Copper C110 | CU ETP

Copper C110 offers excellent conductivity and ductility.

Mechanical properties

Ultimate tensile strength	220 - 280 MPa
Yield strength	60 - 240 MPa
Young's modulus (modulus of elasticity)	115 - 120 GPa
Elongation at break	9 - 30 %

Physical properties

Weldability	Moderate to Poor

Thermal properties

Thermal expansion coefficent	17 - 17.7 10^-6/ºC
Thermal conductivity	380 - 388 W/(m·°C)

Electrical properties

Electrical resistivity	1.71 - 1.76 µΩ*cm

Post treatments

Anodizing compatibility	Not suitable

Common applications

Circuit breakers	
Vacuum capacitors	
Magnetrons	
Electrical instruments	

Copper C110 (CU ETP) CNC Machining Applications & Parts

Copper C110 (Electrolytic Tough Pitch Copper) offers excellent electrical and thermal conductivity combined with good ductility and corrosion resistance. Our precision CNC machining services handle this malleable yet challenging material to produce high-quality components for electrical and thermal applications.

Typical Parts We Machine from Copper C110:

- **Electrical Components:** Busbars, terminals, connectors, switchgear parts
- **Heat Transfer Systems:** Heat exchanger components, cooling plates, thermal management parts
- **Electronics Manufacturing:** Waveguide components, RF shielding, grounding elements
- **Industrial Machinery:** Welding tips, electrodes, machinery components

Our Machining Advantage:

We employ specialized sharp tooling and optimized machining parameters to overcome Copper C110's gummy nature, ensuring clean cuts, precise dimensions, and excellent surface finishes without work hardening.

Get an Instant Quote for your custom Copper C110 parts today.