/gross prod. ratio (%)
up to 20	19	C	C	C	C	up to 20	-	-	-	-	-
20 - 99	5	289	1,216	10,680	45	20 - 40	1	C	C	C	C
100 - 499	6	3,768	2,155	12,528	43	40 - 400	1	C	C	C	C
500 - 999	3	C	C	C	C	400 - 2,000	4	363	1,973	9,397	48
over 1,000	-	-	-	-	-	over 2,000	9	3,694	2,156	12,692	42
TOTAL:	15	4,057	2,140	12,397	43	TOTAL:	15	4,057	2,140	12,397	43

XII. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|---|---------------------------------------|----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export transaction |
| 2. Financial assistance | 6. Industrial training | 9. Admission of foreign labour |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

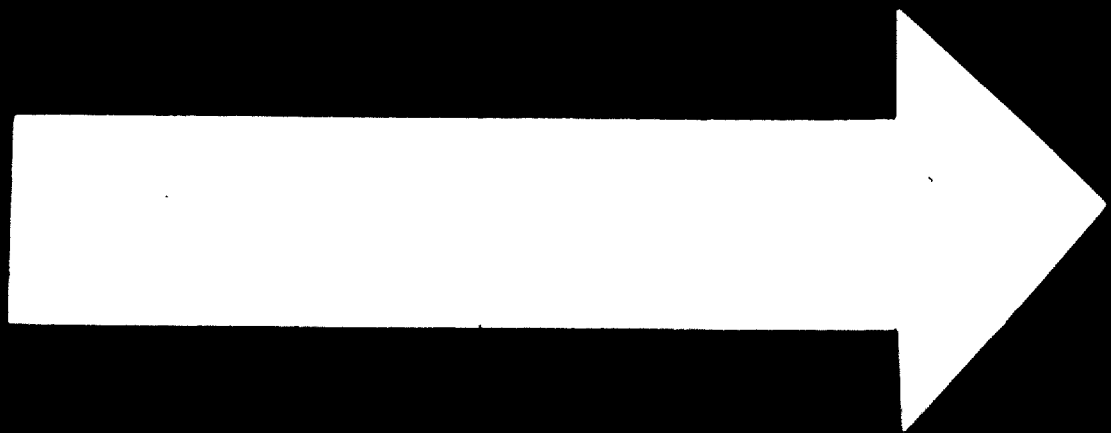
Type of services	Country or region	No. of projects	Field of industry	Description of projects
3				Pre-investment and feasibility studies for copper rolling works could be supplied. If required, even in return for copper.
7				Know-how agreements for the manufacturing of rolled copper wires could be provided together with experts.
8				Establishment reports interest in importing copper on long-term contracts to ensure stable production costs. If necessary, acceptance of copper in return for rolled copper wires.

XIII. SUPPLEMENTS & NOTES

Contract and commission work: The establishment rolls wires for other companies on commission basis. Total commission received in 1967 amounted to US \$ 520,000. The work is based on long-term contracts.

Bottlenecks and current problems: Bottlenecks only occur if the number of orders increases seasonally to such an extent that one additional shift could only be utilized up to 10% or 20%.

Depreciation policy: Both the straight-line and the accelerated methods are applied.



74.09.12

V. ANNUAL PRODUCTION

(1967)

Products (or group of products)	Yr. of first prod.	Quantity produced		Av. unit price ex factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Turret lathes, hand-operated	1950	t	6,833	320.6	2,191
Turret lathes, automatic	1965	t	5,650(*)	228.0	1,288
Front-operated, single and two-spindle automatic chucking lathes	1960	t	14,302	233.4	3,409
Multiple-spindle automatic chucking machines	1952	t	23,465(**)	258.0	6,054
Others	1951	t	6,445	247.0	1,592

(*) Not including internal consumption of 131 t.

(**) Not including internal consumption of 71 t.

TOTAL VALUE OF PRODUCTION: 14,534

VI. VALUE ADDED

(1967)

	Total value (000 US \$)
1 Annual wages & salaries	5,590
- Operative workers (349 persons)	2,540
- Non-operative workers (721 persons)	3,044
2 Other payments for employees	132
3 Annual depreciation	590
- Machinery & equipment	454
- Buildings & other facilities	114
- Non-physical capital assets	22
4 Rentals paid	102
5 Interests & royalties	306
6 Sales tax	68
7 Other indirect business taxes (*)	4
8 (-) Subsidies	-
9 Corporate income before tax	573
(*) Motor vehicle and transport tax.	
TOTAL VALUE ADDED:	8,161

DESCRIPTION OF MAJOR PRODUCTS:

Hand-operated and numerically controlled turret lathes and single-spindle automatic chucking machines are manufactured in single or serial production. Multiple-spindle automatic chucking machines are produced under licence agreements. The basic aggregates of a machine tools are mostly manufactured in series; the fixtures are produced on order as desired by the customers.

MARKET ASPECTS:

Re-sales:

In order to equip the machine tools manufactured, the company also sells various kinds of tools.

Consumers of products:

Automobile industry, manufacturers of ball bearings and presses, electrical industry, mechanical industry.

Sales organization:

Own sales and advertising department.
Domestic: sales offices and salesmen.
Abroad: independent sales organization.

Share in the domestic market:

Hand-operated and automatic turret lathes: 63 .
Multiple-spindle automatic chuck lathes: 21 .
Front-operated single and two-spindle automatic chuck lathes: 27 .

Share in the foreign market:

Hand-operated and automatic turret lathes: 7 .
Multiple-spindle automatic chuck lathes: 5 .
Front-operated single and two-spindle automatic chuck lathes: 2 .

EXPORT:

Total annual export: US \$ 7,620,000.

Major products	To Western countries	To Eastern countries	To Developing countries
Turret lathes	34	34	10

Export price policy:

Export prices are adapted to world market prices.

VII. ANNUAL CONSUMPTION

(1967)

	Quantity consumed		% import	Average import duties (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL:					188
- Electricity	000 kWh	3,735	-	-	107
- Fuel oil	t	195	-	-	39
- Gasoline, diesel	l	122,606	-	-	19
- Gas	000 m3	12,902	-	-	14
- Water	000 m3	58,241	-	-	9
2. Production materials					
TOTAL:					4,498
- Grey iron	t	2,747	-	-	687
- Steel	t	1,454	-	-	364
- Cast steel	t	606	-	-	152
- Non-ferrous metals	t	826	5	4	206
- Electric and hydraulic parts	000 pieces	7,433	-	-	1,858
- Purchased parts	000 pieces	4,923	3	3	1,231

3. Other materials & supplies

TOTAL:	Total consumption value (000 US \$)
TOTAL:	825
- Packaging material (wooden cases, oil paper)	12
- Parts, supplies & services	371
- Other materials & supplies	442

4. Business services purchased

TOTAL:	Total consumption value (000 US \$)
TOTAL:	721
- Transportation, storage & insurance	67
- Communication, advertising & other business services	654

5. Work performed by subcontractors

TOTAL:	Total consumption value (000 US \$)
TOTAL:	141

TOTAL VALUE OF CONSUMPTION: 6,373

VII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (I.1):

	Number	Original Purchase Value (1960 US \$)	Replacement value (1960 US \$)	Avg. Age (yrs)	Remarks
Circular grinding machine	1	45	50	5	
Surface grinding machine	1	36	40	5	
Polygon grinding machine	1	30	33	4	
Turret-head boring mill	1	71	78	4	
Toothed-wheel rotary tempering machine	1	14	15	4	
Milling outer and boring mill	1	13	15	4	
Folding press	1	24	25	3	
Automatic chuck-lathe	1	29	30	3	
Vertical boring mill	1	46	48	3	
Tooth-flank grinding machine	1	53	54	2	
Boring mill	1	135	139	2	
Super-finish boring mill	1	194	198	2	
Lathe tooling center	1	264	265	1	
Other specialized machinery	295	2,848	3,547	8	
Turning lathes	3	11	20	16	
Universal milling cutter	1	3	5	16	
Tool-grinding machine	1	2	3	15	
Universal high-speed milling cutter	1	8	11	11	
Other universal machinery	81	690	917	10	

Remarks:
 SH Purchased second-hand
 Ob Obsolete
 R Rented
 SC Self-constructed

Further details:

Most machines were supplied by the Federal Republic of Germany and were installed between 1961 and 1967.
 Daily running time: 1 - 2 shifts.

CAPACITY POWER:

Process equipment:
 - electric motors kW 2,367

Generating equipment:
 - installed capacity kVA -

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization		Further details
		Machin.	Autop.	
Machine shop (for large parts)		A	II	
Grinding department		B	III	
Laths slide manufacturing department		A	II	
Milling department		B	I	
Machine center		B	II	
Drilling department		A	I	
Automatic lathes department		C	III	
Tool shop		B	III	
Production of single parts				

Mechanization:
 A most advanced
 B considerably high standard
 C moderate standard
 D appreciably short of today's standard
 E almost outdated

Automation:
 I fully automated
 II semi-automated
 III non-automated

CAPACITY UTILIZATION:

Full capacity output: US \$ 17,625,000 based on 1-shift operation.

Current utilization:

Major products (or processes)	Approximate %									
	up to 20	20-40	40-60	60-70	70-80	80-90	90-100			
Turret lathes										x
Front-operated, one and two-spindle automatic chucking lathes										x
Multiple-spindle automatic chucking lathes										x

Company considers the available capacity as being fully utilized.

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output (1960 US \$)	No. of persons employed	Total exports (1960 US \$)
1963	13,010	1,657	5,100
1964	12,980	1,571	4,670
1965	14,550	1,634	4,440
1966	14,750	1,627	6,660
1967	14,530	1,670	7,620
1968	-16,250	1,793	-1,500

2. Investments in the past:

From 1958 to 1960:	Approximate amount (1960 US \$)	Type of investment
210	Administrative building, in-process storage facilities.	
1962 - 1964: 940	Primary industrial buildings, storage facilities.	
in 1967: 1,43		

3. Future Plan:

From 1967 to 1969: 620
 Expansion of operative shops; rationalization of machinery and equipment as well as internal flow of material.
 50 additional operatives will be required on the 1st shift.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C = confidential; these figures are included in total.

(1962) Manufacture of machinery, except electrical machinery (ISIC Code: 360)

1. Size groups by number of persons employed	No. of estab.	No. of emp.	Avg. W. & S. per pers. (US \$)	Avg. sales per pers. (US \$)	Avg. value added/sales ratio (%)	2. Size groups by annual value of sales (1960 US \$)	No. of estab.	No. of emp.	Avg. W. & S. per pers. (US \$)	Avg. sales per pers. (US \$)	Avg. value added/sales ratio (%)
up to 19	1,981	14,791	1,400	7,093	67	up to 500	3,705	29,736	600	6,119	57
20 - 99	2,071	182,071	1,210	7,305	59	500 - 1,250	342	113,370	0	6,163	0
100 - 499	1,313	289,700	2,180	7,401	57	1,250 - 2,500	174	111,027	0	7,575	0
500 - 999	200	135,237	2,013	8,421	57	2,500 - 12,500	533	332,330	2,031	8,236	55
over 1,000	184	671,180	2,144	3,494	52	12,500 - 25,000	0	113,533	2,121	9,297	0
						over 25,000	45	329,007	2,195	9,371	50
TOTAL:	5,749	1,112,958	2,041	8,212	54	TOTAL:	5,743	1,112,957	2,133	8,213	54

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services:

- | | | |
|---|---------------------------------------|----------------------------------|
| 1. Engineering studies | 5. Technical and managerial personnel | 8. Import and export |
| 2. Financial assistance | 6. Industrial training | 9. Distribution of foreign goods |
| 3. Industrial services | 7. Technical consultancy | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
-----------------	-------------------	-----------------	-------------------	-------------------------

The enterprise is prepared to participate in industrial projects.

Apart from this know-how contracts and license agreements could be signed.

XII. SUPPLEMENTS & NOTES

Commission work:

Single parts and structural components; commission paid: US \$ 141,000.

Bottlenecks in the past:

Lack of personnel and suitable production facilities.

Training courses:

Company employees participated in courses and seminars dealing with data processing, accounting, cost calculation and general business administration.

Inventories policy:

On the average the value of finished products in stock amounts to 3.5% of the total value of production.

Major Products: Ball supports, ball cages, standard ball bearings and rollers, steering wheel spindle-cup & cone bearings, ball boxes and shafts, stamped metal parts, rings, plastic parts, tread rollers, hubs and wheels, tools.
In 1967 the total value of production amounted to approximately US \$ 7 million based on 2- and 3-shift operation. Full-capacity output amounts to US \$ 5.1 million.

