

Material Designation

GB	/
UNS	C18150
EN	CW106C/CuCr1Zr
JIS	/

Chemical Composition

Copper, Cu	Rem.
Chromium, Cr	0.50 – 1.20%
Zirconium, Zr	0.03 – 0.20%
Other, Total	Max. 0.20%

Physical Properties

Density	8.89 g/cm ³
Electrical Conductivity	Min. 80 %IACS
Thermal Conductivity	320 W/(m·K)
Coefficiency of Thermal Expansion	17.6 μm/(m·K)
Specific Heat Capacity	385 J/(kg·K)
Modulus of Elasticity	130 Gpa

Mechanical Properties

Specification mm (up to)	Temper	Tensile Strength Min. MPa	Yield Strength Min. MPa	Elongation Min. A%	Hardness Min. HRB
φ 3-25	TF00	450	380	15	80
	TH04	500	450	10	80
φ 25-50	TH00	410	350	15	75
	TH04	450	380	13	78
φ 50-80	TH04	380	310	15	70
> φ 80	TF00/TB00	Please send an email to ryan@corammaterial.com for more details.			

Characteristics

CAMK18150 is a precipitation hardening of low alloy copper:

1. High strength values, even at increased temperatures, with very good resistance to temper embrittlement as well as high softening temperatures.
2. In its hardened state it has a high thermal and electrical conductivity as well as a high temperature resistance.

Application

For applications requiring excellent cold workability and good hot workability as well as high electrical conductivity:

1. Resistance welding electrode, seam welding wheel.
2. Current carrying arm and current carrying shaft.
3. High voltage switch, cable connector.
4. High-speed rail motor guide, end ring, high-speed train sliding connection

Advantage

1. We actively respond to any questions from customers and provide shorter delivery times. If customers have urgent needs, we will fully cooperate.
2. We focus on controlling the production process so that the performance of each batch is as consistent as possible and the product quality is excellent.
3. We cooperate with the best domestic freight forwarders to provide customers with sea, rail and air transportation and combined transportation solutions, and have plans for transportation difficulties caused by natural disasters, epidemics, wars and other factors.

