DIFFERENT TYPES OF POLYMERS AND THEIR PROCESSING

The objective of this work was to analyze the properties of the polymers most usually employed in order to understand the condition needed to process them.

First of all, polymers have been classified as thermoplastics, thermosets and elastomers. The characteristics of each type of polymer have been analyzed, as well as the differences between them, giving examples of them.

After that, the most important properties of some of the most widely used polymers have been explained. Polypropylene is one of this polymers and this has been the material employed in the lab to study injection conditions.

The optimal distance between the mould and the screw has been determined in order to employ the quantity of material enough to fill the mould and to get the adequate samples for tensile and flexural tests.

This project has been realized by MARIA GIANNOU in the Polytechnical School of San Sebastian at the University of the Basque Country in 2005.