Reporting Unit: A one-establishment enterprise; founded in 1909; privately owned. Although the establishment is rather old, its machinery and equipment meet modern standards. 420 employees; 1% exports; little production; research and development activities.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (000 US \$)	Replacement value (000 US \$)	Avg. age (Yrs.)
1. Primary process equipment (including installation cost)			
TOTAL	..	5,050	..
- Process equipment *	..	5,050	..
- Hand tools & apparatuses			
2. Buildings			
TOTAL	..	2,333	
- Primary industrial buildings (total floor space: 1,200 m ²)		1,153	16
- Auxiliary buildings		613	14
- Warehouses		200	14
- Office administration buildings		271	11
- Housing		137	12
3. Auxiliary facilities (excl. buildings)			
TOTAL	..	134	
- Internal power equipment		105	76
- Laboratory facilities		11	1
- Means of transportation		30	5
- Office equipment		232	5
TOTAL PHYSICAL FIXED ASSETS (excluding land):	..	7,514	
4. Other fixed capital assets			
TOTAL	..	7,514	
- Land (total acreage: 12,500 m ²)		90	
- Land improvements (total cost: 9,000 m ²)		90	
- Others			

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1967 monthly average)	up to 125 US\$	125 - 160 US\$	160 - 200 US\$	200 - 300 US\$	300 - 1,000 US\$	over 1,000 US\$
1. Local non-operatives						
- Managers	-	-	-	-	4	-
- Engineers	-	-	-	9	33	-
- Technicians	-	-	-	57	21	-
- Accountants	-	-	-	-	-	-
- Sales officers	-	15	19	23	9	-
- Clerks and typists	-	-	-	-	-	-
2. Local operatives						
- Supervisors	-	-	-	-	-	-
- Foremen	-	-	-	-	-	-
- Skilled operatives	-	-	-	-	-	-
- Machine operators	-	-	-	-	-	-
- Craftsmen	-	41	144	175	17	-
- Truck drivers	-	-	-	-	-	-
- Unskilled operatives	-	18	55	22	-	-
- Other full-time operatives	-	28	73	78	2	-
- Part-time operatives	-	-	-	-	-	-
3. Foreign employees						
- Managerial staff	-	-	-	-	-	-
- Technical staff	-	-	-	-	-	-
- Other skilled operatives	-	2	19	3	-	-
- Unskilled operatives	-	9	20	1	-	-

Company considers supervisors and foremen as local non-operatives.

EXTERNAL CONDITIONS:

Transport:	external long distance	fair
	internal long distance	fair
	local and city	fair
Utilities:	electricity	excellent
	water	insignificant
	gas	fair
Community:	residence	fair
	health and recreation	fair
	education	fair
Own Welfare Facilities:	Recreation home; pension fund.	

III. INVENTORIES

(End of 1967)	Actual value (000 US \$)	Number of months
Inventories	1,194	
TOTAL:		
- Production materials	447	3
- Other input materials	99	3.5
- Work-in-process	166	0.5
- Finished products	482	1

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
Shift hours/day	8	8	8	hours
Actual hours/year	1,834	1,834	1,834	hours
Actual days/year	229	229	229	days

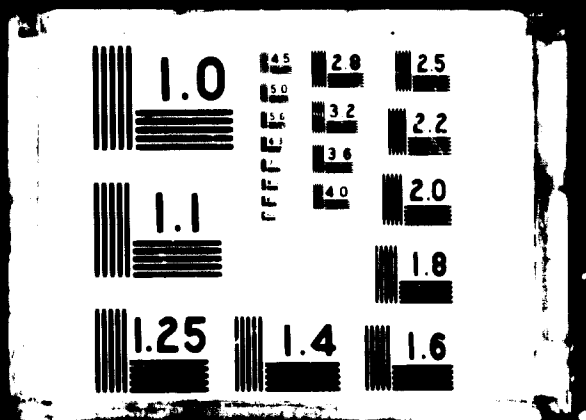
IV. MANNING TABLE

(Number of persons)

Skill categories: A. Supervisory staff and foremen (for all shifts)
B. Skilled operatives
C. Semi-skilled operatives (machine operators)
D. Unskilled operatives

(End of 1967)	Total	1st Shift				2nd Shift		3rd Shift	
		A	B	C	D	B-D	B-D	B-D	
ALL SHOPS & UNITS:	317	130	576				142		2
1. Primary operative shops	574	33	146	228	17	141	9		
- Cutting and noncutting metal processing dept.	407	17	131	124	12	123	-		
- Tempering and surface treatment department	52	2	4	20	2	16	8		
- Plastic parts processing department	21	3	7	6	2	2	1		
- Assembly department	78	4	3	71	-	-	-		
- Shipping department	16	7	1	7	1	-	-		
2. Auxiliary operative units	221	45	175				1		-
- Technical office	24	24	-				-		-
- Production programming	11	11	-				-		-
- Others	37	1	36				1		-
- Repair & maintenance	11	1	7				-		-
- Mechanical shop	-	-	-				-		-
- Tooling shop	-	-	-				-		-
- Utilities control	47	4	93				-		-
- Product & material storage	27	2	25				-		-
- Off-site transport	4	1	3				-		-
- Guards, cleaners, etc.	20	1	19				-		-
3. Auxiliary non-operative units	122	112	10				-		-
- Production management	2	2	-				-		-
- Research & development	14	4	10				-		-
- Sales unit	59	59	-				-		-
- Accounting	20	20	-				-		-
- General administration	27	27	-				-		-

II OF II
02919



Major Products: Electrical control units and parts for household domestic appliances industry.
 Four shift operation. Capacity revenue output with 1968 plant was about US \$ 8,000,000. Capacity is being steadily increased in the face of fast-growing derived demand.

Reporting Unit: A one-establishment medium-large size operation; part of an international industrial complex; privately owned by foreign capital; founded in 1958; current plant constructed in 1965. Partly patented production of products whose "design-turnover" or "obsolescence" period is about 3 years.

I. FIXED CAPITAL ASSETS

(End of 1968)	(**) Book value 1000 US \$	Av. age (Yrs.)
1 Primary process equipment (including installation cost)		
a. TOTAL	602	3-4
- Process equipment *	549	
- Hand tools & apparatuses	53	
b. TOTAL: Equipment under construction	92	
2. Buildings		
TOTAL	1,595	3
- Primary industrial buildings (total floor space: 8,800 m ²)	1,595	
- Auxiliary buildings		
- Warehouses		
- Office administration buildings		
- Housing		
3. Auxiliary facilities (excl. buildings)		
TOTAL	119	..
- Internal power equipment (included in 1.)		
- Laboratory facilities	3	
- Means of transportation	3	
- Office equipment	33	
- Employee welfare equipment	24	
TOTAL PHYSICAL FIXED ASSETS (excluding land):	2,418	
4. Other fixed capital assets		
TOTAL	119	-
- Land (total acreage: 55,000 m ²)	119	
- Land improvements		
- Others		

(**) Replacement values are not available.

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII.)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1968 monthly average)	up to 80 US\$	80 -160 US\$	160 -320 US\$	320 -480 US\$	over 480 US\$
1. Local non-operatives					
- Managers	-	-	-	-	5
- Engineers	-	-	-	3	11
- Technicians	-	-	7	4	2
- Accountants	-	-	5	5	3
- Sales officers	-	-	-	2	3
- Clerks and typists	-	11	38	4	-
2. Local operatives					
- Supervisors	-	-	-	-	2
- Foremen	-	-	26	9	-
- Semi-skilled operatives	-	43	145	-	-
- Machine operators	-	2	44	-	-
- Craftsmen, electricians, etc.	-	2	51	-	-
- Truck drivers	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-
- Other full-time operatives	-	2	19	-	-
- Part-time operatives	-	-	-	-	-
3. Foreign employees					
- Managerial staff	-	-	-	-	1
- Technical staff	-	-	-	-	1
- Other skilled operatives	-	-	-	-	-
- Unskilled operatives	-	-	-	-	-

EXTERNAL CONDITIONS:

Transport	external long distance: air; poor; sea/fair; good; internal long distance: good; local and city: fair/good
Utilities	electricity: good; water: local system: poor; own well: good; gas: irrelevant
Community	residence: fair/good; health and recreation: fair/poor; education: fair; training: poor
Own Welfare Facilities	excellent; clinic, restaurant, recreation, locker room.

IV. MANNING TABLE

(number of persons)

(End of 1968)

556 women
290 men
846

Skill categories: A Supervisory staff and foremen (for all shifts)
 B Skilled operatives
 C Semi-skilled operatives (machine operators)
 D Unskilled operatives

ALL SHOPS & UNITS:	Total		Shift categories			
	A	B-D	1st shift B-D	2nd shift B-D	3rd shift B-D	4th shift B-D
1. Primary operative shops	588	12	174	91	91	15
A. Primary parts						
- Bakelite holding	16	1	-	6	6	-
- Bakelite stamping	14	1	1	4	4	4
- Sub-assembly	35	1	36	24	24	-
- Piece	56	2	15	8	8	-
B. Finished products						
- Motor protector	165	1	123	18	12	6
- Combination units	31	2	37	-	-	-
- Starter relays	129	1	81	23	23	1
- Integrated circuits	22	1	21	-	-	-
- Thermostats	61	1	39	8	9	4
2. Auxiliary operative units	155	13	120	10	9	3
- Repair & maintenance	27	1	21	2	2	1
- Plant services	12	8	4	-	-	-
- Tooling shop	21	1	23	-	-	-
- Utilities control	-	-	-	-	-	-
- Product & material storage	26	-	26	-	-	-
- Laboratories	9	1	7	-	-	-
- Quality control	34	1	16	8	7	2
- Purchasing inspection	18	-	17	-	-	-
- Others, incl. cafeteria and clinic	6	-	6	-	-	-
3. Auxiliary non-operative units	133	34	69	-	-	-
- Production management	5	3	5	-	-	-
- Research & development	5	2	6	-	-	-
- Sales unit	10	5	5	-	-	-
- Accounting	14	5	13	-	-	-
- General administration	32	8	24	-	-	-
- Technical production control	14	9	11	-	-	-
- Others (Purchasing)	8	3	5	-	-	-

III. INVENTORIES

(End of 1968)	Actual value 1000 US \$	Number of months
Inventories (rough estimates)		
TOTAL	2,050	3
- Production materials	700	
- Other input materials	50	various
- Work-in-process	1,300	?
- Finished products		
Inventories of finished products:		
1. 1.1968: US \$ 2,023,000		
31.12.1968: US \$ 1,522,000		

WORKING TIME PER OPERATIVE WORKER:

	1st shift (*)	2nd shift	3rd and 4th shift
Shift hours/day	7	7	7
Actual hours/year	2,555	2,500	2,000
Actual days/year	284	284	284

(*) 5-day week; other shifts: 6-day week.

IV. ANNUAL PRODUCTION

Product (or group of products)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price ex factory (US \$)	Total production value (000 US \$)
		Unit	Output			
(1967)						
Automobiles Model 1 (small)	1960	pieces	7,385	9,520	3,644	26,912
Model 2 (medium)	1965	"	2,793	3,599	5,020	14,021
Model 3 (large)	1960	"	5,556	7,167	5,756	31,980
Light-duty trucks	1925	"	2,311	2,394	3,088	7,136
Heavy-duty trucks	1925	"	5,407	6,960	4,644	25,110
TOTAL VALUE OF PRODUCTION						105,159

* including sales-tax

COMPETING IMPORTS:

Product	Price of competing imports	
	Price c.i.f. (without tariff)	Tariff rate
Automobiles Model 1 (small)	US \$ 2,256	115 %
Model 2 (medium)	" " 2,448	120 %
Model 3 (large)	" " 2,768	125 %
Light-duty trucks	" " 2,032	180 %
Heavy-duty trucks	" " 2,889	362 %

EXPORTS:

Products	Export unit price (ex factory)	Benefits due to exports
Pressed parts	US \$ 127	Additional quotas granted
Designs (hours)	" " 6	
Foundry products (shells for water pumps)	" " 2	

CAPACITY UTILIZATION:

Due to insufficient capacity of the assembly department and to governmental restrictions, the capacity of the motor and foundry section could not be fully utilized. Additionally, caused by a strike in the supplier country, some 1,500 units were produced less in 1967 than normally.

