SLS Selective Laser Sintering PP Polypropylene

Functional parts made of polypropylene using 3D printing

Why PP?

Polypropylene is ubiquitous in industrial applications. Components made from PP have similar properties to injectionmolded components made from polypropylene. Its low density and its extremely high elongation at break as well as its resistance to acids and alkalis make PP an ideal material for the automotive, packaging and consumer goods industries.

Possible uses for PP

Compared to other 3D printing plastics, PP has an exceptionally high elongation at break, which makes it an ideal material for film hinges and snap hooks. In the latter case in particular, the use of printed components can avoid expensive injection molding tools, especially when it comes to small series parts. Another unique selling point is the low density of PP. Components made of PP have a low dead weight, which is particularly interesting for the production of transport packaging.

Material properties.

density	0.84 g / cm ³
Tensile module	907 MPa
tensile strenght	21.4 MPa
Elongation at break	529%
Bending modulus	698 MPa