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United Nations Industrial Development Organization

Regional Seminar on Machine Tools

j. Developing Countries of
Europe, Middle East and North Africa

Alatni Pjessari (Golden Sands) near Varn., Bulgaria
18 - 27 October 1971

#### AIDE NEMOIRE

The machine tool industry plays a key role in the expansion of world industrial production, since nearly all the products are manufactured by metalworking machines.

The industrial development of a country depends to a considerable degree on the number, age, quality and type of machine tools which it possesses. The stock of machine tools and other related equipment in the developing countries should be sufficient for their industrial development. The success of development of the engineering industry in developing countries depends, not only on the stock of machine tools and other industrial equipment, but on the way in which these are used in the country. Some developing countries have sufficient stocks of equipment which are not being fully and properly utilized. This means additional expenditure for buying, servicing and maintenance and repair of machine tools and related industrial machinery.

### Purpose

The purpose of the Seminar is to:

- (a) Discuss the problems of the selection and utilization of machine tools in developing countries;
- (b) Discuss various means of co-operation between developed and developing countries on selection, development, marketing and utilization of machine tools;
- (c) Nake plant tours to a selected number of machine tool manufacturing and industrial enterprises to observe the production and utilization of machines under workshop conditions with a view to studying the experience gained in the creation and development of the machine tool industry in Bulgaria.

id.71-5755

We regret that some of the pages in the microfiche copy of this report may not be up to the proper legibility standards, even though the best possible copy was used for preparing the master fiche.

# The main items which will be discussed are:

# 1. Analysis of machine tool industries:

- backgroun' of the development of the machine tool building industry in Bulgaria;
- expected demand for machine tools in developing countries in the Second Development Decade.

# 2. Selection and utilization of machine tools:

- definition and selection of machine tools;
- utilization and under-utilization;
- the introduction by stages of numerically controlled machine tools;
- maintenance and repair;
- rebuilding of machine tools;
- training of local personnel.

# 3. Economy of machine tool industry:

- governing policies and plans for the development of machine tools;
- investment and co-operation with foreign partners;
- marketing;
- sales;
- credit incentives.

# 4. Pre-requisites for the creation of machine tool building industries:

- necessity of establishing machine tool building industries;
- design capabilities;
- ancillary industries foundries, forgings, bearings, electrical equipment and components, tools, etc.;
- skilled labour;
- production facilities;
- quality control and testing;
- servicing.

# 5. Technical assistance required from UNIDO:

- selection and acceptance tests of machine tools;
- utilization;
- rebuilding, maintenance and repair;
- design;
- production.

#### Organization

The Seminar is being organized by the United Nations Industrial Development Organization and the Government of the Peoples Republic of Bulgaria, acting as the host country, on a regional basis.

The following Seminar officials have been appointed:

# (a) On the part of UNIDO

Director

Mr. N. K. Grigoriev, Director Industrial Technology Division

Technical Secretary

Mr. N. N. Krainov

Industrial Development Officer Engineering Industries Section Industrial Technology Division

# (b) On the part of the Government

Director

Ing. Stilian Petrov - Gen.

Director DSO ZMM

Technical Secretaries

Ing. Michail Christov Ing. Vitan Vaselov

Duration Ten days, from 1d to 27 October 1971.

Place Slatni Pjassazi (Golden Sands) near Varna, from 18 to 24 October 1971; Gabrovo, Plovdiv and Sofia, from 25 to 27 October 1971.

#### Programme

The first part of the Seminar will begin and end with a plenary meeting. Working sessions on technical, economical and organizational problems will take place in between and visits to plants in Silistra and Ruse will be made.

The second part of the Seminar programme, from 25 to 27 October 1971, will be devoted to plant visits in Gabrovo, Plovdiv and Sofia. A plenary meeting will be held at the end of the plant tour programme to make a review of the plants visited.

### Working Language

The official working language of the Seminar will be English. If required, interpretation into other languages will be arranged.

#### Participants

A total of approximately thirty persons from developing and industrialized countries are expected to attend the Seminar.

For further details please refer to Appendix I - Plant Tour Programme.

# (a) Participants from developing countries

Participants from the developing countries invited by the United Nations Industrial Development Organization to attend the Seminar should be directly concerned with the subject of the meeting and qualified in the technical field to be able to participate in the proceedings of the meeting. These participants are expected to prepare an outline on the actual state and plans for the selection, utilization, maintenance, repair and development of machine tools in their countries. In addition, they are expected to participate activel, in the discussions and assist in the preparation of the report of the Seminar.

#### (b) Participants from developed countries

imports from industrialized countries will attend the Seminar and contribute papers, films and studies on specific subjects. In addition, the experts will act as discussion leaders at the work sessions and offer comments and suggestions and otherwise assist in the preparation of the report of the Seminar.