V. ANNUAL CONSUMPTION

Product	Quantity consumed		% imported	Tariff rate	Total consumption value (000 US \$)
	Unit	Purchase			
(1967)					
1. Energy and water					766
TOTAL:					
- Electricity	000 kWh	34,700	-	-	595
- Gas	m3	360	-	-	22
- Other liquid fuels and lubricants	000 m3	..	-	-	2
- Natural gas	000 m3	2,460	-	-	117
- Water	000 m3	1,380	-	-	30
2. Production materials					78,158
TOTAL:					
- Motors and transmissions			32	5-100 ad val.	9,636
- Axles, wheels, springs and chassis			20	5-100 ad val.	13,544
- Screens			4	5-100 ad val.	1,354
- Paints and lubricants	..	..	-	-	689
- Tyres			-	-	3,901
- Parts of bodies			100	US cts 3 per gross kg and 40% ad val. (average)	6,497
- Upholsteries and cushionings			-	5-90 ad val.	1,227
- Others			32	"	41,310

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965)					
Industry group: Manufacture of motor vehicles (ISIC: 383)					
1. Size groups by number of persons employed:	Number of estab.	Number of empl.	Avg. gross prod. val. per pers. (US \$)	Avg. gross prod. ratio* (%)	
up to 5	5,138	14,067	342	1,151	37
6 - 15	760	6,363	645	2,002	77
16 - 100	134	5,786	1,249	7,196	106
over 100	336	35,921	1,851	13,311	91
TOTAL	6,368	62,137	1,330	8,831	90
2. Size groups by scale of annual production (000 US \$):					
up to 2	6,565	11,676	856	566	35
2 - 8	3,617	11,121	344	1,222	34
8 - 40	857	7,969	648	1,910	76
40 - 120	182	4,327	942	3,061	70
over 120	260	35,024	1,958	14,456	93
TOTAL	11,421	70,117	1,179	7,914	90

* Capital is defined as physical capital assets.

VI. VALUE ADDED

(1967)	Value (000 US \$)
1. Wages & salaries	
- Employees in direct production (2,498 persons)	1,714
- Other employees (1,292 persons)	5,094
2. Other payments for employees	4,777
3. Annual depreciation	2,099
4. Rentals paid	332
5. Interests & royalties	176
6. Sales tax	2,116
7. Other ind. bus. taxes	2,028
8. (-) Subsidies	(-1) 60
9. Corporate income before tax	2,438
TOTAL	22,531

VII. MONTHLY EARNING RATES

(End of 1967)	No. of empl.	Average earning rates (US \$)
1. Local non-operatives		
TOTAL:	..	..
- Managers	..	..
- Engineers	200	460
- Technicians	500	370
- Accountants	50	400
- Sales officers	50	480
- Other professional staff	-	-
- Clerks & typists	145	160
2. Local operatives		
TOTAL:	2,310	191
- Supervisors	10	880
- Foremen	120	320
- Machine operators	150	168
- Craftsmen	280	184
- Truck drivers	10	160
- Other full-time operatives	150	200
- Unskilled & part-time operatives	1,500	176
3. Foreign employees		
TOTAL:	4	1,319
- Managerial staff	1	1,600
- Engineers, trainers and other techn. control staff	23	1,440
- Other non-operatives	14	360

Product	% imp.	Total consumption value (000 US \$)
3. Other materials & supplies		
TOTAL:		1,172
- Packagings	12	154
- Repair & maintenance	2	730
- Non-factor service inputs	-	849
4. Business services purchased		
TOTAL:		2,214
- Transport, storage & insurance	-	1,921
- Communication, advertisements, etc.	-	292
5. Work performed by sub-contractors		
TOTAL:		82,921

IX. SUPPLEMENTS

Government policies:

Production quotas, price control and the enforced usage of at least 60% locally produced parts affects the profitability.

Future plan:

The company will invest US \$ 2,060,000 in order to increase the capacity of the assembly plant for

Major Products: Prototype internal combustion engines, electronic measuring units, research and test engines, test benches, design of factory layouts, etc.
Full-capacity output amounts to US \$ 3.9 million based on 1-shift operation.

Reporting Unit: A one-establishment enterprise, privately owned; founded in 1948; 280 employees; largest privately owned research center for internal combustion engines in the world; high growth rate; licenses are granted all over the world; approximately 80% exports.

I. FIXED CAPITAL ASSETS

(End of 1967)	Original purchase value (1000 US \$)	Replacement value (1000 US \$)	Average age (Yrs)
1. Primary process equipment (including installation cost)			
TOTAL:	702	938	8
- Process equipment *	669	898	
- Hand tools & apparatuses	33	40	
2. Buildings			
TOTAL:	477	928	10
- Primary industrial buildings (total floor space: 3,675 m ²)	378	563	10
- Auxiliary buildings	15	74	10
- Warehouses	-	-	-
- Office administration buildings	33	240	10
- Housing	51	51	1
3. Auxiliary facilities (excl. buildings)			
TOTAL:	129	..	10
- Internal power equipment (water supply, sub-station, gas mixing plant)	39	116	6.5
- Laboratory facilities	13	..	3
- Means of transportation	19	21	11
- Office equipment	58	..	
TOTAL PHYSICAL FIXED ASSETS (excluding land):	1,308	..	
4. Other fixed capital assets			
TOTAL:	885	1,103	-
- Land (total acreage: 7,400 m ²)	11	229	-
- Land improvements (s. no. 4,045 ")	874	874	-
- Others (including rights, patents, interests and capital participation)			

*NB: Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII).

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1967 monthly average)	up to 100 US\$	100 -140 US\$	140 -160 US\$	160 -240 US\$	240 -560 US\$	over 560 US\$
1. Local non-operatives						
- Managers	-	-	-	-	-	3
- Engineers	-	1	1	28	43	2
- Technicians	-	4	3	-	-	-
- Accountants	-	2	1	4	-	-
- Sales officers	-	-	-	2	4	-
- Clerks and typists	3	6	5	5	2	-
- Others: warehouse, control, design, work programming	-	2	1	1	-	-
2. Local operatives						
- Supervisors	-	-	-	-	-	-
- Foremen	-	-	2	2	-	-
- Skilled operatives	2	18	16	12	-	-
- Machine operators	2	8	8	7	-	-
- Craftsmen	-	1	-	-	-	-
- Truck drivers	10	10	2	-	-	-
- Unskilled operative	-	-	-	-	-	-
- Other full-time operative	-	-	-	-	-	-
- Part-time operative	-	-	-	-	-	-
- Experimental fitters	-	4	10	11	-	-
3. Foreign employees						
- Managerial staff	-	1	1	1	1	-
- Technical staff	2	5	2	1	-	-
- Other skilled operative	-	2	-	-	-	-
- Unskilled operative	-	1	1	-	-	-
- Others	-	-	-	-	-	-

EXTERNAL CONDITIONS:

Transport:	external long distance internal long distance local and city	} excellent
Utilities:	electricity water gas	
Community:	residence health and recreation education		poor fair excellent
Own Welfare Facilities:	Apartment houses	

III. INVENTORIES

(End of 1967)	Actual value (1000 US \$)	Number of months
Inventories	882	
TOTAL:		
- Production materials	123	5
- Other input materials	4	2
- Work-in-process	611	12
- Finished products	144	5

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	hours
- Shift hours/day	9	-	-	hour
- Actual hours/year	2,040	-	-	hours
- Actual days/year	236	-	-	days

IV. MANNING TABLE

(Number of persons)

Shift categories: A: Supervisory staff and foremen (for all shifts)
B: Skilled operatives
C: Semi-skilled operatives (machine operators)
D: Unskilled operatives

(End of 1967)	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	B-D	B-D
ALL SHOPS & UNITS:	282	144	138			-	-
1. Primary operative shops	207	84	55	58	10	-	-
Development of engines:							
- Design department	43	43	-	-	-	-	-
- Experimental department	44	18	26	-	-	-	-
- Electronics department	6	6	-	-	-	-	-
- Precision department	5	4	1	-	-	-	-
Production of engines:							
- Mechanical department	63	4	26	28	5	-	-
- Precision department	46	9	2	30	5	-	-
- Electronics department							
2. Auxiliary operative units	34	19	15			-	-
- Repair & maintenance	-	-	-	-	-	-	-
- Mechanical shop	-	-	-	-	-	-	-
- Tooling shop	-	-	-	-	-	-	-
- Utilities control	15	15	-	-	-	-	-
- Product & material storage	4	4	-	-	-	-	-
- Off-site transport	1	-	-	1	-	-	-
- Guards, cleaners, etc.	14	-	14			-	-
3. Auxiliary non-operative units	41	41	-			-	-
- Production management	3	3	-			-	-
- Research & development (*)	(98)	(71)	(27)			-	-
- Sales unit	6	6	-			-	-
- Accounting	8	8	-			-	-
- General administration	24	24	-			-	-

(*) Most important primary operative shop; figures are therefore included under 1.

V. ANNUAL PRODUCTION

(1967) Products (or group of products)	Yr. of first prod.	Quantity produced		Av. unit price on factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
- Design, development and other activities	1946	-	-	..	715
- Parts of test and research engines	1966	pieces	114	4,931.3	580
- Test benches and equipment	1966	pieces	6		
- License fees	1947	-	-	..	270
- Motor-vehicle appliances	1946	-	-	..	250
- Pisto-electric and other precision measuring devices	1965	pieces	800	126.5	100
- Electronic measuring devices	1966	pieces	2,680	73.1	192
TOTAL VALUE OF PRODUCTION:					2,107

VI. VALUE ADDED

(1967)	Total value (000 US \$)
1. Annual wages & salaries	100
- Operative workers (1 137 persons)	80
- Non-operative workers (1 192 persons) (*)	20
2. Other payments for employees	150
3. Annual depreciation	116
- Machinery & equipment	84
- Buildings & other facilities	10
- Non-physical capital assets	22
4. Rentals paid	41
5. Interests & royalties	84
6. Sales tax (incl. also page 14)	21
7. Other indirect business taxes (**)	23
8. () Subsidies	-
9. Corporate income before tax	235
(*) Including 48 apprentices.	
(**) Land tax and other duties.	
TOTAL VALUE ADDED	1,135

DESCRIPTION OF MAJOR PRODUCTS:

The development work carried out comprises a great variety of types of two- and four-stroke diesel engines with air- or water-cooling systems, designed in units of different cylinder arrangements, cylinder sizes and cylinder numbers, with or without supercharging, for the use in varied fields, such as in road vehicles, rail tractors engines, power plants in industry, trade and agriculture, as well as in ships, both as main and auxiliary engines with an output ranging from 2 h.p. to 8,000 h.p.

The company specialises in the design and construction of internal combustion engines to be produced and operated in countries without a sufficient number of highly skilled workers and where the general technical development has only been quite recent. In engine designs made for such countries particular attention has been paid to the following features: rugged construction, simple production methods, easy maintenance. Moreover, these engines can be adapted to local conditions as concerns the supply of accessories, at the same time

(For continuation please see page 4 XII. Supplements)

MARKET ASPECTS:

Re-sales:

Of minor importance, mainly motor car accessories.

Consumers of products:

Manufacturers of internal combustion motors and motor vehicles, educational institutions of various types, producers of arms and rockets.

Sales organization:

Own staff of salesmen for domestic and foreign markets; 3 own foreign agencies and representatives in most countries of the world.

50% of products are manufactured to order and 50% on stock.

Share in the domestic market:

Development of engines and production of related measuring devices.

EXPORT:

Total annual export US \$ 1,400,000.

Major products	To Western countries	To Eastern countries	To Developing countries
Development of engines	75%	20%	5%
Test engines	75%	20%	5%
Pisto-programme	85%	15%	-
Electronic measuring devices	85%	15%	-

Share in the international market:

Development of engines: 50%; related measuring devices: 5%. (For special marketing policies)

Main export markets:

Southern and Eastern Europe, USA, Canada, Egypt, South Korea.

VII. ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import duties	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					21
TOTAL:					
- Electricity	000 kWh	53.9	-	-	12
- Coal, coke	t	40	-	-	1
- Fuel oil	t	100	-	-	4
- Gas	000 m ³	12	-	-	1
- Water	000 m ³	28	-	-	3
2. Production materials					492
TOTAL:					
- Raw material (*)	t	30	-	-	55
- Motor vehicle parts	pieces	22,500	-	-	148
- Other production material	pieces	18,400	1-2	(**)	246
- Standardised elements	pieces	48,000	-	-	19
- Experimental material	pieces	9,200	2	(**)	24

(*) Iron and steel, non-ferrous metals, sheet metal, tubes, etc.

(**) Mainly bond transshipment or customs-exempt.

