

CUPRO MAX

Chemical Composition (%)	Cr	Zr	Others	Cu
	0.5-1.2	0.03-0.3	max 0.2	rest

Code DIN: 2.1293, EN: CW106C, UNS No: C18150

Material Properties It is one of the most electrically conductive copper alloys. Since it is alloyed with alloyed chromium and zirconium, its hardness is higher than that of pure copper. It can be shaped by wire erosion.

Application Area Resistance welding tips and discs of mild steels and galvanized steel sheets for high production rates, steel or aluminum continuous casting molds, Ingot moulds for gravity die casting of brass and copper, electrodes of spark erosion machines (E.D.M.), electrical equipment components, studs and contacts, sealing tools, ingot, moulds or cooling inserts, shaping and cooling tools for plastic extrusion, Top crusts for centrifugal casting moulds for grey cast iron, welding tools in plastic packaging.

Heat Treatment Delivered in heat treated condition.

Mechanical Properties	Hardness	HB	135-170
	Tensile strength	N/mm ²	400-500
	Yield strength	N/mm ²	320-410
	Elongation L=5D	%	18
	Modulus of elasticity (20 °C)	GPa	122

Physical Properties	Electrical conductivity	MS/m	45
	Coefficient of thermal expansion (273 - 573 K)	10 ⁻⁶ /K	17
	Thermal conductivity (20 °C)	(W/m.K)	320
	Density	(g/cm ³)	8.9
