

AMS 4640 - ASTM B150 C63000

## Additional Information

AMS4640 has similarities to the following standard designations and specification

ASTM B124, B150 C63000

QQ-C-465B (1) C63000

NF L14-705 CuAl10Ni5Fe4, UA10N

EN 12163/5/7 CW307G

DIN 17665 / 17672 CuAl10Ni5Fe4, WN 2.0966

## Chemical Properties

Element	Chemical Composition %
Copper (Cu)	Balance
Aluminium (Al)	10
Nickel (Ni)	4.8
Iron (Fe)	3.7
Manganese (Mn)	0.3

## Mechanical Properties

Condition	Typical Size Range (in)	Yield 0.5% eul (ksi)	UTS Rm (ksi)	Elongation (%)	Hardness (HB)
Ext. & Drawn	3/8" - 3"	54 - 87	107 - 123	12 - 20	195 - 255
Rolled	3" - 7"	46 - 73	102 - 116	15 - 25	180 - 240
Forged	>7"	46 - 73	102 - 116	15 - 25	180 - 240

## Physical Properties

Property	Value
Young's Modulus	17,400 ksi
Density	0.274 lb/in <sup>3</sup>
Melting Range	1920 - 1960 °F
Coefficient of Expansion (68 - 572 °F)	9.4-6in/in °F
Thermal Conductivity	26.5 Btu/ft h °F
Electrical Conductivity	8% IACS
Electrical Resistivity	130 Ωs (circ mil/ft)
Relative Magnetic Permeability	1.4
Specific Heat	0.09 Btu/lb °F

## Disclaimer

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