	Total consumption value (000 US \$)
3. Other materials & supplies	21
TOTAL:	
- Packaging material	-
- Parts, supplies & services	14
- Other materials & supplies	7
4. Business services purchased	136
TOTAL:	
- Transportation, storage & insurance	22
- Communication, advertising & other business services (travel expenses)	114
5. Work performed by subcontractors	-
TOTAL:	
TOTAL VALUE OF CONSUMPTION:	672

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (#1)

	Number	Original Purchase Value (USD US \$)	Replacement value (USD US \$)	Avg. Age (yrs)	Remarks	Further details
i) Test and measuring units (*)	385	166	205	6.7	partly sk	i) Climate test chamber (USA, 1965-1967); vibration testing system (USA, 1966); oscilloscope (USA, 1967, 100 MHz); frequency generator (USA, 1967, 100 MHz); DC-standard (USA, 1966); XY-recorder (USA, 1966).
ii) Test benches	17	102	135	10	sk	ii) Test desks, test benches for noise and flow investigations (Austria, 1950 - 1967).
Devices	27	46	74	11	-	
Motor vehicle workshop devices	185	108	119	6.5	-	
iii) Other machines	12	46	78	7.7	-	
Lathe, milling machines, turret lathes, boring machines, etc.	42	198	287	9	-	iii) Plasma welding machine (Switzerland, 1967); ultrasonic washing plant (Federal Republic of Germany, 1964); superfinish plant (Fed. Rep. of Germany); sand blast machine (Federal Rep. of Germany, 1967); precision turning lathe (UK, 1967).

(*) Sneeze meters, blow by, oscilloscopes, oscillographs, computing and recording equipment, fuel scales, and measuring equipment, etc.

CAPACITY POWER

Process equipment electric motors	kW	430
Generating equipment installed capacity	kVA	-

CAPACITY OF PRIMARY OPERATIVE SHOPS

Major primary operative shops	Kind of process involved	Method	Action	Further details	Capacity output
Experimental department	Testing of prototypes (on last up to 2 years)	A	II		
Mechanical department		B	III		40 prototypes and research engines per year
Precision department	Piezo-electric measuring transducers (quartz pressure and high pressure) and ultrasonic washing plant	A	III		1,000 units/year
Electronic department	Mini-modular system; precision control	A	III		1,000 units/year

CAPACITY UTILIZATION

Full capacity output US \$ 3.97 million

Current utilization based on 1-shift operation.

Major products by process	Approximate %
Design development and licenses	I
Test and research motors	I
Test benches and equipment	I
Precision measuring devices	I
Electronic measuring devices	I

The production of electronic measuring devices was only started recently and is expanding rapidly. Overall output is expanded to reach full-capacity output.

IX. HISTORY & PLAN

Year	Total sales (USD US \$)	No. of persons employed	Total output (USD US \$)
1963	1,820	287	1,170
1964	1,560	294	1,200
1965	1,780	294	1,370
1966	1,910	308	1,430
1967	2,200	329	1,470
1968	2,320	341	1,550

Period	Approximate amount (USD US \$)	Type of investment
From 1945 to 1960	360	40 buildings, 50 machinery and equipment
" 1961 - 1962	58	50 buildings, 50 machinery and equipment
" 1963 - 1964	400	50 buildings, 50 machinery and equipment
" 1965 - 1967	17	50 buildings, 50 machinery and equipment

3. Future Plan
From 1969 to 1971: 27. Expansion of all production facilities and introduction of new products.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

C = Confidential; figures of this size group are included in underlined ones.

(1964)

Industry: Manufacture of motor vehicles (NMC Code 383)

1 Size groups by number of persons employed	No. of establishments	No. of emp.	Avg. value prod. (USD US \$)	Avg. gross prod. (USD US \$)	Avg. value added (USD US \$)
up to 19	190	1,300	1,219	6,550	53
20 - 99	42	1,748	1,608	7,044	51
100 - 499	15	4,103	1,794	6,248	52
500 - 999	2	-	C	C	C
over 1,000	4	15,210	1,267	8,621	48
TOTAL	253	22,361	1,870	8,001	49

2 Size groups by annual rate of production (USD US \$)	No. of establishments	No. of emp.	Avg. value prod. (USD US \$)	Avg. gross prod. (USD US \$)	Avg. value added (USD US \$)
up to 20	80	149	715	4,193	62
20 - 40	51	258	988	5,433	56
40 - 200	76	1,165	1,469	6,221	55
200 - 400	16	771	1,637	5,615	55
400 - 2,000	18	2,481	1,669	6,838	53
over 2,000	12	17,957	1,959	8,451	48
TOTAL	253	22,361	1,870	8,001	49

III. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|------------------------------|---------------------------------------|-------------------------|
| 1. Engineering study | 7. Technical and managerial personnel | 8. Import and export |
| 2. Financial assistance | 9. Industrial training | 9. Admission of foreign |
| 3. Industrial services | 10. Technical consultancy | 10. labor |
| 4. Equipment supply | | |
| 5. Maintenance & repair work | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
1				Supply of overall engineering studies for mechanical engineering factories as well as all kinds of studies which are concerned with internal combustion engines, mechanical workshops and training plants for mechanical engineers (engineering studies have been prepared for engine and motor vehicle plants in USA, Western and Eastern European countries, and Japan).
2				Provision of know-how agreements for designing and planning of combustion engine factories, training plants for engineers, engine maintenance workshops and for construction of prototype engines and specific electronic devices. License agreements are issued for engines which will be produced in series.
3				Planning and construction of turn-key plants for engine production. Measuring machines and equipment, quartz pressure transducers, quartz accelerometers, remote-controlled counting adapters, fuel scales, smoke meters, spark-plug adapters, etc. Piezo-electric devices: Charge amplifiers, peak meters, carrier amplifiers, digital counters, digital meters, equipment for engine indicating, ballistic measuring assembling.
4				Provision of industrial engineers, mechanical engineers, managers, planners, foremen, trainers, supervisors, etc. About 50 experts can be provided altogether.
5				Interested and experienced in all kinds of consultancy.
6				Admission and training of a sufficient number of operatives in connection with an industrial project.

III. SUPPLEMENTS & NOTES

III. V. ANIMAL PRODUCTION (Description of Major Products - cont'd):

allowing the use of available production plants and equipment, and finally providing for special requirements caused by the local use of such engines.

The company plans and erects plants for the production of engines with due regard to local conditions.

A further field of activity is the development of fully installed engine testbeds as well as of testing equipment and electronic testing devices.

Equipment manufactured by the company: Measuring machines and equipment, quartz pressure transducers, quartz accelerometers, remote-controlled counting adapters, fuel scales, smoke meters, spark-plug adapters, etc. Piezo-electric devices: Charge amplifiers, peak meters, carrier amplifiers, digital counters, digital meters, equipment for engine indicating, ballistic measuring assembling.

Single production or small series.

Investment policy:

The straight-line as well as the accelerated methods of depreciation are applied.

Major Products: Production of motorcycles and bicycles; 2-shift operation.
 Capable of producing annually 100,000 bicycles and 20,000 motor cycles in 2-shift operation.

Reporting Unit: A one-establishment enterprise, founded in 1950, private corporation, no participation of foreign capital.

I. FIXED CAPITAL ASSETS (End of 1966)

	Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
1 Primary process equipment			
TOTAL		2,850	4,100
- Process equipment		1,720	2,400
- Hand tools & apparatuses		20	20
- Cost of installation		110	110
2 Primary industrial building	1957-66	100	400
TOTAL		100	400
(total floor space: 2,000 sq m)			
3 Auxiliary facilities			
TOTAL		200	900
- Water, steam, electricity, cooling & storing	1960	50	200
- Transportation facilities	1961-64	150	700
- Administrative facilities		20	0
- Laboratory facilities		0	0
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land)		2,950	5,000
4 Other fixed capital assets			
TOTAL		0	0
Land (total acreage: 100 sq m)		0	0

DETAILS OF PROCESS EQUIPMENT (No)

	Supplier country	Year of installation	Orig. purchase value (1000 US \$)	Replacement value (1000 US \$)
- Presses, lathes, milling machines and cutters			60	100
- Nickel plating tanks			5	5
- Equipment for welding, riveting and grinding			5	5
- Furnaces			5	5
- Machinery for spray-grinding beam-sunshine	*)		5	5
- Cutters, sharpeners, drills			5	5
- Equipment for tempering, water pumps			5	5
- Pneumat. hammers, compressors			5	5
- Other equipment			40	40

(*) 50% of process equipment was imported from Czechoslovakia, 40% by Italy and from Germany.

HISTORY OF INVESTMENT

Construction of the factory started in 1957. The first trial run as well as commercial production started in 1961. The factory made its first profits in 1962. The following investments for expansion purposes were made: (in \$ 1000)

Year	Approx.	Spec.
1961	100	Production of spare-parts for bicycles
1962	100	Production of spare-parts for motorcycles
1963	50	Production of motorcycles
1965	50	Production of motorcycles

CAPACITY FIGURES

Process equipment	1000 kW	Generating equipment installed capacity	6VA
Electric motor	1000		
Electric furnace	100		

ENVIRONMENTAL CONDITIONS

Transport: Long distance, but all lines excellent.

Utilities: Electricity, gas, water, hot water, fair.

Community: Residential, educational, health and recreational, poor. All is decided to give social contributions.

II. INVENTORIES AND WORKING CAPITAL (End of 1966)

	Actual value (1000 US \$)	2 Liquid assets	Actual value (1000 US \$)
1 Inventories			
TOTAL	1,000	TOTAL	1,300
- Production materials	100	- Cash (hand/bank)	100
- Other input materials	100	- Markets, esc. & bonds	10
- Work-in-process	100	- Short term investment	10
- Finished products	100	- Prepaid expenses	5
		- Accounts receivable	10
3 Devised working capital			
TOTAL	1,000		
- Production materials	100		
- Other input materials	100		
- Finished products	100		
- Wages & salaries	100		
- Other special items	100		

III. MANAGING TABLE (number of persons)

	Total	1st shift		2nd shift	
		A	B	A	B
(1966 average)	2,125	815	815	500	500
ALL SHOPS & UNITS:					
1 Primary operative shops	1,000	400	400	200	200
- Assemblies	100	40	40	20	20
- Sub-assemblies and components	100	40	40	20	20
- Automatic lathes	100	40	40	20	20
- Presses	100	40	40	20	20
- Grinding	100	40	40	20	20
- Wheels	100	40	40	20	20
- Polishing	100	40	40	20	20
- Engines	100	40	40	20	20
- Gears	100	40	40	20	20
- Painting	100	40	40	20	20
- Foundry	100	40	40	20	20
- Others	100	40	40	20	20
2 Auxiliary operative units	500	200	200	100	100
- Repair and maintenance	100	40	40	20	20
- Mechanical shop	100	40	40	20	20
- Utilities control	100	40	40	20	20
- Product & material storage	100	40	40	20	20
- Off-site transport	100	40	40	20	20
- Guards, cleaners, etc.	100	40	40	20	20
3 Auxiliary non-operative units	625	250	250	125	125
- Production management	100	40	40	20	20
- Research & development	100	40	40	20	20
- Sales unit	100	40	40	20	20
- General administration	100	40	40	20	20

WORKING TIME PER OPERATIVE WORKER

	Normal hours/day	hours	Normal days/year	days
Actual hours/year				

CAPACITY OF OPERATIVE SHOPS

(This section is currently blank in the provided image.)

IV. ANNUAL PRODUCTION

(1986)	Yr. of first prod.	Quantity produced		Nominal capacity output	Unit price in factory (US \$)	Total production value (100 US \$)
		Unit	Output			
Products for group of products						
- Bicycles (30 different models)	1951	pieces	1,000,000	1,000,000	0.10	100,000
- Motor cycles	1963	pieces	100,000	100,000	1.00	100,000
- Sets of lights	1951	sets	1,000,000	1,000,000	0.10	100,000
- Spare-parts	1951	pieces	1,000,000	1,000,000	0.10	100,000
- Toys	1951	pieces	1,000,000	1,000,000	0.10	100,000
TOTAL VALUE OF PRODUCTION						

UTILIZATION:

The overall rate of utilization is almost 100 percent, except for a slight lack of demand. Nominal capacity output is based on 20 shifts and 20 work days per month.

EXPORTS:

None.

