

Alloy K500

Chemical Properties

Element	Chemical Composition %
Aluminium (Al)	2.30 - 3.15 max
Carbon (C)	0.18 max
Copper (Cu)	27.0 - 33.0 max
Iron (Fe)	2.0 max
Manganese (Mn)	1.5 max
Nickel (Ni)	63.0 min
Sulphur (S)	0.010 max
Silicon (Si)	0.50 max
Titanium (Ti)	0.85 max

Mechanical Properties

Property	Value
Ultimate Tensile Strength	830-970 N/mm ²
0.2% Proof Stress	550-689 N/mm ²
Elongation	15% min
Hardness HRC (max)	35

Physical Properties

Property	Value
Density (Kg/m ⁻³)	84.3
Magnetic Permeability (20°C)	<1.005
Young's Modulus (N/mm ²)	179 x 10 ³
Specific Heat, 20°C	418
Specific Electrical Resistance, 20°C	0.62
Thermal conductivity, 20°C	17.5
Mean coefficient of thermal expansion, 20-100 °C	13.4 x 10 ⁻⁶

Product Forms

Round Bar

Disclaimer

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