

Copper Grades for CNC Machining

Materials	Other names	Type	Descriptions	Applications	Corrosion resistance	Post treatment capability	Welding capability	Price index	Density - g/cm ³	Young modulus - Gpa	Yield strength - Mpa	Ultimate tensile strength - Mpa	Elongation at break - %	Hardness - HB brinell	Electrical Conductivity - % at 20 °C IACS	Electrical resistivity - Ω·mm ² /m	Thermal conductivity - W/m-K
Copper Cu-ETP	C110, 2.0060	Copper	This grade is composed of 99.9% of copper. Also called "red copper", it is the most common form of copper and is universal for electrical applications. It is known for its very high electrical and thermal conductivity and excellent formability properties.	Electrical	Very good	Suitable for surface treatment	Moderate to poor	4	8.85	120	130	220	15	40-110 (HV)	101	0,017	380
Copper Cu-OFE	C101	Copper	C101 offers higher conductivity due to its purity: 99.99% of copper. 110 is generally easier to machine and thus more cost-effective.	Electrical	Very good	Suitable for surface treatment	Moderate to poor	5	8.96	125-135	60 - 240	230-270	10-30	40-110 (HV)	101	0,017	390