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THE DEVELOPMENT OF THE PLASTICS INDUSTRY/
IN POLAND/

by

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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.

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h. Actual situation and development plans of the plastics industry in Poland.

After the World War II the Polish plastics industry started from a nearly zero level, and despite lack of financial and technical means and any adequate scientific - technical base, there was a systematic development noted:

<u>year</u>	<u>rate of production /1000 tons/</u>
1945	0,3
1950	3,5
1960	40,0
1965	90,0
1970	220,0
1973	333,0
1975	400,0 /estimated/

A considerable advance in plastics production took place during 1958 - 1961, when production of PVC, PS, polyesters and epoxyresins was started, and production of phenolic and amino resins as well as moulding compounds was intensified. This founded the further development of plastics processing. Despite the development of the plastics manufacturing and processing industry up to 1970 this branch did not keep up with the demands of the national economy.

As a result there was a set-back in modernization of the national economy in the late 1960 's, especially in building industry, automotive and engineering industry and packaging.

Therefore the Zjednoczenie Przemysłu Tworzyw Sztucznych "ERG" /Plastics Industry Association/ was established in 1968, which

is coordinating the plastics manufacturing and processing in Poland. The Association worked out a modern program for the plastics processing, development till 1980. This program was consistently realized during the last years in accordance with the chemicalization program of the national economy.

The growth of plastics, production will be as follows:

in 1975 a 100 % growth compared with 1970
 1980 a 90 % "- "- with 1975
 1983 a 45 % "- "- with 1980.

Major plastics markets:

	1975	1980
Building	100	240
automotive and engineering		
industry	100	165
agriculture and packaging	100	165
Consumer goods and foodstuff packaging	100	160
Lighter industry	100	160

Despite the increased growth rate it is a minimum program, because the latest government program imparts more dynamism to the progress in national economy, particularly in housing, automotive etc.

The realization of the slogan " We will build a second Poland" demands an increased plastics consumption in the housing

branch as shown below:

	<u>consumption, 1000 tons</u>
1971	107
1975	315
1990	1.490

At present the Polish plastic industry is one of the most rapidly developing.

This fact finds its expression in the increased and accelerated investment program.

The investment range realized in 1971 - 1975 will be 75 % greater than was planned, and seven times greater compared with investments during 1966 - 1970.

In the past production development several hundreds of modern products were introduced in housing, electrical and automotive industry and consumer goods, thus allowing to satisfy their basic requirements.

During this period the technological barrier in plastic processing was overcome, because apart from working out own technologies, decision for the purchase of newest technologic licenses was made.

2. Description of required technical assistance from UNIDO

For the development of the plastic industry in Poland we want technical assistance concerning:

- a/ new technologies and techniques in plastics processing,
- b/ purchase of semi-commercial scale and testing equipment,
- c/ personnel training and consultations about modern technology and operating of semi-commercial and testing equipment.

ad.a/ Modern processing technology and techniques

1. Compounding
2. Fabrication technology for PVC, PP, PE and PS products including material saving /the use of fillers/.
3. Fabrication technology for foamed PVC, PS, PE and PP products /extruded and injection moulded/.
4. Injection moulded PVC products.
5. Fabrication technology:
 - PVC horticultural films with special properties,
 - composite films,
 - consumer goods, /new designs/.
6. Disposal of post - consumption plastics wastes.
7. Rotomoulding.

ad.b/ Semi - commercial scale production equipment

Foam injection moulding and foam extrusion, - film and sheet thermoforming, - composite films.