VI. VALUE ADDED

(1986)	Value (100 US \$)
1. Wages & salaries	
- Employees (incl. part-time)	
- Other employees	
2. Other payments for employees	
3. Annual depreciation	
4. Rentals paid	
5. Interests & royalties	
6. Sales tax	
7. Other ind. bus. taxes	
8. Subsidies	
9. Corporate income before tax	
TOTAL	

VII. MONTHLY EARNING RATES

(End of 1985)	No. of emp.	Average earning rate (US \$)
1. Local non-operatives		
TOTAL		
Managers		
Engineers		
Technicians		
Accountants		
Sales officers		
Other professional staff		
clerks & typists		
2. Local operatives		
TOTAL		
Supervisors		
Foremen		
Machine operators		
Craftsmen		
Truck drivers		
Other full-time operatives		
Unskilled part-time operatives		
3. Foreign employees		
TOTAL		

V. ANNUAL CONSUMPTION

(1986)	Unit	Quantity consumed		Total consumption value (100 US \$)
		Purchase	% imported	
1. Energy and water				
TOTAL				
- Electricity	000 Kwh			
- Butane gas	kg			
- Natural gas				
- Water				
2. Production materials				
TOTAL				
- Sheets				
- Pipes and similar				
- Rods, wire				
- Steel bars				
- Tyres and tubes				
- Plastic articles				
- Pedals, brakes				
- Paints				
- Chrome-coated polished and other parts				
3. Other materials & supplies				
TOTAL				
Packaging				
Repair & maintenance				
Non-factor service inputs				
4. Business services purchased				
TOTAL				
Transport, storage & handling				
communications, advertisements, etc.				
5. Work performed by sub-contractors				
TOTAL				

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1985)	Industry group	Manufacture of motorcycles and tricycles		(1984)	
		Number of emp.	Number of emp.	Average prod. per emp. (US \$)	Average prod. per emp. (US \$)
1. Size group by number of persons employed					
up to 24					
over 24		433	1,713	1,297	1,174
TOTAL		433	1,713	1,297	1,174
2. Size group by value of annual production (100 US \$)					
up to 2		1,401	1,713	1,297	1,174
over 2		83	1,000	1,297	1,174
TOTAL		2,141	10,596	1,297	1,174

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

(1985)	Value (100 US \$)
1. Imports	
2. Exports	
3. Net exports	
4. Total value added	
5. Total production	
6. Total consumption	
7. Total value added at basic prices	
8. Total value added at current prices	
9. Total value added at constant prices	
10. Total value added at market prices	
11. Total value added at basic prices (incl. taxes on products)	
12. Total value added at current prices (incl. taxes on products)	
13. Total value added at constant prices (incl. taxes on products)	
14. Total value added at market prices (incl. taxes on products)	

Major Products: Bicycles.
Capable of producing annually about 6,300 bicycles based on 1-shift operation. Full-capacity output amounts to US \$ 280,000.

Reporting Unit: A one-establishment enterprise; privately owned; founded in 1927; 25 employees; 15% exports.

I. FIXED CAPITAL ASSETS

End of 1977	Original purchase value (000 US \$)	Replace ment value (000 US \$)	Ave age (Yrs)
1. Primary process equipment (including installation cost)		31	
TOTAL		39	
Production equipment	11	29	
By-product & support equipment	28	2	
2. Buildings		49	
TOTAL	39	49	
Primary plant building (1,400 sq m)	39	49	
Auxiliary buildings (warehouses)			
Office & administrative buildings (workshop)			
3. Auxiliary facilities (excl. buildings)		21	
TOTAL	14	21	
Water & power equipment	14	21	
Laboratory, etc.			
Means of transport (incl. office equipment)	14	19	
	13	1	
TOTAL PHYSICAL FIXED ASSETS (excluding land)		145	
4. Other fixed capital assets		22	
TOTAL		22	
Land (total) (acres)	10	22	
Land improvements (roads, etc.)			
Others			

II. MONTHLY GROSS WAGES AND SALARIES

(1967 monthly average)	Number of persons				
	up to 100 US\$	100-140 US\$	140-160 US\$	160-240 US\$	over 240 US\$
1. Local non-operatives					
Managers	-	-	-	-	-
Engineers	-	-	-	-	-
Technicians	-	-	1	-	-
Accountants	-	-	-	-	-
Sales officers	-	-	-	-	-
Clerks and typists	1	1	-	-	-
Personnel (*)	-	-	-	1	-
2. Local operatives					
Supervisors	-	-	-	-	-
Foremen (*)	-	-	-	-	-
Skilled operatives	-	-	4	2	-
Machine operators	-	-	2	-	-
Craftsmen	1	-	-	-	-
Truck drivers	1	1	-	-	-
Unskilled operatives	7	-	-	-	-
Other full-time operatives	-	-	-	-	-
Part-time operatives	-	-	-	-	-
3. Foreign employees					
Managerial staff	-	-	-	-	-
Technical staff	-	-	-	-	-
Other skilled operatives	-	-	-	-	-
Unskilled operatives	-	-	-	-	-

* Enterprise considers foremen as non-operatives.

EXTERNAL CONDITIONS

Transport	connecting distance, international	fair
	connecting distance, domestic	excellent
	freight rates	excellent
Utilities	electricity	excellent
	water	
	gas	
Community	road network	fair
	level and maintenance of roads	
	education	
Own Welfare Facilities		

III. INVENTORIES

End of 1977	Actual value (000 US \$)	Number of months
Inventory		
TOTAL		
Production materials		
Other input materials		1.4
Work in process		
Finished products		

WORKING TIME PER OPERATIVE WORKER

	to date	per date	to date
Actual hours per year	1,170		
Actual days per year	240		

IV. MANAGING TABLE

1967	Total employees				Total employees	
	A	B	C	D	E	F
ALL SHOPS & UNITS	25	4	21			
1. Primary operative shops	19		19			
Production of frames	7		7			
Painting	1		1			
Assembly	11		11			
2. Auxiliary operative units	2		2			
Repair & maintenance						
Mechanical shop						
Tooling shop						
Quality control						
Product & material storage						
Off-site transport						
boards, cleaners, etc.						
other packaging						
3. Auxiliary non-operative units	4	4				
Production management						
Research & development						
Sales unit						
Accounting						
General administration						

V. ANNUAL PRODUCTION

(1967)	Yr of first prod	Quantity produced		Av unit price ex factory (US \$)	Total output value (000 US \$)
		Unit	Quantity		
Juvenile models	1930	pc	1,200	30.8	37
Dismountable models	1962	"	1,900	46.3	88
Sports and racing models	1930	"	2,000	51.0	102
TOTAL VALUE OF PRODUCTION					227

VI VALUE ADDED

(1967)	Total value (000 US \$)
1 Annual wages & salaries	41
- Operative workers (21 persons)	1
- Non-operative workers (4 persons)	
2 Other payments for employees	11
3 Annual depreciation	27
- Machinery & equipment	13
- Buildings & other facilities	14
- Non-physical capital assets	
4 Rentals paid	
5 Interest & royalties	12
6 Sales tax	11
7 Other indirect business taxes	1
8 () Subsidies	
9 Corporate income before tax	14
TOTAL VALUE ADDED	

DESCRIPTION OF MAJOR PRODUCTS:

Serial as well as single production of children's, dismountable, sports, and racing bicycles.

The company only manufactures various types of bicycle frames; all other parts are imported and mounted on the frames.

Terms of delivery: Immediately, except for special designs which can be delivered within 2 - 4 weeks time.

MARKET ASPECTS:

Consumers of products:

Households (children and young people).

Sales organization:

Presently the company has no own sales force, however, considers to employ one representative soon. So far the enterprise manufactures on stock.

Share in the domestic market

3.

Competition in the market:

Company believes that several foreign manufacturers of bicycles are found on their products on the market.

Foreign sales markets:

Denmark, Switzerland.

EXPORT

Total annual export 150,000

Major product	To Western countries	To Eastern countries	To Developing countries
---------------	----------------------	----------------------	-------------------------

Dismountable bicycles 100.

Export price policy

Adaptation to conditions prevailing in the European markets.

Comments:

The company is planning to expand its production capacity in the near future. It is also planning to expand its sales network in the European market.

VII ANNUAL CONSUMPTION

(1967)	Quantity consumed		% import	Average import price (000 US \$)	Total consumption value (000 US \$)
	Unit	Quantity			
1 Energy and water					
PPFA:					
- Electricity	000 kWh	400			1
- Cells	5	1.4			1
- Diesel oil and petrol					1
- Gas	100 m ³	1.7			1
2 Production materials					115
PPFA:					
- Pipes	5	71	100	16	16
- Pipes					13
- Other parts					61
- Other production materials					25
- Welding gas					

	Total consumption value (000 US \$)
3 Other materials & supplies	5
PPFA:	
- Packaging material (corrugated paper, printing paper)	1
- Parts, supplies & services	1
- Other materials & supplies	1
4 Business services purchased	5
PPFA:	
- Transportation, storage & insurance	1
- Communication, advertising & other business services	4
5 Work performed by subcontractors	5
PPFA:	
TOTAL VALUE OF CONSUMPTION	

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT N.1:

	Number	Original Purchase Value (USD US \$)	Replacement value (USD US \$)	Avg. Age (Yrs)
Lathes	6	3	5	7
Column-type drilling machines	5	3	4	11
Escentric presses	3	7	10	25
Protective gas automatic welding machine	1	2	2	2
Spot welders	2	1	2	4
Pipe-bending machine	1	1	1	20
Sandblast machines	2	..	3	..
Remelting furnace	1	..	1	..
Others	..	..	1	..

Remarks:
 BW Purchased second-hand
 OB Obsolete
 R Rented
 SK Self constructed

Further details:

The company utilizes standard-type machinery and equipment which had partly been purchased second-hand.
 No further details available.

CAPACITY POWER

Process equipment electric motors 32 kW

Generating equipment installed capacity - 1VA

CAPACITY OF PRIMARY OPERATIVE SHOPS

Shop primary operative shops	Kind of process involved	Standard	Actual
Production of frames		..	III
Painting	II
Assembly		..	III

Mechanization:
 A most advanced
 B considerably high standard
 C moderately standard
 D appreciably short of fully standard
 E almost obsolete

Automation:
 I fully automated
 II semi-automated
 III unautomated

Further details:

CAPACITY UTILIZATION

Full capacity output 11 1 252,1XX

Current utilization Based on 1-shift operation.



All types of bicycles

The company's management was not able to adjust to modern standards of production. Due to misconceived quality thinking the enterprise became less and less competitive which ultimately resulted in a loss in the reporting year. Most of the process equipment utilized falls short of modern standards.
 Presently the utilization of the existing capacity is very much limited by organizational problems.

IX. HISTORY & PLAN

Year	Total output (USD US \$)	No. of persons employed	Total output (USD US \$)
1963	210	31	10
1964	220	29	20
1965	21	26	3
1966	22	27	3
1967	23	28	3
1968	24	28	4

2 Investments in the past
 From 1962 to 1968 3K Machinery and equipment

3 Future Plan
 From 1970 to 1975 77K Modernization of primary process equipment and of buildings.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1968)
 Industry Bicycles and motorcycle manufacturing (BKH Sub. 14)

1 Size groups by number of persons employed	No. of units	No. of emp.	As % of total emp. (USD US \$)	As % of total prod. (USD US \$)	As % of total value added (USD US \$)	2 Size groups by annual value added	No. of units	No. of emp.	As % of total emp. (USD US \$)	As % of total prod. (USD US \$)	As % of total value added (USD US \$)
up to 14	10	34	1,37K	7,37%	0	up to 20	2	4	1,12K	0,22%	0
20 - 49	1	1	0,01K	0,01%	0	20 - 49	1	1	0,01K	0,01%	0
100 - 499	4	1,261	1,261K	7,14%	32	100 - 499	2	2	0,02K	0,02%	0
over 500	..	..	..	..	..	over 500	2	2	0,02K	0,02%	0
TOTAL	15	1,292	1,611K	7,19%	32	TOTAL	17	1,292	1,611K	7,19%	15

confidential, figures of these also group are included in those underlined.

V. ANNUAL PRODUCTION

(1968)

A. SALES OF ESTABLISHMENT:

Products for group of products

Yr of first prod	Quantity produced		Av unit price ex factory (US \$)	Total output value (000 US \$)
	Unit	Quantity		
1958	1000 pcs	4,339	(*)	1,200
1956	"	4,100	"	1,100
1961	"	2,700	"	1,100
1967	"	240	"	1,100
1967	"	1,440	"	1,100
-	-	-	-	1,100
				1,100

B. NET ADDITION TO INVENTORIES:

- All product categories	-	-	-	1,100
--------------------------	---	---	---	-------

(*) Unit prices are not specified where product group's heterogeneity would render this figure meaningless.

TOTAL VALUE OF PRODUCTION

VI. VALUE ADDED

1968	Total value (000 US \$)
1 Annual wages & salaries	1,100
2 Other payments for employees	1,100
3 Annual depreciation	1,100
4 Rentals paid	1,100
5 Interest & royalties	1,100
6 Sales tax	1,100
7 Other indirect business taxes	1,100
8 Corporate income tax	1,100
9 Corporate income before tax	1,100
TOTAL VALUE ADDED	1,100

DESCRIPTION OF MAJOR PRODUCTS:

The final output of this establishment consists of intermediate products which are used for the manufacture of household electric appliances, in particular the so-called "white market". From both the qualitative and quantitative points of view, these products must be considered, in both domestic and international terms, as extremely competitive. It should be noted that there is a high "obsolescence factor" encountered by most of the firm's products, which requires active efforts in market and product development research, which result in a "product-life" of about 3 years on the average.

