

## Copper Alloys

## AMS 4640 (C63000) Bar & Forgings

Datasheet Updated  
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### SPECIFICATIONS

Aerospace	AMS 4640
US	C63000

American nickel aluminium bronze grade designed as an equivalent to European grades.

### CHEMICAL COMPOSITION

Element	% Present
Iron (Fe)	0.00 - 3.70
Manganese (Mn)	0.00 - 0.30
Aluminium (Al)	0.00 - 10.00
Nickel (Ni)	0.00 - 4.80
Copper (Cu)	Balance

### ALLOY DESIGNATIONS

- AMS 4625
- UNS C63000
- ASTM B150

### SUPPLIED FORMS

- Bar
- Forgings
- Rod

### APPLICATIONS

- Marine fasteners, hardware and fittings
- Aerospace landing gear components, thrust washers, gears, control bushes, faucet balls, springs & worm wheels
- Non-sparking safety tools
- Valve stems and seats
- Wear plates
- Welding clamps
- Valve spindles and components
- Fasteners
- Bearing bushes

### CHARACTERISTICS

- Very good strength and toughness
- High resistance to corrosion and erosion
- Retention of properties at cryogenic temperatures
- Excellent resistance to shock, wear and abrasion
- Spark resistance
- Good fabrication and welding properties
- Anti-galling

### MECHANICAL PROPERTIES

Property	Value
Elongation A50 mm	12-25 %
Hardness Rockwell B	180-240 HRB

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