2/ Testing equipment

- Bursting strength tester
- Abrasion tester
- Blocking resistance tester

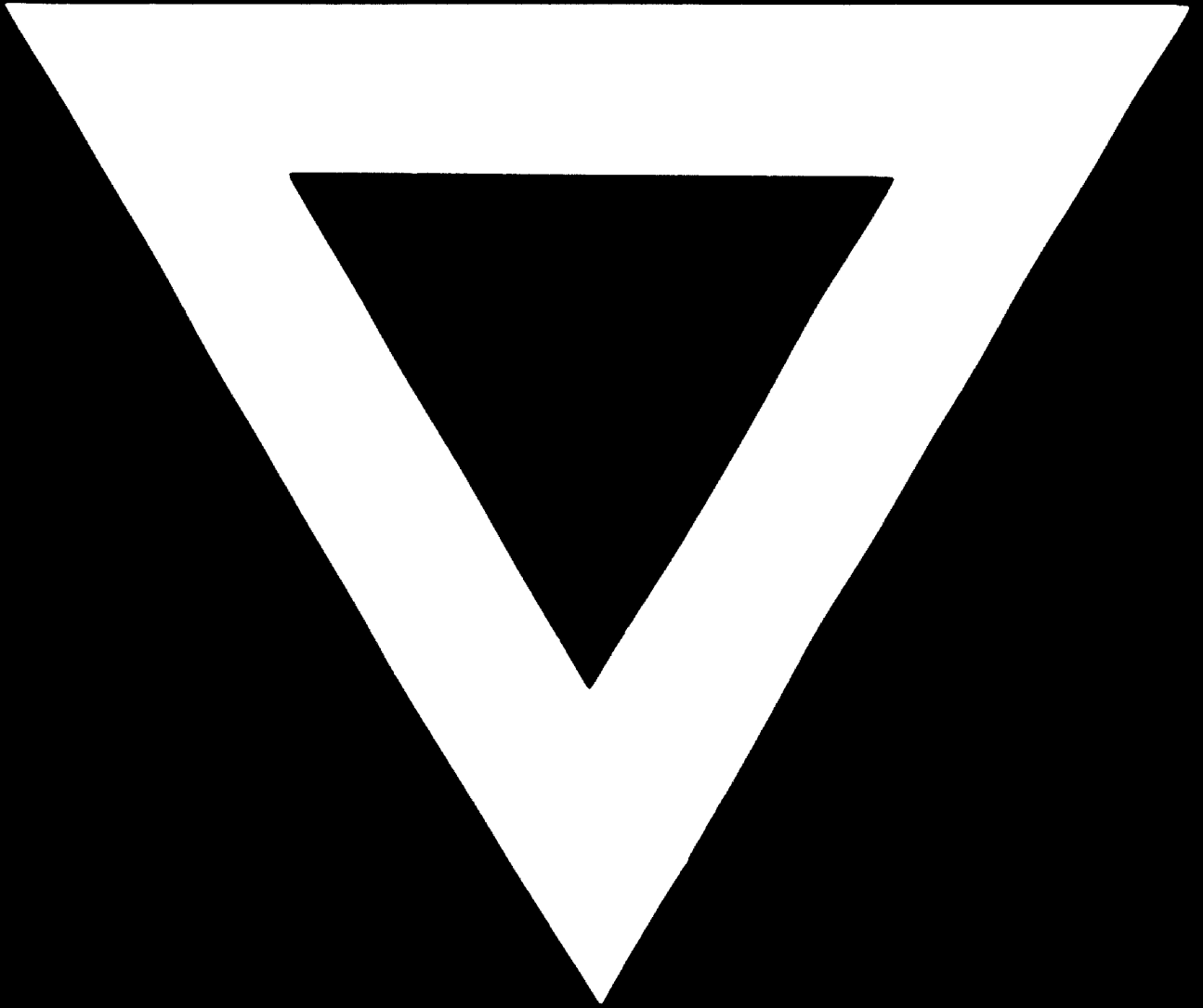
- Contraction-meter
- Tear resistance tester
- Gas permeability tester
- Differential calorimeter /Perkin - Elmer/

ad.c/ Personnel training and consultations refer to technologies cited in item a/.

Instruction in testing methods and application of:

- heat shrinkable PE films,
- foamed films,
- composite films.





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