

Al 6061

Metal | SLM

Familiar 6061 aluminium for light frames and housings — easy to machine and anodise.

The same 6061 alloy engineers know from CNC work, now printed. At 2.8 g/cm³ and roughly 290 MPa tensile it is the balanced choice for light frames and housings that may later be machined, anodised or put into series production in the conventional way.

Mechanical properties

Density	2.8 g/cm ³
Hardness	95 HV
Surface roughness Ra	16 µm
Surface roughness Rz	70 µm
Yield strength	240 MPa
Elastic modulus	70 GPa
Tensile strength	290 MPa
Elongation at break	10%

Typical applications

- Lightweight frames
- Device housings
- Radiators and intercoolers
- Cylinder-head prototypes
- Pistons for testing
- Mounting plates

Maximum part size

350 × 400 × 360mm (larger parts can be split and joined)

Available finishes

CNC-machined surfaces · Colour anodised · E-coated · Electroplated · Glass-bead blasted · Hard anodised · 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