N.B.: The firm has initiated the production of integrated circuits for the computer and electronic industries in January of 1968.

MARKET ASPECTS:

Re-sales:

The firm engages in re-sales activities in a residual sense in order to complement its own lagging capacity in particularly fast-growing product markets. These re-sales are generally imports manufactured by "sister"-firms abroad and normally involve products for which an internal productive capacity, either existing or to be established. In 1968, re-sales (of general control devices) totalled US \$ 89,000. These have been netted out of this study.

Consumers of products:

Both domestic and foreign firms engaged in the manufacture of household electric appliances.

Sales organization:

Internal sales unit of 10 persons, also a national-international marketing office with a 6-man staff, located in the major industrial city in the country.

EXPORT

Total annual export about 1,100,000 US \$

Major products	To Western countries	To Eastern countries	To Developing countries
----------------	----------------------	----------------------	-------------------------

All of the above... of which about 10% is sent to... countries...

Market dynamics:

The firm is demand-driven... international market... manufacturers... is the chief factor... The firm will continue to expand its capacity in the domestic market and will continue to expand its international market...

VII. ANNUAL CONSUMPTION

(1968)

1. Energy and water	Quantity consumed		% report	Average input duties	Total consumption value (000 US \$)
	Unit	Quantity			
TOTAL:					
- Electricity of which lights	000 kWh	...	-	-	96
- Industrial power			-	-	10
- Combustible oil			-	-	5
- Gas			-	-	5
- Water			-	-	1
2. Production materials (direct)					
TOTAL:					1,980
- Copper wire	t	30	-	(*)	152
- Silver	"	25	-	(*)	1,980
- Constantan (nickel-copper alloy)	"	6	100	(*)	2
- Brass	"	7	-	(*)	8
- Soft iron	"	23	-	(*)	4
- Electric cable	m	1,000	-	(*)	17
- Nickel powder	t	120	-	(*)	165
- Nickel-ore	"	2	100	(*)	1
- Tin-plate (brass-silver alloy)	"	22	100	(*)	15
- Truffles	"	8	100	(*)	24
- Trinitite	"	15	100	(*)	164
- Other specified prod. mat. ...				(*)	316

3 Other materials & supplies	Total consumption value (000 US \$)
TOTAL:	57
- Packaging material (cartons, tape, glue, etc.)	24
- Parts, supplies & services	14
- Other materials & supplies (incl. cafeteria, dining, etc.)	19
4 Business services purchased	152
TOTAL:	148
- Transportation, storage & insurance	148
- Communication, advertising & other business services	101
5 Work performed by subcontractor	44
TOTAL:	44
TOTAL VALUE OF CONSUMPTION	1,559

(*) These products are purchased within the country and accordingly final prices include an additive.

10. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of service

- | | | |
|---|---------------------------------------|----------------------------------|
| 1. Engineering study | 5. Technical and managerial personnel | 8. Import and export trade fairs |
| 2. Financial assistance | 6. Industrial consulting | 9. Assistance of foreign labor |
| 3. Industrial services | 7. Technical co-operation | |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
-----------------	-------------------	-----------------	-------------------	-------------------------

Due to its size the enterprise is not able to render any industrial services for co-operation with developing countries.

11. SUPPLEMENTARY NOTES

Difficulties in the past and current problems:

Difficulties to receive imported bicycle-parts in time.
Lack of space in the assembly department.
Reorganization of working methods and construction of new buildings.

Expansion policy:

The enterprise applies the straight-line method.

Investment policy:

Although the company exclusively produces on stock, the value of finished products amounts only to 7% of the total production value.

Major Products:

Plastic table sets. Capable of producing annually 50,000 sets based on 2-shift operation.

Reporting Unit:

One-establishment enterprise, founded in 1955, privately owned, 100% foreign capital participation.

I. FIXED CAPITAL ASSETS

	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
(End of 1967)			
1 Primary process equipment			
TOTAL		110	110
- Process equipment			
- Hand tools & apparatuses			
- Cost of installation included in process equipment			
2 Primary industrial building			
TOTAL			
- Total floor space:			
3 Auxiliary facilities			
TOTAL			
- Water, steam, electricity, cooling & storing			
- Transportation facilities			
- Administrative facilities			
- Laboratory facilities			
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land)			
4 Other fixed capital assets			
TOTAL			
- Land - total acreage			

DETAIL OF PROCESS EQUIPMENT (no.)	Supplier country	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
1	A	1955		
2	B	1955		
3	C	1955		
4	D	1955		
5	E	1955		

RESEARCH AND DEVELOPMENT:

Department of the factory was established in 1955. Production started in 1955. The factory is located in the facilities.

CAPACITY POWER:

Process equipment			
Electric motors	10	10	
Pre-heaters			
Generating equipment installed capacity			1VA

EXTERNAL CONDITIONS:

Transport	Good
Utilities	Good
Community	Residential, fairly good educational, poor.

II. INVENTORIES AND WORKING CAPITAL

(in 000 US \$)

(End of 1967)		Actual value	Actual value
		1967	1966
1. Inventories			
TOTAL		7	7
- Production materials		1	1
- Other input materials		2	2
- Work-in-process		1	1
- Finished products		3	3
2. Liquid assets			
TOTAL		115	115
- Cash (hand/bank)		115	115
- Market, sec. & bonds		-	-
- Short-term investment		-	-
- Prepaid expenses		-	-
- Accounts receivable		5	5
3. Desired working capital			
TOTAL		79	79
- Production materials		12	12
- Other input materials		4	4
- Finished products		3	3
- Wages & salaries		4	4
- Other special items		-	-

III. MANNING TABLE

	Total	1st shift		2nd shift	
		A	B	A+B	A+B
(1967 average)					
ALL SHOPS & UNITS:	17	11	11	11	11
1 Primary operative shops	17	11	11	11	11
- Production	17	11	11	11	11
- Finishing	4	2	-	-	-
2. Auxiliary operative units	2	1	1	1	1
- Repair and maintenance	-	-	-	-	-
- Mechanical shop	-	-	-	-	-
- Utilities control	-	-	-	-	-
- Product & material storage	-	-	-	-	-
- Off-site transport	2	1	1	1	1
- Guards, cleaners, etc.	-	-	-	-	-
3. Auxiliary non-operative units	6	6	6	6	6
- Production management	1	1	1	1	1
- Research & development	-	-	-	-	-
- Sales unit	5	-	-	-	-
- General administration	-	-	-	-	-

WORKING TIME PER OPERATIVE WORKER:

Normal hours/day:	7 hours	Normal days/year:	260 days
Actual hours/year:	1,790 hours		

CAPACITY OF OPERATIVE SHOPS:

ADVANTAGES DUE TO FOREIGN CAPITAL PARTICIPATION:

Equipment, machinery, patents, "know-how", and production materials are partly supplied by the foreign partner.

IV. ANNUAL PRODUCTION

(1967)	Yr. of first prod.	Quantity produced		Nominal capacity output (*)	Unit price as factory (US \$)	Total production value (1966 US \$)
		Unit	Output			
Products for group of producers						
Plastic table sets	1965	36 pc./set	28,000	50,000	7.20	202
TOTAL VALUE OF PRODUCTION						202

COMPETITIVE IMPORTS:

On imported plastic table sets a protective tariff rate of US \$ 1.50 per gross kg and 10% ad valorem is levied.

EXPORTS:

Part of production is exported at US \$ 7.20/set.

CAPACITY UTILIZATION:

Only 50% of capacity could be utilized due to lack of raw materials and insufficient technology used in the production process. For full utilization of the existing capacity 40 additional man-hours would be annually required on the 1st and 2nd shifts each.

(*) Nominal capacity and actual output are based on a two-shift operation.

V. ANNUAL CONSUMPTION

(1967)	Quantity consumed				Total consumption value (1966 US \$)
	Unit	Purchase	% imported	Tariff rate	
1. Energy and water					
TOTAL:					
- Electricity	000 Kwh	207.50			5
- Liquid fuels and lubricants		..			
- Water		..			1
2. Production materials					
TOTAL:					
- Melanic	t	95	100	per ad gross val- kg + rem US \$ %	74
- Foils	t	300	100	0.20 15	14
3. Other materials & supplies					
TOTAL:					
- Packagings (cardboard boxes)					6
- Repair & maintenance					2
- Non-factor service inputs					2
4. Business services purchased					
TOTAL:					
- Transport, storage & insurance					1
- Communication, advertisements, etc.					17
5. Work performed by sub-contractors					
TOTAL:					
162					

VI. VALUE ADDED

(1967)	Value (1966 US \$)
1. Wages & salaries	
- Employees in direct production (21 persons)	11
- Other employees (8 persons)	12
2. Other payments for employees	
3. Annual depreciation	6
4. Rentals paid	1
5. Interests & royalties	
6. Sales tax	
7. Other ind. bus. taxes	
8. (-) Subsidies	
9. Corporate income before tax	27
60	

VII. MONTHLY EARNING RATES

(End of 1967)	No. of pers. emp.	Average earning rate (US \$)
1. Local non-operatives		
TOTAL:	6	333
- Managers	1	1,500
- Engineers		
- Technicians	1	300
- Accountants		
- Sales officers		
- Other professional staff	4	100
- Clerks & typists		
2. Local operatives		
TOTAL:	24	32
- Supervisors		
- Foremen		
- Machine operators		
- Craftsmen		
- Truck drivers		
- Other full-time operatives		13
- Unskilled & part-time operatives		
3. Foreign employees		
TOTAL:		

VIII. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(196)	(196C)				
Industry group:	Number of estab.	Number of empl.	Avg. W. & S. per pers. (US \$)	Avg. gross prod. val. per pers. (US \$)	Avg. emp. gross prod. rate* (%)
1. Size groups by number of persons employed up to					
No data available.					
TOTAL					
2. Size groups by value of annual production (1966 US \$) up to					
TOTAL					

* Capital is defined as physical capital assets.

IX. SUPPLEMENTS

FUTURE PLAN:

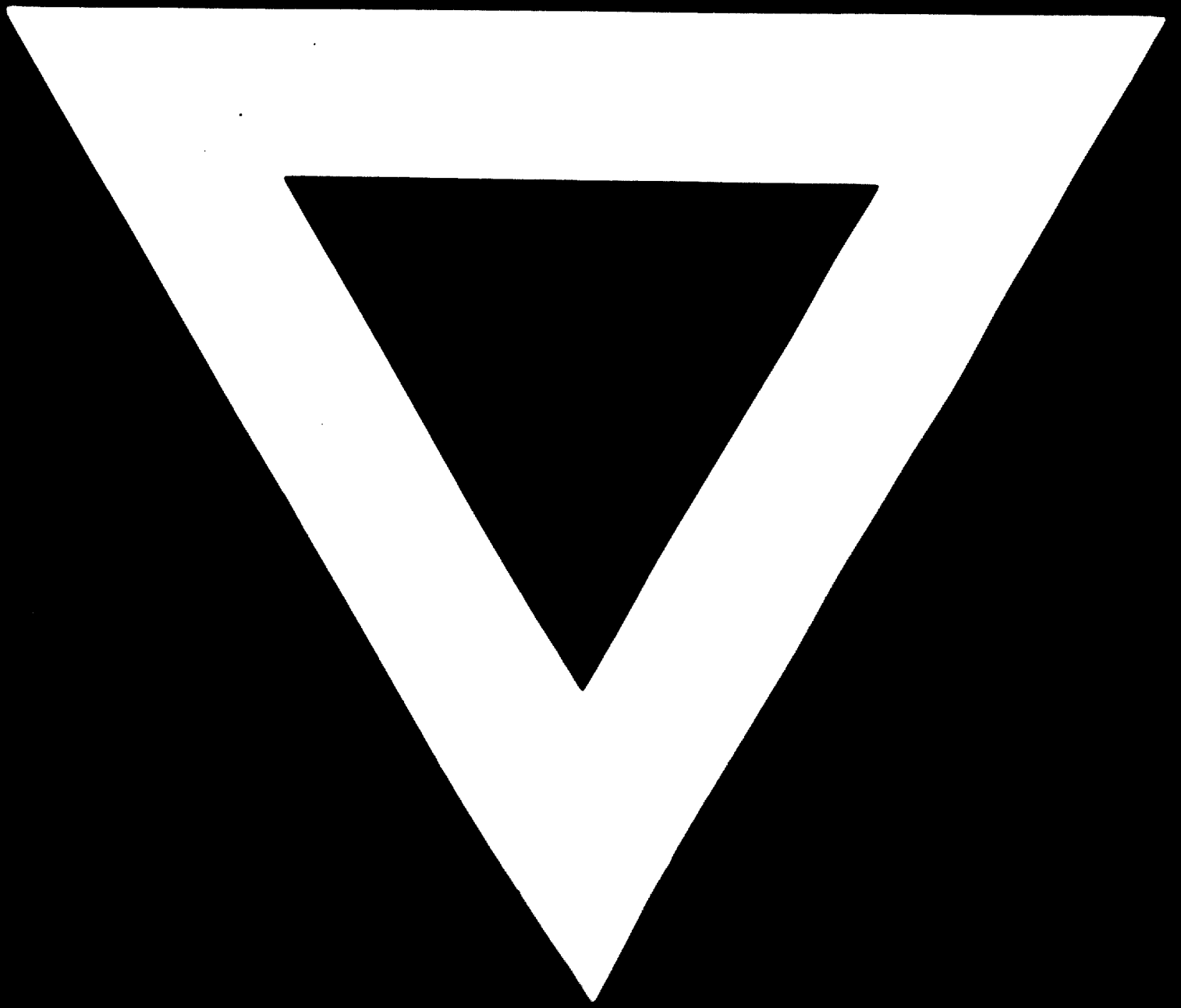
By 1972 approximately US \$ 75,000 will have been invested in order to increase the employment on the 1st shift by 7 persons, and on the 2nd and 3rd shifts by 6 persons each.

