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05908



Distr. LIMITED

ID/WG.189/ 4 25 October 1974

Original: ENGLISH

United Nations Industrial Development Organization

Fifth Training Programme in Plastics Technology, 5th Vienna, Austria, 23 September - 22 November 1974

THE DEVELOPMENT OF THE PLASTICS INDUSTRY /

by

J. A. Yacaman Flores*

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^{*} Industrial Coordinator, Polymer S.A., San Pedro Sula, Henduras

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 population of Honduras is approximately 2.7 million people. There has been a tremendous change in the plastics industry of the country.

Let us go back to 1963 which is only 11 years ago, the use of plastic was negligible. The first customers who started using it were the banana plantation owners.

Due to the high requirements of the bining divisions, they decided to buy the plant that supplied them with the materials, at the same time other people started looking at polyethylene as the savious on the packaging market so the plastic industry started its expansion in such a way that people began to use all types of products made of PI, PP, PVC and PS.

At the present time there are six consumers of plastic which I would say are big plus several other consumers which are not only dedicated to plastic industry but that have equipment in order to obtain what they need for their product packaging. The actual consumption of plastic in Honduras is around 10,000 tons a year. Polyothylene is the number one product in the market, 6,000 tons are consumed a year for different purposes such as: panana protection and packaging, food packaging, laundry, clothing, meat, etc.

The plant, where I am working, is the number one consumer of plastic materials. The consumption per year is approximately 6,000 tons. Following, you will find the percentages of the different plastic materials used.

Polyethylene 60 %
Polypropylene 30 %
Polyvinylchloride 10 %
100 %

Since the plant, where I work, is the biggest in the plastic market and since everything that I could say about the plastic industry is related to my work then let me describe what we do based on what I do and what I know of our competitors.

Polyethylene is widely used in Honduris in the fibrication of banana film, bags, liners, decorative films, color strips, toys, buckets, bottles. 50 % of the production goes to the banana industry and the

remaining 50 % which is a great increase compared to around 10; in 1970, goes to what we call domestic market. The domestic market is having a tremendous change towards polysthylene and it is expected that in the future this market will lead the consumption of Pl.

Polypropylene is used for strapping, tape, fibres and rope and until this year we are making film. With the fibres we make a product called twine which is like rope and is the number one product. It is used by the banama plantations to hold the plants so when the fruit grows, the plant will not fall down. The secondary product is the tape which is used exclusively for the production of woven bags. The demand for woven bags is so great that the capacity of the plant is too short.

Actual capacity for woven bags is around 300 tons a year.

PVC is another product that is really going strong even though our actual consumption which is only 600 tons a year, does not show it that way. it has a great future. In Mondaras PVC is mainly used in pipe and a little bit on containers.

Polystyrene is the product that is not used very much and its main use is in injection moulding.

Another product that is having a great demand is the PE flexible pipe. This product is used for irrigation and also as electrical conduit in construction. Production per year of this product is 600 tons.

The future for the plastic industry is very brilliant in Honduras since it is relatively young and besides there are so many things to do. As you have read there are only two processes being developed in Honduras which are extrusion and injection moulding and even the second one is not yet being developed as it should. The field for this industry is really wide and new equipment is being bought and new processes are being studied. The capacity installed for PVC pipe in Honduras is around 1,300 tons per year and only 600 tons are being produced due to lack of raw materials. Just a year ago the production of PVC was only 200 tons, this year we will produce three times that much; we can say the same for the rest of the products. There are plans for expansion in the woven bag production to meet local demands and export the surplus.

Of course, there is always something that could stop this growth and this are the high prices in raw materials and the lack of some of them. The economy of the country is having a realy bad year and besides this what I have mentioned before the high prices of raw materials will have a great effect on the plastic industry.

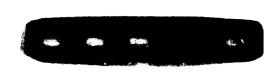
Special practical experience and information would be required on the following:

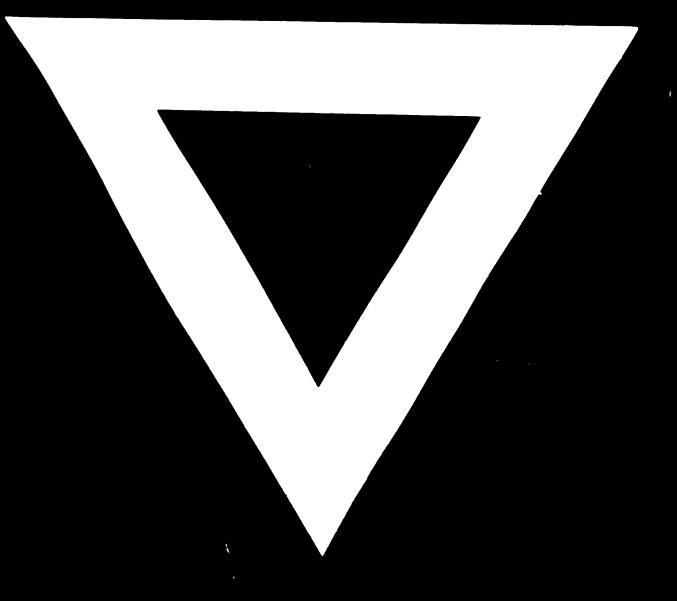
- PVC Extrusion;
- Mixing raw materials with similar melt index to obtain a better product;
- Quality control;
- Compounding. Mixing of additives.

Also, I would like to see in more details the following processes:

- PE Extrusion
- PP
- Injection moulding
- Fillers in PVC, what can be done with the impact test?

My last problem is what solution there is to the high cost of raw materials. Honduras, as you know, does not produce any raw materials and the way I see it high prices are here to stay. Therefore, something must give way and if raw materials continue to grow, then plastic consumers will have to look for a substitute if there is.





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