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D02902

Distr.
LIMITED

ID/WG.87/10
25 August 1971

ORIGINAL: ENGLISH

United Nations Industrial Development Organization

Regional Seminar on Machine Tools
in Developing Countries of
Europe, Middle East and North Africa

Slatni Pjassazi (Golden Sands) near
Varna, Bulgaria, 18 - 27 October 1971

COUNTRY STUDY REPORT
ON
THE MACHINE TOOL INDUSTRY
IN IRAN 1/

by

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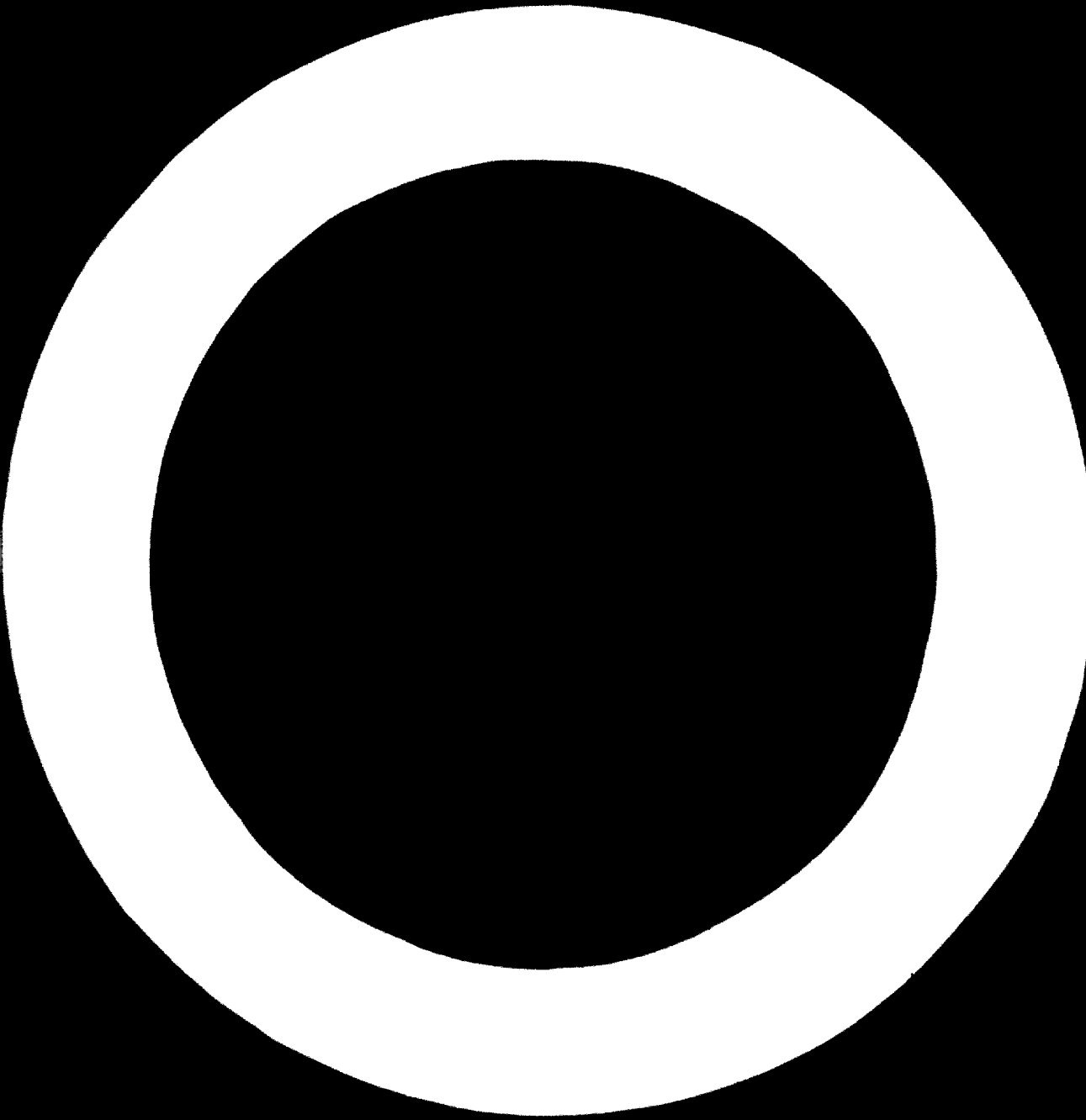

Iran has achieved good progress in the field of industry during recent years.

