

Cu

Metal | SLM

Pure copper for maximum thermal and electrical conductivity — pickled and passivated.

Pure copper for parts whose job is to move heat or current. Printed to at least 99 % relative density, it reaches about 220 MPa tensile with 25 % elongation. Pickling and passivation are included. Build size is smaller than for steel, so large busbars may need splitting.

Mechanical properties

Density	8.94 g/cm³
Hardness	100 HV
Surface roughness Ra	12.5 µm
Yield strength	160 MPa
Elastic modulus	110 GPa
Relative density	≥99.0%
Tensile strength	220 MPa
Elongation at break	25%

Typical applications

- Busbars
- Induction coils
- Heat exchangers
- Conformal cooling inserts
- Electrical connectors
- Conductive test parts

Maximum part size

160 × 160 × 200mm (larger parts can be split and joined)

Available finishes

CNC-machined surfaces · E-coated · Electroplated · Polished · Powder coated · Sandblasted · Spray painted, gloss · Spray painted, matte · Tapped threads · Tumbled

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