#### Documentation

A draft report will be prepared by a consultant appointed by UNIDO outlining the papers presented and the particular problems for discussions. The papers to be presented to the Seminar will be in English. It is envisaged that all papers will be distributed among participants prior to the Seminar.

#### Report

The report of the Seminar will be based on the agenda and the deliberations of the working sessions. It is expected to be in the form of a manual summarising country-wise, the steps and procedures which should be followed by each country in the development of the engineering industry.

#### Postal Information

Official correspondence relating to the Seminar, as well as participants, personal mail should be addressed as follows:

(a) During the period 18 to 24 October 1971:

UNIDO Regional Seminar Hotel International Slatni Pjassazi Bulguria

Telephone: 6 56 11 Tolex 021584

(b) During the period 25 to 27 October 1971:

UNIDO Regional Sominar Hotel Hemus Sofia

(c) Before and after the Seminar:

Mr. N. Krainov
Industrial Development Officer
Engineering Industries Section
Industrial Technology Division
UNIDO, P. O. Box 707
1010 Vienna, Austria

Telephone: 4350349
Cable Address: UNIDO WINN

### Shipment of Material

Participants who wish to contribute to the Seminar with films and/or informative material, are requested, if they are not bringing the material personally, to forward the same by air, well in advance of the Seminar.

Shipments should be clearly marked UNIDO REGIONAL SEMINAR and addressed to:

The Seminar Management Attention: Mr. M. Krainov c/o Hotel International Sletni Pjassazi Bulgaria

The Airway Bill must contain an exact specification of the contents of the shipment and a copy should be sent to:

Mr. N. Frainov Industrial Development Officer Engineering Industries Section Industrial Technology Division UNIDO, P. O. Box 707 1010 Vienna, Austria.

#### Travel Arrangements

Participants are requested to arrive in Sofic not later than the afternoon of 17 October 1971 and as close to that time as airline schedules will permit. Participants are expected to land at the VRAJDEENA Airport of Sofia. Near the Visa Control, a board will be displayed with necessary instructions. Transport will be available on Sunday, 17 October 1971, in the late afternoon, to travel to Slatni Pjassazi (Golden Sands) near Varna, where the Seminar will be held.

# Passport, Visa and Vaccination requirements

Participants must possess valid passports or travel documents. Before leaving their home country for Bulgaria, participants are requested to contact the nearest diplomatic or consular office of the Peoples Republic of Bulgaria, or in its absence, the nearest BALKANTURIST (official Bulgarian tourist agency), agent or general representative, to obtain the necessary visa and also arrange for any health or vaccination requirements needed in connexion with their travel.

#### Accommodations

During the period 17 to 24 October, participants will stay at the Hotel International, Slatni Pjassazi (Golden Sands) near Varna where the Seminar will be held. Participants arriving before this date will be accommodated at a hotel in Sofia. The food that will be served will not differ from food ordinarily served in middle Europe. Participants requiring special diets are requested to notify the Seminar Management of this, in time.

During the period 25 to 27 October, accommodations will be provided in accordance with the Plant Tour Programme as set out in Appendix I.

#### Registration

Registration of participants will take place from 6.30 p.m. to 8.00 p.m. on Sunday, 17 October 1971, and from 8.30 a.m. to 9.47 a.m. on Monday, 18 October 1971, in the conference area of the Hotel International. The first meeting (inaugural session) will commence at 10.00 a.m.

# Financial Arrangements

Participants invited at the expense of UNIDO will be provided with a return trip air ticket, economy class, from the airport of departure in their home countries to Sofia, and transport within Eulgaria in accordance with the programme of the Seminar. In addition, they will receive free board and lodging, and the amount of 11.00 Leva per day to cover incidental out-of-pocket expenses for the duration of the Seminar.

Participants invited to attend the Seminar at their own expense will receive free transport within Bulgaria (from/to Sofia) in accordance with the programme of the Seminar.

UNIDO will accept no responsibility for the following expenses incurred by the participants as these are the responsibility of the participants themselves or their Governments:

- (a) All expenses in the home country incidental to travel abroad, including expenditure for passports, visa fces, inoculations and other such miscellaneous items and internal travel to and from the airport of departure in the home country;
- (b) Salary and related allowance for the participants during the period of the Seminar:
- (c) Travel and costs incurred by dependents who may accompany participants;
- (d) Travel and any other costs which may be incurred by travel, other than by direct route and authorized mode;
- (e) Costs incurred by participants with respect to excess baggage, travel insurance, accident insurance, medical bills and hospitalization fees in connexion with their attendance at the Seminar;
- (f) Compensation in the event of death or disability of participants in connexion with their attendance at the Seminer;
- (g) Loss or damage to personal property of participants while attending the Seminar.

# Currency Regulations

The Bulgarian currency regulations forbid the import and export of Bulgarian currency. The official tourist rate of exchange is 2 leva per US dollar (with equivalent rates for other convertible currencies).