With regard to heavy industry, the country however, only started in 1966 with the planning and building of heavy industry plants including the machine tool producing Metallurgical and Engineering Plant (MEP) in Tabriz. After completion of the buildings and installation of machinery and equipment, this plant started, as the first of its kind in Iran, the production of simple drilling machines, two years ago.

The MEP was established on the basis of a contract concluded between the Government of Iran and the Government of Czechoslovakia in 1966.

The contract includes technical and economical assistance by Czechoslovakia to the project as well as the provision of license documentation for the production of different kinds and types of products which was planned for the factory, such as: Bench, column and radial drilling machines; double wheel grinding and polishing machines; centre lathes, milling machines, shaping machines, eccentric presses, compressors, stationary diesel engines, centrifugal pumps, single and three phase electric motors.

Other information about the Plant

- Under building area	115,000 m^2
- Other area	425,000 "
-, Total area	540,000

Production shops consist of :

a) Machining and assembly shops or so called Engineering Production Centre,

b) Grey iron, steel and nonferrous foundry, roughing and forging shops or so called Metallurgical Production Centre,

c) Pattern making shop,

d) Tool room,

e) Repair shop

- Majority of machinery and equipment are Czech made and the remaining are from so called third countries.
- Number of machinery and equipment about 650.
- Total planned investment amounts to 73,000,000 US $

- Number of employees in full run:

Technical staff	356
Administrative staff	101
Direct workers	1040
Indirect workers	720
Total	2327

- The Plant has its own training centre, training technicians and workers needed for the factory in different positions. Up until now the centre had trained about 400.

- About 100 engineers, technicians and workers in different positions have, up to now, gone through 9 months practical training courses in Czechoslovakia and in the so called third countries.

Besides the technological project, the organization and management project has also been made by the Czechoslovak Government, which has established rules of running the factory.

Due to experience gained in the past period, I think the following problems should be discussed at the seminar to find proper solutions for them:

Measures to be taken and discussed at the Seminar for safeguarding of machine tool industries in developing countries:

1. By the governments:

- to ask the assistance of foreign experts especially UNIDO when establishing new machine tool factories;

- to limit or stop the importation of products similar to the products manufactured in own factories. It goes without saying that this limitation should be in such a way that the local manufacturer is not allowed to decrease the quality level of his products;

- to facilitate the importation of raw material and components for manufacturers through decreasing of customs duties and other costs;

- to try to come to some regional agreements with other developing countries, helping each other in creating wider markets;

- to encourage and help the private sector in the establishment of an auxiliary industry to help the heavy industry cover its needs for parts and components from national sources;

- to see to the training of the technical and management staff needed for industries, through arranging suitable practical training parallel to theoretical studies at universities and institutes, and also sending trainees to developed countries to gain practical experience in respective fields and professions;
- to try to establish a unified system of wages and salaries at a country level to prevent the creation of special attracting poles in some places;
- to adopt or establish an industrial standardization as a guide line for systematic development of industries and as a common tool for eventual co-operation between different industrial units;
- to have long term industrial development plans and the foreseeing of all necessary steps to be taken for the realization of these plans;

2. By the factories themselves:

- to select the products to be manufactured, suitable technology and machinery after a deep study and seek technical assistance of foreign and especially UNIDO experts;
- to employ proper and experienced people and see to their continuous training in respective fields;
- to make use of experienced experts of developed countries, at least during the first five years of operation;
- to see to the important task of production planning activities with regard to a good market research and also capacity governed by production facilities and human factor;
- to be careful in optimum choice and consumption of material;
- to try to creat a suitable relation between the number of direct production workers and other staff in order to decreare the indirect and overhead costs;
- to see to the economic consumption of different kinds of energies;
- to take care of planned preventive repairs of machinery and equipment, thus preventing interruptions in production processes, and increasing the lifetime of production facilities;
- to take special care in quality inspection of manufactured parts and final products;
- to establish organizational rules and principles for smooth and proper running of the factory.

