

Polymer resistance

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Many inquiries from the market concern polymer resistance to all sorts of mechanical and chemical influences. Unfortunately, a super polymer resistant to everything still does not exist, although the market may well think it does when it reads certain product specifications for projects. Every polymer has its strong and weak properties and customers must make a choice based on the application. Furthermore, not only the type of polymer is important but also the form in which it is used. Is the polymer in the shape of a board or is it a yarn and, if so, is the yarn drawn giving the polymer molecules an orientation? Or is it undrawn? During the production process, is the polymer cooled slowly or rapidly so that crystallinity can be influenced and therefore properties such as tensile and bending strength? Are the molecule chains long or short? A polymer, after all, is nothing else than a chain of simple molecules. Together with numerous other parameters, these factors influence the resistance of polymers.



A civil engineer cannot be expected to know, let alone understand all these variants. He must establish what technical requirements are needed to produce a product that will work for its designated life. As a guide to customers, we enclose a comparative overview of the intrinsic properties of the polymers used in our products with information on each property. The following abbreviations for the polymers will be used.

PET = polyester
PA = polyamide
PP = polypropylene
PE = polyethene