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D04799

Distr.
LIMITED

ID/WG.113/35
12 February 1973

ENGLISH
ORIGINAL: SPANISH

United Nations Industrial Development Organization

Regional Seminar on Machine Tools
for Countries in Latin America

Buenos Aires, Argentina
16 to 25 October 1972

Sao Paulo, Brazil
26 to 27 October 1972

THE MACHINE TOOL PNEUMATIC AND HYDRAULIC COMPONENTS INDUSTRY IN ARGENTINA[1/]

by

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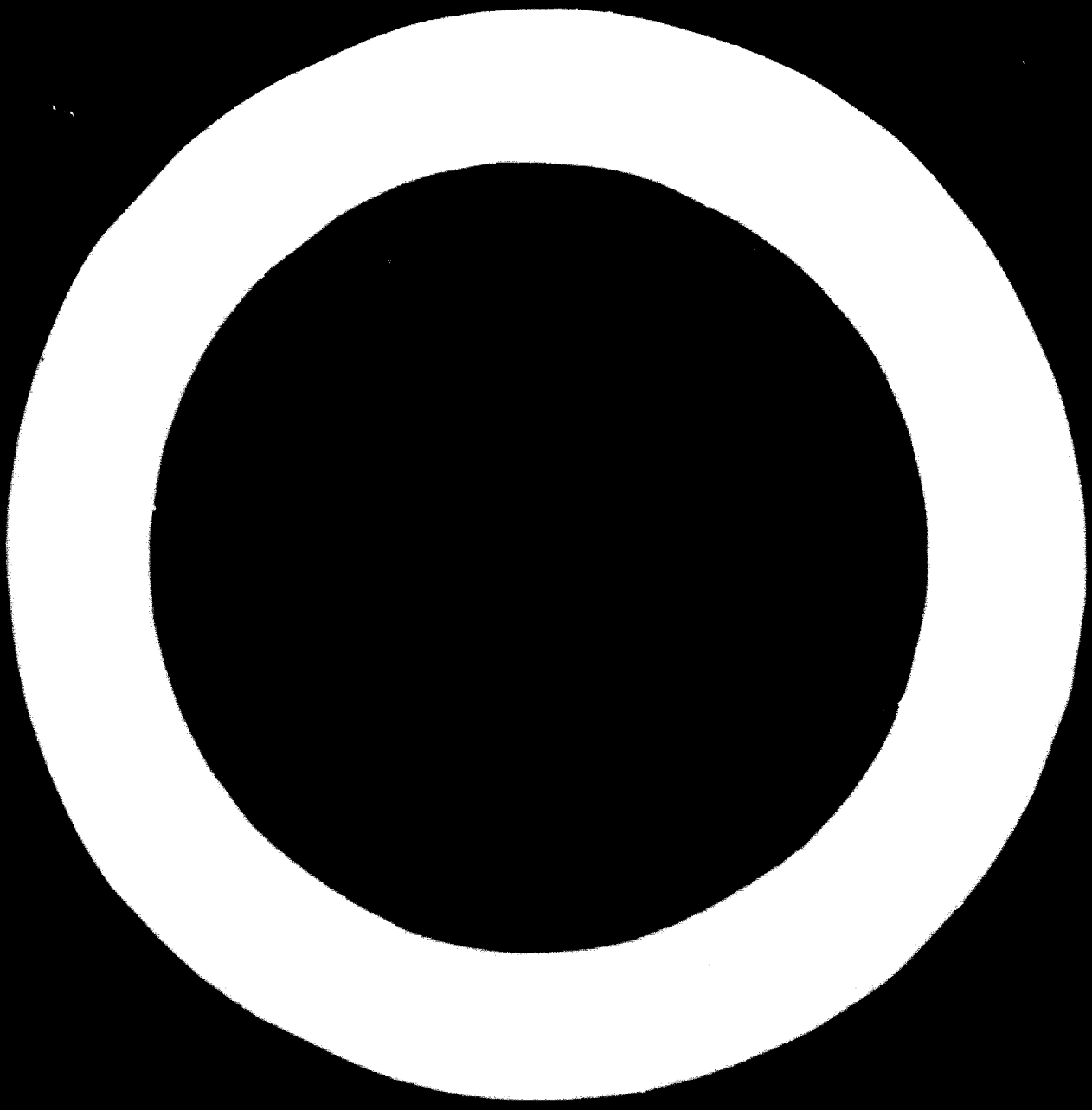
1/ The views and opinions expressed in this paper are those of the author and do not necessarily reflect the views of the Secretariat of UNIDO.



Throughout the machine tool industry, the utilization of components using pressurized fluids is steadily increasing in importance.

Thus it has been possible to develop, in Argentina, standard pneumatic and hydraulic components currently used in machine tools of modern design, with a view to meeting the requirements of the new automated production techniques.

The development of these components in Argentina can be divided into three stages:

Stage 1 - before 1960

During this period knowledge of how to use these components was not very widespread, and the sector was therefore very heterogeneous, machine tool manufacturers either making their own components or importing them.

In this period the first component factories having clear ideas on the importance of pneumatic and hydraulic components were established.

Stage 2 - from 1963 to 1971

This is the stage in which knowledge of the technique was disseminated and in which, after much hard work, intermediate technical levels in design were attained, a more unified approach was evolved, and users began to form a market, with the result that manufacturers could then produce.

Also, the latter part of this period was the time when the new models of components designed to serve multiple purposes and incorporating a technology appropriate to modern volumes and techniques (injection techniques, use of new materials, "transfer machining", test systems, etc.) began to be manufactured.