Importation of Machine Tools in years 1965 - 1969

Type	1965 pcs.	1966 pcs.	1967 pcs.	1968 pcs.	1969 pcs.
Lathes	993	682	1157	1272	599
Drilling Machines	279	444	752	604	230
Drinding Machines	444	311	1038	632	692
Milling Machines	13	10	21	35	44
Presses (except hydraulic)	155	248	264	317	267

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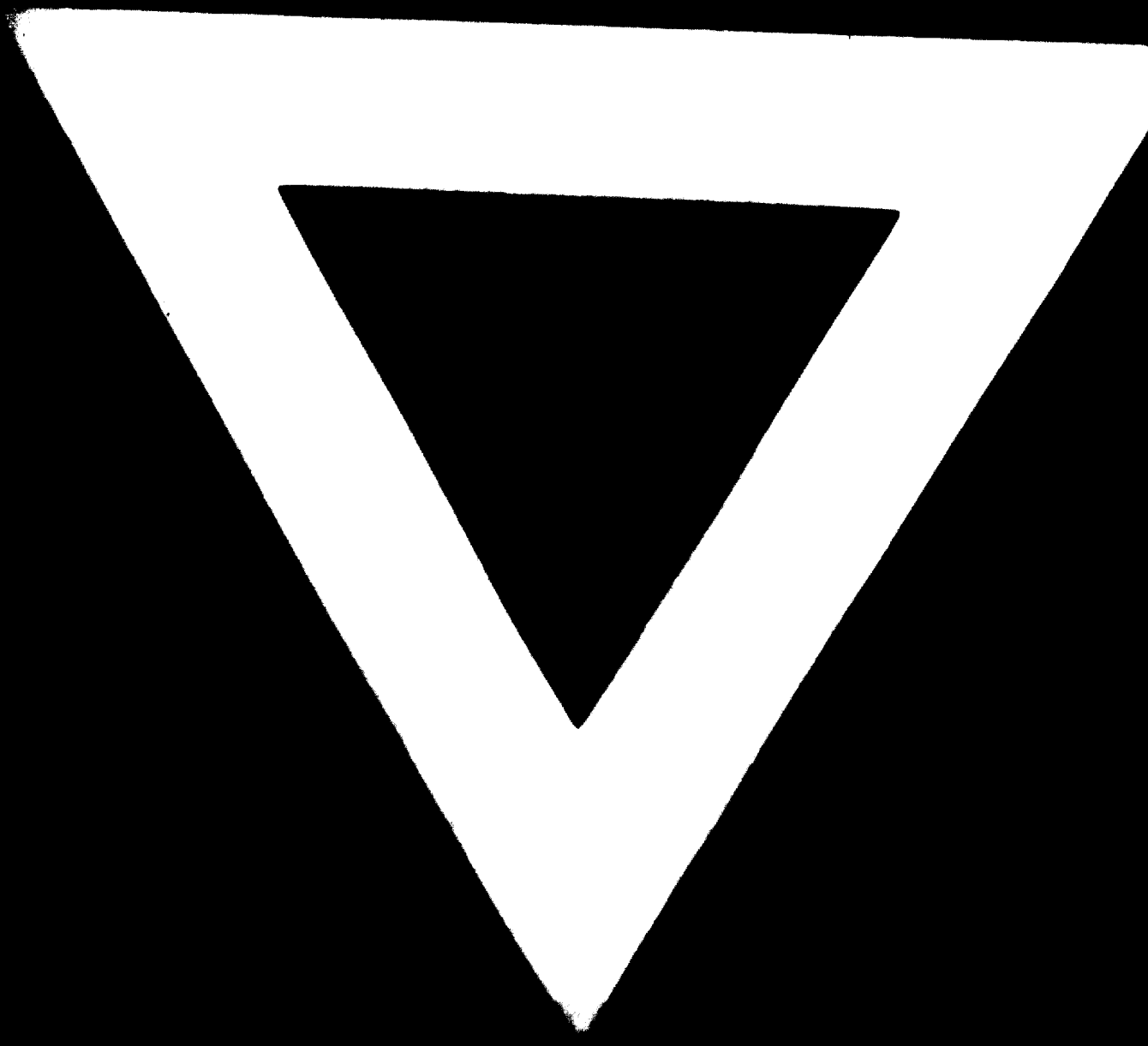

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