

Engineering plastic with a HD profile: Ultraform® PRO

Case Study

BASF's two new POM grades (POM: polyoxymethylene; polyacetal) Ultraform® S2320 003 PRO and W2320 003 PRO are semi-crystalline materials having high resistance to chemicals, and a high capacity of bearing mechanical loads as well as the good sliding friction properties for which POM is well known. This makes it particularly suitable for functional components such as valves, metering systems, springs, slide and gear elements. The suffix PRO (Profile Covered Raw Materials Only) results from the requirement to use only quite specific, strictly controlled starting materials, usually from a single manufacturer. The copolymeric polyacetals are sold with practically the same service package as the plastics in the HD family. The S and W grades with an MVR of 11 and 25 cm³/10min respectively differ in their flowability and molecular weight.

Comprehensive service package for medical technology

In the field of diagnosis and therapy trusting and reliable collaboration between the manufacturers of plastics and the producers of medical technology is particularly important. Accordingly, to accompany these new products BASF offers an extensive service package that is specially adapted to the requirements of this market. In addition to application-related support it comprises compatibility tests with special chemicals and tests in accordance with important international medical technology standards (e.g. US Pharmacopeia and ISO 10993-x) as well as the preparation of drug master files (DMFs). There is also the attested intention on the part of BASF to make no significant changes to the plastic formulations defined in the drug master file. The only exceptions arise when there are external pressures, e.g. changes in the legal framework.

Unchanging formulations

In addition to this, when changes to formulations do become necessary BASF guarantees to give customers at least 36 months advance notice. At the same time BASF's own suppliers have to keep the formulations of their products constant. This service in the field of medical technology offers high benefits to customers. An unchanging formulation reduces the risk of costly new approvals for the medical device manufacturer. Furthermore, the long-term reliability of deliveries of the product ensures a high degree of certainty in planning and contributes to risk aversion in customers' businesses. The tests carried out by BASF and the approvals associated with them also help simplify testing and approval procedures for users.