Printed in Austria
70-6858—October 1971—4,600

Price: \$ U.S. 9.00
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74.09.12

VII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (1):	Number	(*) Unit value (Book value) (US \$)	Replacement value (1980 US \$)	Age (yrs)	Remarks	Further details:
Welding machines		900				Much of the specialized process equipment is constructed by the firm in accordance with its own design specifications. All other equipment was purchased new. None of it can be said to be obsolete.
Magnetic hammers		-				
Burnishing machines		-				
Electric screwing machines		222				
Component mounting machines		-				
Marking machines		-				
Treatment ovens		4,937				
Riveting machines, type I		-				
Presses		15,254				
Rating or measuring machines		-				
Winding machines		644				
Riveting machines, type II		438				
Control apparatus		6,484		2-5		
Seam folding machine		493				
Dressing machine		222				
Degreaser		1,073				
Automatic insulation stripper		330				
Tapping machine		-				
Milling machine		3,327				
Sensitive drills (semi-automatic)		274				
Lathes		1,959				
Grinding machine		-				
Lapping machine		-				
Compressed air plant		-				
Computer		(rented)				

(*) These unit values refer to average book values of that type of equipment. Where the equipment group is considered too heterogeneous no unit value is given.

CAPACITY POWER:
 Process equipment: electric motors kW 2,000
 Generating equipment: installed capacity kVA -

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Major primary operative shops	Kind of process involved	Mechanization:		Automation:		Further details:
		A most advanced	B considerably high standard	I fully automated	II semi-automated	
A. Primary parts						The degree of mechanization and automation of any given process is, in great part, a function of: a. the projected length of the production run; b. the extent of "specialization" and potential adaptability of equipment required for less labour-intensive operation; and c. the depreciation policy which applies for that kind of equipment.
- Bakelite moulding	Transformation by heat-process of bakelite powder into "plugs"	C		III		
- Bakelite stamping	Transformation by heat-pressing process of "plug" into component parts	B		II		
- Sub-assembly	Preparation by assembly of component elements	B		II		
- Discs	Production of bi-metal "discs" as temperature control elements	B		II		
B. Finished products						
- Thermostate	Mechanical assembly process of final products. Considerable internal variation of relative mechanization-automation as a result of use of several different processes in producing a given end-product. Highly capitalized circuit assembly, testing process. (Mechanization: A; automation: I, II)	A-C		II, III		
- Motor protector						
- Combination units						
- Starto relay						
- Integrated circuits						

CAPACITY UTILIZATION:

Full capacity output: about US \$ 8,000,000.
 Current utilization:
 Major products for present

	up to 35	40	50	60	70	80	90	100
All products (because the product-process mix is very flexible)						x		x

N.B.: Since the market demand for the firm's products is growing very rapidly, the establishment is continually faced with the situation of pushing production to its capacity limits. Given the existence of certain unavoidable internal rigidities, indivisibilities and time-lags which perforce necessarily limit actual production to less than theoretical capacity. The firm can be said to have been working at about its capacity limits.

IX. HISTORY & PLAN

1. Performance in the past:	Total output (1980 US \$)	No. of persons employed	(*) Total exports (1980 US \$)
Year 1963	3,215	549	-
1964	3,054	364	150
1965	3,795	336	1,110
1966	5,636	453	1,200
1967	6,212	603	2,200
1968	7,942	847	3,000

(*) very approximate.

2. Investments in the past:	Approximate amount (1980 US \$)	Type of investment
From 1958 to 1959:	100	Legal establishment, technical studies, equipment, labour training
" 1958 " 1965:	400	Replace and upgrade equipment, etc.
in 1965:	1,500	New plant and equipment
" 1965 to 1968:	500	Replace and upgrade equipment.

3. Future Plan:
 From 1968 to 1969: 1,000 General plant expansion to cover increased production as well as to allow for expansion of product types.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

(1965) Manufacture of electrical and telecommunications equipment and apparatus (ISIC-Code: 370)

Size groups by number of persons employed:	Average no. of employees	Value added (1980 US \$)	Labour costs (1980 US \$)	Fixed investment (1980 US \$)	Value of output (1980 US \$)	AVERAGE PER EMPLOYEE					Value added/output value ratio (%)
						Fixed investment value added ratio (%)	Value added (US \$)	Labour costs (US \$)	Fixed investment (1000 US \$)	Labour costs value added ratio (%)	
up to 49	24.5	246	195	22.4	627	9.08	3,100	2,480	285	73.00	39.24
50 - 99	74	715	627	35.6	1,960	12.79	3,430	2,550	383	84.07	38.14
100 - 499	248	2,490	1,490	44.2	7,250	18.54	3,480	2,390	643	82.98	32.77
500 - 999	740	7,000	4,060	77.7	20,700	8.83	3,920	3,160	347	80.67	42.51
1,000 - 4,999	2,400	20,800	11,200	225.0	61,800	8.90	3,400	2,220	352	74.69	40.77
TOTAL (average):	665	2,500	1,950	26.1	6,100	10.76	3,760	2,930	374	80.22	39.91

(*) Fixed investment data refer to investment during year of study.

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services

- | | | |
|---|---------------------------------------|----------------------------------|
| 1. Engineering studies | 5. Technical and industrial personnel | 8. Transport and communication |
| 2. Financial assistance | 6. Industrial training | 9. Administration and management |
| 3. Industrial services | 7. Technical consultation | 10. Other |
| 4. Equipment supply, installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
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It should be noted that this establishment is part of a vast international complex of firms producing related products in a number of countries in the world.

Here a given developing country is interested in the possibility of establishing a plant in this given field, they might consider contacting this firm on a thorough-going commercial basis, for:

- 1, 2, 3, 4, 7 and 8.

XII. SUPPLEMENTS & NOTES

Cost-Revenue Relationships:

Inventories of finished products were increased from US \$ 933,000 at the beginning of 1969 to US \$ 1,522,000 at year's end to provide a cushion against an expected increase in demand during 1969 during which time additional capacity would be under construction but not yet operative.

Depreciation policies:

Government policies to this effect have a major effect in determining the final capital-labour ratio, particularly in the face of the limited product life as a result of design changes, obsolescence, etc.

Presently the firm uses the accelerated write-off on all durable and non-durable equipment of: year 1 and 2 - 33%; year 3 - 21%; year 4 - 15%.

Selected coefficients:

1. Ratio of operative workers to total work force:	59
2. Machinery per worker (*):	US \$ 1,240
3. Value added per employee:	US \$ 5,340
4. Mean daily absentee ratio:	9
5. Ratio of gross profits to gross production:	15.4
6. Average hourly wage (**):	US \$ 3.59
7. Average annual labour costs (to firm) per employee:	US \$ 2,680
8. Average annual payment per employee:	US \$ 1,760
9. Ratio of labour costs to value added:	52
10. Ratio of value added to value total production:	57
11. Ratio of fixed investment to value added:	56

(*) Book value of machinery, equipment, tools, etc. per each employee in direct production on the "daytime" shift (first and second).

(**) Estimate.

Major Products: Assembly of buses, mini-buses and passenger cars.

Assembly capacity about 25,000 units of mini-buses and passenger cars per annum; one-shift operation.

Reporting Unit:

A one-establishment enterprise, founded in 1963; private owned. No foreign capital participation. The construction as well as trial production of the factory started in 1963, commercial production in 1964. The plant was originally built for the assembly of buses 240 units/yr. only. But the operation has become profitable only recently with the present, increased capacity. (Break-even output around US \$ 53 million.) No possibility of merging with other companies; possibility of further specialization. Exports amounted to approximately US \$ 1 million.

I. FIXED CAPITAL ASSETS

(End of 1968)	Original purchase value (000 US \$)	Replacement value (000 US \$)	Average age (Yrs)
1. Primary process equipment (including installation cost)			
TOTAL	14,061	..	..
- Process equipment *	13,190	..	..
- Hand tools & apparatuses	891	..	..
2. Buildings			
TOTAL	4,681	..	..
- Primary industrial buildings (total floor space: 68,037 m ²)	4,681	..	..
- Auxiliary buildings (23,150 ")			
- Warehouse (14,154 ")			
- Office administration buildings (20,000 m ²)			
- Housing (16,168 m ²)			
3. Auxiliary facilities (excl. buildings)			
TOTAL	840	..	..
- Internal power equipment	-	-	-
- Laboratory facilities	-	-	-
- Means of transportation	545	..	..
- Office equipment	297	..	..
TOTAL PHYSICAL FIXED ASSETS (excluding land):	19,584	..	..
4. Other fixed capital assets			
TOTAL	3,692	..	..
- Land (total acreage: 2,500,000 m ²)	3,692	..	..
- Land improvements	-	-	-
- Others	-	-	-

*NB. Details of process equipment and capacity of primary operative shops are given on Page three (Section VIII)

II. MONTHLY GROSS WAGES AND SALARIES

(Number of persons)

(1968 monthly average)	US\$	US\$	US\$	US\$	US\$	US\$
1. Local non-operatives						
- Managers	660	-				1,320
- Engineers	460	-				990
- Technicians	200	-				460
- Accountants	105	-				400
- Sales officers	130	-				400
- Clerks and typists	30	-				200
- Others	65	-				90
2. Local operatives						
- Supervisors	-	-				530
- Foremen	-	-				265
- Skilled operatives	104	-				200
- Machine operators	-	-				-
- Craftsmen	105	-				200
- Truck drivers	100	-				120
- Unskilled operatives	40	-				65
- Other full-time operatives	40	-				65
- Part-time operatives	-	-				-
3. Foreign employees						
- Managerial staff	-	-				-
- Technical staff	-	-				-
- Other skilled operative	-	-				-
- Unskilled operatives	-	-				-

EXTERNAL CONDITIONS:

Transport.	external long distance	excellent
	internal long distance	excellent
	local and city	Fair
Utilities	electricity	Fair
	water	excellent
	gas	-
Community	residence	excellent
	health and recreation	excellent
	education	excellent
Own Welfare Facilities:	-	-

III. INVENTORIES

(End of 1968)	Actual value (000 US \$)	Number of months
Inventories		
TOTAL	5,897	-
- Production materials	-	-
- Other input materials	-	-
- Work-in-process	5,897	-
- Finished products	-	-
(See XII. Supplements: liquid assets and depreciable working capital)		

WORKING TIME PER OPERATIVE WORKER:

	1st shift	2nd shift	3rd shift	
Shift hours/day	8	-	-	hours
Average hours/yr.:	2,144	-	-	hours
Normal days/year:	268	-	-	days

IV. MANNING TABLE

(number of persons)

Skill categories: A: Supervisory staff and foremen (for all shifts)
B: Machine operators
C: Other operatives
D: -

(1968 average)	Total	1st Shift				2nd Shift	3rd Shift
		A	B	C	D	B-D	B-D
ALL SHOPS & UNITS:	2,712	464	-	2,248	-	-	-
1. Primary operative shops	2,123	67	116	1,940	-	-	-
All shops (incl. utility and assembly)	2,123	67	116	1,940	-	-	-
2. Auxiliary operative units	192	-	-	192	-	-	-
- Repair & maintenance	20	-	-	20	-	-	-
- Mechanical shop	-	-	-	-	-	-	-
- Tooling shop	-	-	-	-	-	-	-
- Utilities control	25	-	-	25	-	-	-
- Product & material storage	30	-	-	30	-	-	-
- Off-site transport	-	-	-	-	-	-	-
- Hards, cleaners, etc.	-	-	-	-	-	-	-
- Others	117	-	-	117	-	-	-
3. Auxiliary non-operative units	397	397	-	-	-	-	-
- Production management	4	4	-	-	-	-	-
- Research & development	35	35	-	-	-	-	-
- Sales unit	124	124	-	-	-	-	-
- Accounting	24	24	-	-	-	-	-
- General administration	210	210	-	-	-	-	-

V. ANNUAL PRODUCTION

Products (or group of products)	Yr. of first prod.	Quantity produced		Av. unit price as factory (US \$)	Total output value (000 US\$)
		Unit	Quantity		
Buses	1964	units	1,262	14,520	18,334
Mini-buses	1965	units	1,412	4,746	6,703
Passenger cars	1967	units	12,751	1,952	24,896
Others					7,882
TOTAL VALUE OF PRODUCTION:					56,815

VI. VALUE ADDED

(1968)	Total value (000 US \$)
1. Annual wages & salaries	
- Operative workers (2,315 persons)	1,473
- Non-operative workers (37 persons)	1,011
2. Other payments for employees	1,000
3. Annual depreciation	2,200
- Machinery & equipment	1,000
- Buildings & other facilities	1,200
- Non-physical capital assets	1,000
4. Rentals paid	1,000
5. Interests & royalties	1,000
6. Sales tax	1,000
7. Other indirect business taxes	1,000
8. () Subsidies	1,000
9. Corporate income before tax	1,000
*not incl. in total	1,000
TOTAL VALUE ADDED	12,714

DESCRIPTION OF MAJOR PRODUCTS:

Major parts are from G.R. and Fed.Rep.of Germany. Batteries and tyres only are manufactured in the country.