The Bulgarian currency system is as follows:

l leva equals 100 Stotinki

Coins: Stotinki 1, 2, 5, 10, 20, 50, and one and two leva; Notes: 1, 2, 5, 10, 20 leva.

# Weather Conditions

The temperature in October varies from 15 to 23 centigrade. It is recommended that participants bring clothing suitable for these temperatures and the possibility of rain.

#### APPENDIX I

# PLANT TOUR PROGRAMME

The Machine Tool Building and Toolmaking Association of the Peoples Republic of Bulgaria is responsible for research, design and production of various kinds of machine tools, including metal-cutting and wood-worling machines, forging machines and presses, foundry equipment, various linds of tools, dies, jigs and fixtures. The Association combines thirty-two plants, two research institutes and tochnical schools for the training of skilled personnel.

To observe the production and utilization of machines under workshop conditions with a view to studying the experience gained in the creation and development of the machine tool industry in Bulgaria, visits to the following five plants will be made:

# hednesday, 20 October 1971

7.30 a.m.

Departure from Hotel International to Silistra, a small town about 100 km. from Varna, to visit the ZMM Machine Tool Building Plant.

The plant employs '00 workers and has an annual production of about 3,000 machine tools, consisting of simple mechanical and hydraulic machine tools, including cutting-off machines, grinders, sawing machines and other machinery.

Lunch

Balcanturist - Silistra

Continue to Ruse to visit the ZIM Metal-cutting Machine Tool Production Plant.

The Plant employes 200 workers with an annual production of 160 machine tools, including automatic transfer machines, lathes, milling machines and shapers.

Departure from Ruse to Slatni Pjassazi.

#### Monday, 25 October 1971

7.30 a.m.

Departure from Hotel International to Gabrovo to visit the State Instrument Factory.

This factory employs about 1,800 workers and produces metal-cutting tools and measuring instruments and special machine tools for the fabrication of tools.

1.00 p.m.

Lunch - Balcanturist - Gabrovo

A sightseeing tour of Gabrovo will be made in the afternoon, and the night will be spent in a comfortable hotel in the vicinity of summit Stoletov. The name of the hotel is Balcanturist - Stoletov.

<sup>1/</sup>Subject to change.

### Tuesday, 26 October 1971

Departure for Plovdiv, and visit to the ZDM Wood-5.30 a.m.

working Machine Factory.

This factory produces about 2,000 machine tools per

year and employs 300 workers.

Trimonzium - Plovdiv. Lunch 1.00 p.m.

Following the plant visit, a sightseeing tour will be made, after which the participants will proceed to Sofia.

### Hednesday, 27 October 1971

Departure from Hotel Hemus, Sofia, to visit the ZIM 8.30 u.m.

Metal-cutting Machine Tool Production Plant

This plant employs 2,450 people and produces various kinds of machine tools including universal and special lathes, N/C machine tools, automatic transfer machine tools, and automatic machine lines. The annual production

is 2,660 units.

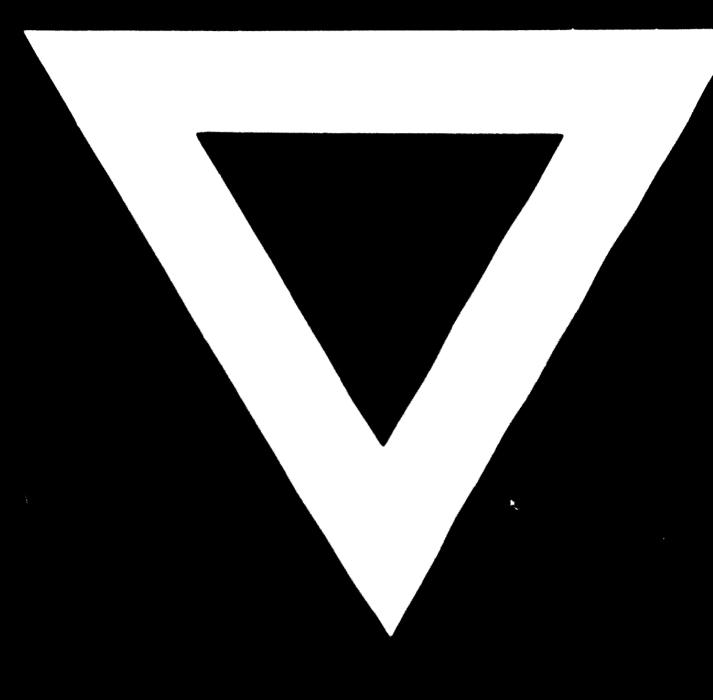
Following this visit a plenary meeting will be held to

review the plant visits made.

Lunch - DSO ZIM 1.00 p.m.

### Thursday, 28 October 1971

Departure - transport to the airport will be provided.



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