

316L

Metal | SLM

Corrosion-proof, ductile stainless for marine, food and medical parts.

The stainless we recommend when corrosion is the main enemy. 316L stays ductile (about 50 % elongation), welds well and is accepted for food-contact and many medical uses. It is softer than 17-4 PH, so pick it for marine, chemical and hygienic environments rather than for maximum strength.

Mechanical properties

Density	7.95 g/cm ³
Hardness	200 HV
Surface roughness Ra	15 µm
Surface roughness Rz	70 µm
Yield strength	340 MPa
Elastic modulus	180 GPa
Tensile strength	530 MPa
Elongation at break	50%

Typical applications

- Marine propellers and impellers
- Pump housings
- Surgical instruments
- Implant prototypes
- Food-line fittings
- Chemical valves

Maximum part size

420 × 420 × 450mm (larger parts can be split and joined)

Available finishes

CNC-machined surfaces · E-coated · Electroplated · Glass-bead blasted · Mirror polished · Polished · Powder coated · Sandblasted · Screen printed · Spray painted, gloss · Spray painted, matte · Spray painted, soft-touch · Tapped threads · Tumbled · Welded

Values are indicative and depend on part geometry, build orientation and post-processing. For project-specific requirements contact info@3dexperts.me. Instant price: 3dexperts.me/quote