MARKET ASPECTS:

Consumers of products:

Private persons and firms as well as government organizations.

Sales organization:

The company has a central sales department in the Capital and sales agencies in all provinces.

Share in the domestic market:

The company holds a share of about 40%.

Export price policy:

Efforts will be made to sell at the lowest possible price.

Competition with imported products:

At present no competition, since the import of cars and buses is restricted.

EXPORT:

Total annual export (US \$) 1,000,000

Major products	To Western countries	To Eastern countries	To Developing countries
City-buses	-	-	100%
Inter-city buses	-	-	100%
Mini-buses	-	-	100%

The following export prices were charged:

City-buses US \$ 14,520 per unit

Inter-city buses US \$ 4,746 per unit

Mini-buses US \$ 4,600 per unit.

VII. ANNUAL CONSUMPTION

(1965)	Quantity consumed		% import	Average import duties *	Total consumption value (000 US \$)
	Unit	Quantity			
1. Energy and water					
TOTAL:					
- Electricity	000 kWh	5,297 **			143
- Petroleum	000 l	..			48
- Water	000 m3	100			15
2. Production materials					
TOTAL:					44,003
- Cast-iron and engine	asts	..	100		10,802
- Iron sheets	ests	..	100		4,400
- Tyres and tubes	pieces	..	-		1,520
- Batteries and other accessories	pieces	..	10		5,281

3. Other materials & supplies		
TOTAL:		26
- Packaging material		26
- Parts, supplies & services		26
- Other materials & supplies		26
4. Business services purchased		
TOTAL:		61
- Transportation, storage & insurance		61
- Communication, advertising & other business services		61
5. Work performed by subcontractors		
TOTAL:		14,000
TOTAL VALUE OF CONSUMPTION:		14,000

* Import duties amounted to US \$ 6,600 in total.
 ** of which 77,000 kWh were internally generated.

VIII. TECHNOLOGICAL CHARACTERISTICS

DETAIL OF PROCESS EQUIPMENT (8.1):

Number	Original Purchase Value (1000 US \$)	Replacement value (1000 US \$)	Avg. Age (yrs)	Remarks
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Remarks:
 SH Purchased second-hand
 (2) Quantity
 R Rented
 SC Self-constructed

All equipment supplied by Fed. Rep. of Germany and Great Britain.

CAPACITY POWER:

Process equipment:
 electric motors kW 3,600
 - other prime movers ..

Generating equipment:
 installed capacity kVA 1,610
 Annual production in 1968: 1,450 kWh

CAPACITY OF PRIMARY OPERATIVE SHOPS:

Mechanization:
 A most advanced
 B considerably high standard
 C moderate standard
 D appreciably short of today's standard
 E almost outdated

Automation:
 I fully automated III non-automated
 II semi-automated

Major primary operative shops	Kind of process involved	Mechan.	Autom.	Further details:
Body building shop		B	II	
Assembling shop		B	II	

CAPACITY UTILIZATION:

Full-capacity output: US \$ 95,000,000

Current utilization:

Major products (or processes)	up to 60	60-65	65-70	70-75	75-80	80-85	85-90	90-100
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The actual over-all capacity utilization rate is considered to be about 60%. The under-utilization is due to the insufficient supply of parts as well as labour. However, these bottlenecks will be soon cleared. For full-capacity utilization another 1,000 operatives would be required.

A total investment expenditure of approximately US \$ 66,000 would be needed to make all production facilities technologically well balanced.

IX. HISTORY & PLAN

1. Performance in the past:

Year	Total output (1000 US \$)	No. of persons employed	Total exports (1000 US \$)
1963	-	-	-
1964	-	-	-
1965	2,230	790	-
1966	27,330	1,400	-
1967	38,850	2,500	-
1968	56,980	2,712	960

2. Investments in the past:

Year	Approximate amount (1000 US \$)	Type of investment
Up to 1966:	5,280	Machinery and building
1967:	4,750	Machinery and building

3. Future Plan:

From 1969 to 1973: 71,280 General expansion purposes.
 Another 1,000 operatives will be employed then.

X. CHARACTERISTICS OF THE INDUSTRY IN THE COUNTRY

* Data of selected 14 establishments representing only part of ISIC 383.

(1967)

Industry: Manufacture of motor vehicles (ISIC-Code: 383 *)

1. Size groups by number of persons employed:	No. of estab.	No. of emp.	Avg. W. & B. per pers. (US \$)	Avg. gross prod. val./per pers. (US \$)	Avg. value added/gross prod. ratio (%)	Capital assets per pers. (US \$)
up to 100	5	367	1,022	19,709	30.0	6,931
101 - 300	3	589	1,812	17,035	15.4	10,116
over 300	6	4,301	1,167	19,182	17.6	4,731
TOTAL:	14	5,257	1,229	18,978	18.3	5,488

XI. DESIRED AREAS FOR CO-OPERATION WITH DEVELOPING COUNTRIES

Type of services:

- | | | |
|--------------------------------|---------------------------------------|-------------------------------|
| 1. Engineering study | 3. Technical and managerial personnel | 5. Import and export trade |
| 2. Financial assistance | 4. Industrial training | 6. Admission of foreign labor |
| 7. Industrial surveys | 8. Technical consultancy | |
| 9. Equipment supply | | |
| 10. Installation & maintenance | | |

INDUSTRIAL SERVICES FOR CO-OPERATION WITH DEVELOPING COUNTRIES:

1. Services performed during the past five years:

Type of service	Country or region	No. of projects	Field of industry	Description of projects
-----------------	-------------------	-----------------	-------------------	-------------------------

XII. SUPPLEMENTS & NOTES

Depreciation policy:

The following depreciation rates were applied:

Buildings	10%
Machinery except testing machine	25%
Testing machine	10%
Office equipment	20%

Labour training:

On-the-job training is currently in operation; own training department; foremen and engineers are sent abroad for training.

Liquid assets (average):

	(000 US \$)
Cash on hand and in bank	1,120
Marketable securities and bonds	31,345
Accounts receivable from delivery of goods and services	5,200
Other accounts receivable	1,750
<u>Prepaid expenses</u>	<u>1,650</u>
Total average liquid assets	41,070

Desired working capital:

	(000 US \$)	Equivalent no. of months		
Production materials	15,541	1		
Other materials and supplies				
Finished products				
Wages for primary operative workers				
Other wages and salaries				
Training costs				
Administrative costs, sales costs and contingencies				
Other special items				
<u>Total desired working capital</u>			<u>15,541</u>	<u>1</u>

Major Products: Automobiles and trucks (light and heavy duty).
 Capable of producing annually 30,000 units on 2-shift operation.

Reporting Unit: A one-establishment enterprise, founded in 1925, private corporation, 100% foreign capital.

I. FIXED CAPITAL ASSETS

(End of 1967)	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
1 Primary process equipment			
TOTAL		5,334	9,164
- Process equipment		4,859	9,147
- Hand tools & apparatuses		475	617
- Cost of installation		included above	included above
2 Primary industrial building	1966/67	5,067	10,880
TOTAL		5,067	10,880
(total floor space: 112,692 m ²)			
3 Auxiliary facilities		3,271	..
TOTAL		1,001	1,219
- Water, steam, electricity, cooling & storing		1,012	1,268
- Transportation facilities		898	988
- Administrative facilities		..	..
- Laboratory facilities		358	..
- Others		..	..
TOTAL PHYSICAL FIXED CAPITAL ASSETS (including land):		13,672	..
4 Other fixed capital assets		5,403	..
TOTAL		5,403	..
- Land (total acreage: 11,746, 384 m ²)		5,403	..

DETAIL OF PROCESS EQUIPMENT (incl.)	Supplier country	Year of installation	Orig. purchase value (000 US \$)	Replacement value (000 US \$)
Furnaces (foundry)	FR, Germ. USA	1963/64	682	818
Motor producing machinery	..	1963/64	1,994	2,395
Assembly line	USA	1959	659	4,030
Tooling shop	USA	1963	1,524	1,904

Equipment, machinery, patents and "know-how" have to be imported.

HISTORY OF INVESTMENT:

The plant was built in 1932 to assemble trucks and cars. Trial as well as commercial production started in the same year.

A motor plant and foundry were added in 1963, a tooling shop in 1964.

The following investments were made for the expansion of the assembly plant: (in 000 US \$)

1954	approx.	1,040	whole plant
1962	"	830	Painting, upholstery, chassis, garages
1965	"	890	and warehouse departments.

CAPACITY POWER:

Process equipment:		
Electric motors:	9,091	kW
" Furnaces:	4,800	"

Generating equipment:
 installed capacity: - LVA

EXTERNAL CONDITIONS:

Transport: Long distances and local area, excellent.

Utilities: Electricity, water, excellent.

Community: Residential, health and recreational, excellent.

II. INVENTORIES AND WORKING CAPITAL

(in 000 US \$)

(End of 1967)	Actual value	2. Liquid assets	Actual value
1 Inventories		TOTAL:	3,267
TOTAL	20,172		
- Production materials	574	- Cash (hand/bank)	-
- Other input materials	1,031	- Market. sec. & bonds	-
- Work-in-process	13,527	- Short-term investment	4
- Finished products	5,040	- Prepaid expenses	776
		- Accounts receivable	2,487
3. Desired working capital			
TOTAL			
- Production materials			
- Other input materials			
- Finished products			
- Wages & salaries			
- Other special items			

III. MANNING TABLE

(number of persons)

A - Machine operators
 B - Other operatives

(1967 average)	Total	1st shift A	B	2nd shift A+B	3rd shift A+B
ALL SHOPS & UNITS:	3,455	3,301		469	85
1. Primary operative shops	1,219	797	101	332	49
- Foundry	144	125	19	-	-
- Machining and assembly of motors	110	84	26	-	-
- Assembly of automobiles	302	394	40	268	-
- Tool shop	323	194	16	64	49
2. Auxiliary operative units	1,456	1,283		137	36
- Repair and maintenance	309	251		46	12
- Mechanical shop	109	89		16	4
- Utilities control	273	245		28	-
- Product & material storage	535	535		-	-
- Off-site transport	-	-		-	-
- Guards, cleaners, etc.	55	21		21	13
- Others (craftsmen, quality controllers)	175	142		26	7
3. Auxiliary non-operative units	1,120	1,120		-	-
- Production management	8	8		-	-
- Research & development	146	146		-	-
- Sales unit	111	111		-	-
- General administration	262	262		-	-
- Others	593	593		-	-

WORKING TIME PER OPERATIVE WORKER:

Normal hours/day	7.47	hours	Normal days/year	240	days
Actual hours/year	1,870	hours			

CAPACITY OF OPERATIVE SHOPS:

Operative shops	Processing capacity	Utilisation rate	Automation and mechanisation
Assembly of bodies	106 units/day	138%	Moderate
Motors (machining)	120/shift	100%	"
Foundry	100 sets/shift	100%	"