Consequently, our production range covers components for pressure generation, numerical control, distribution and final utilisation, and the designer can thus be supplied with suitable components and specialised technical assistance.

Stage 3 - from 1971 to the present day

The level attained in this field is such that today practically no pneumatic or hydraulic components are imported; they are in fact exported, competing on the world market.

The various types of pneumatic and hydraulic components concerned are:

Hydraulic motors,
Pressure generating sets and pumps,
Hydraulic and pneumatic cylinders,
Hydro-pneumatic cylinders,
Booster cylinders,
Hydraulic and pneumatic valves and electro-valves,
Different types of control valves,
Different types of accessory valves,
Filtering equipment - pneumatic circuit control and lubrication,
Logic elements for numerical control,
Hydraulic and pneumatic accessories,
Hydraulic copying devices,
Pneumatic plates,
Automatic pneumatic feeds for strip,
Small hydro-pneumatic operating units,
Hydro-pneumatic feeds for drilling machines,
Pneumatic rotary tables,
Pneumatic jaws,
Etc.

Since the range of hydraulic and pneumatic components is extensive, over twenty manufacturers are engaged in their production, each component being produced by at least two manufacturers.

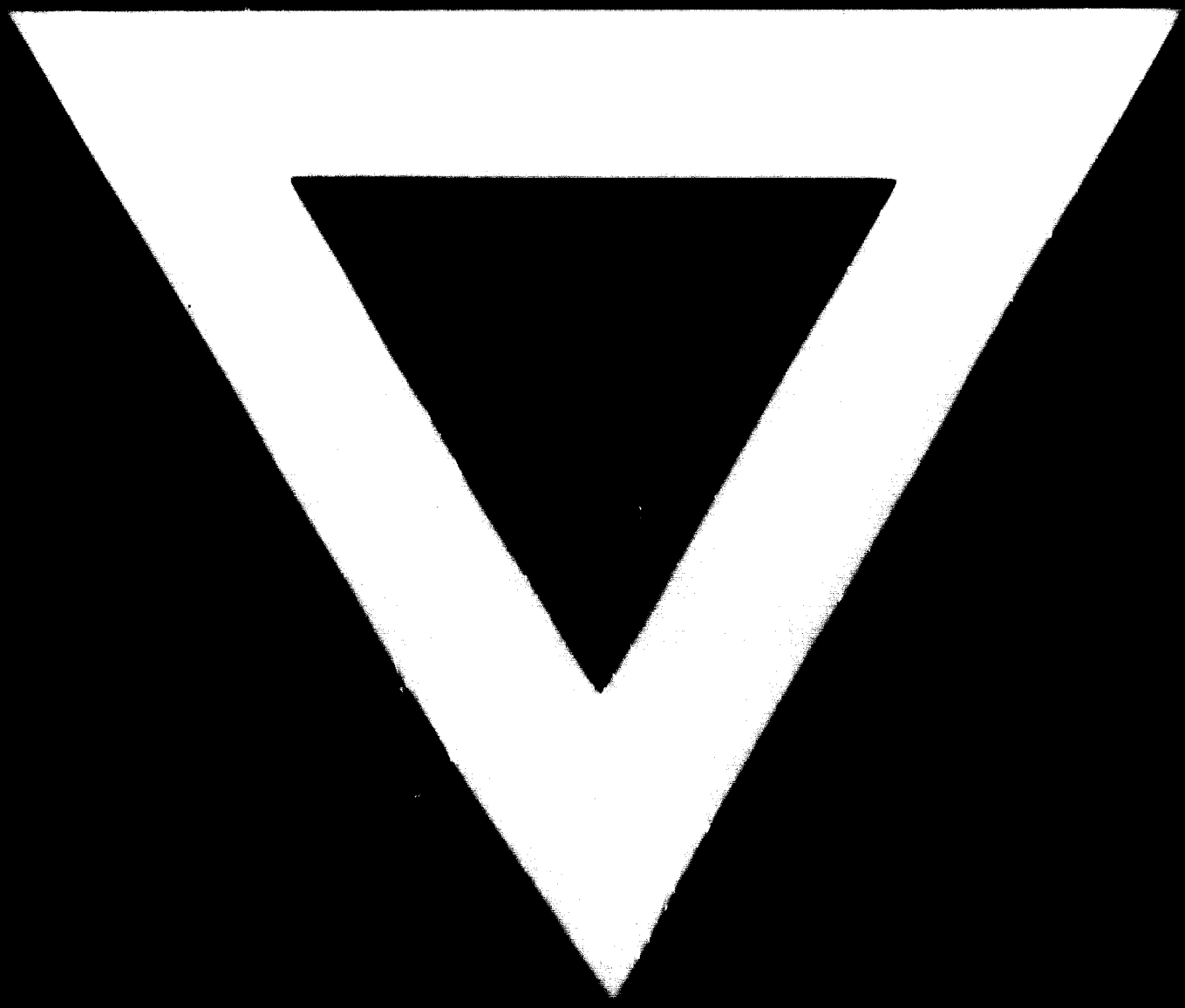
Thus there is a continuous interest in renewal and modernization, to the advantage of the user.

As a result of the development of pneumatic and hydraulic components, the market for them has expanded. In addition to the machine tool industry, the following industries are being supplied:

(1) The automotive industry,
(2) The iron and steel industry,
(3) The petro-chemical industry,
(4) The paper industry,
(5) The packing industry,
(6) The cereals processing industry,
(7) The meat industry,
Etc.

CONCLUSION

In conclusion, at present it can be affirmed that the Argentine machine tool industry has the appropriate facilities in this field, from modern pneumatic and hydraulic components and specialized courses on them, to technical assistance from manufacturers.



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