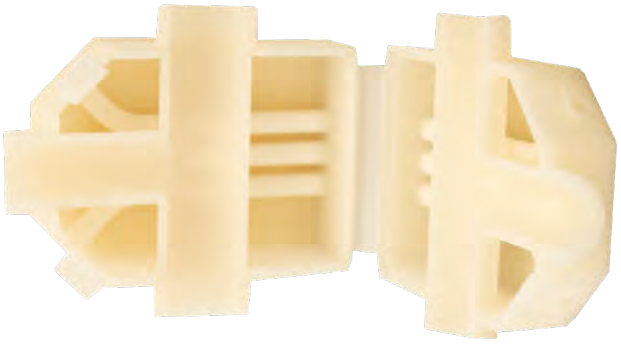
SELECTIVE LASER SINTERING

PP NATURAL



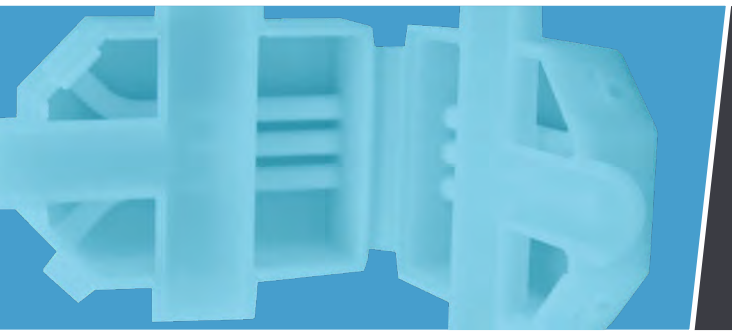
PRODUCT SPECIFICATIONS

PRODUCT DESCRIPTION:

PP Natural is real Polypropylene, one of the most commonly used plastics worldwide that can be now 3D printed in SLS technology.
The material shows high durability and is both tough and flexible. Other important characteristics are its low weight compared to other plastic materials, together with excellent chemical resistance and electrical insulation. The material also has low moisture absorption. It can be used for both functioning prototypes as well as end products.

APPLICATIONS:

The material is well suited for functional moving parts with features like snap fits. As general purpose material, it finds application in a wide variety of fields, from automotive to consumer and household products, healthcare and electrical equipment.



KEY PRODUCT BENEFITS

- High elongation at break and flexibility
- Durability and toughness
- Low weight

Property	Test Method	Value
Colour	-	White / yellowish translucent
Sintered Density	ASTM D792	0.90 ± 0.05 g/cm³
Water absorption, 20 °C, 50 % Relative Humidity	DIN EN ISO 62	0.5 ± 0.2 %
E-Module (x-y plane)	DIN EN ISO 527, test speed 10 mm/min	750 ± 150 MPa
E-Module (z plane)		750 ± 150 MPa
Tensile strength (x-y plane)		18 ± 3 MPa
Tensile strength (z plane)		15 ± 3 MPa
Elongation at break (x-y plane)		20 ± 4 %
Elongation at break (z plane)		9 ± 3 %
Vicat Softening Temperature	DIN EN ISO 306/A	105 °C

TOLERANCES:

For well-designed parts, tolerances of ± 0.20mm plus 0.002mm/mm can typically be achieved. Note that tolerances may change depending on part geometry.

PROTOLABS

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