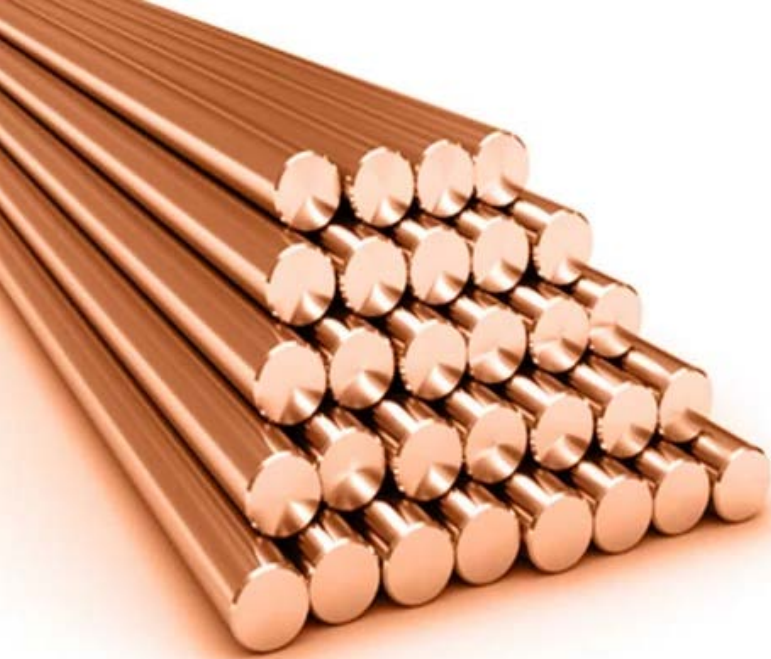


COPPER

C103 - CW008A

BORNMORE METALS



C103 - CW008A

Copper C103, also known as Oxygen-Free Copper (OFC), is a high-purity copper alloy with minimal oxygen content. It offers excellent electrical and thermal conductivity, high ductility and superior corrosion resistance, making it suitable for demanding electrical, electronic and industrial applications. Copper C103 can be annealed to restore ductility and relieve internal stresses.

KEY FEATURES

- High conductivity
- Excellent corrosion resistance
- Suitable for forming and bending
- High purity

CHEMICAL PROPERTIES

Copper (Cu)	Phosphorus (P)	Oxygen (O)	Other Impurities
99.95-99.99%	0.002%	0.001%	0.001%

MECHANICAL PROPERTIES

Tensile strength (N/mm ²)	220-260
Yield strength (N/mm ²)	70-100
Elongation (% at break)	40-50
Hardness (HV)	40-50
Proof stress 0.2% (MPa)	-

PHYSICAL PROPERTIES

Density (kg/m ³)	8940	
Modulus of elasticity (Gpa)	119	
Mean coefficient of thermal expansion	0-100°C (µm/m/°C)	16.5
	0-350°C (µm/m/°C)	17.7
	0-538°C (µm/m/°C)	18.6
Thermal conductivity	at 100°C (W/m.K)	384
	at 500°C (W/m.K)	340
Specific Heat 0-100°C (J/kg.K)	393	
Electrical resistivity (nΩ.m)	170	
Melting point (°C)	1083	

MARKET SECTORS



Electrical Industry

Power cables, busbars, PCBs, semi-conductor bases, connectors



Automotive Industry

Vehicle wiring harnesses, connectors, radiators



Industrial & Manufacturing

Heat exchangers, vacuum systems, cryogenic equipment



Medical Devices

Medical instruments, vacuum systems, MRI machines



Architecture & Construction

Roofing, cladding, electrical systems



Aerospace Industry

Spacecraft, aircraft components, communication systems