



NICKEL ALUMINUM BRONZE

EQUIVALENT SPECIFICATIONS

ISO	CuAl10Ni5Fe4
European	CuAl10Ni5Fe4
BS	CA 104
JIS	C 6301
Russian	BrAZN10.4.4

Spec Equivalents: AMS 4640, SAE J463, QQ-C-465B, ASME SB150, ASTM B-150, B-124, B-171, B-283

C63000 (AMS 4640 - CDA 630) Nickel Aluminum Bronze alloy is an excellent choice for applications involving heavy loads, abrasive wear resistant, friction, abrasive wear and corrosion. The addition of nickel increases the alloys strength without diminishing its excellent ductility, toughness and corrosion resistance. Typical applications for C63000 nickel aluminum bronze included aircraft landing gear components, strut bearings, main pistons, trunnion bearings and similar vital components.

TYPICAL USES for C63000 Nickel Aluminum Bronze:

INDUSTRIAL: Hydraulic Bushings for Earth Moving Equipment, Corrosion Resistant Articles, Bushings, Bearings, Heat Exchanger Flanges, Heat Exchanger Headers, Tanks, Valve Balls, Structural Members, Pump Shafts, Aircraft Parts, Valve Guides, Plunger Tips, Welded Piping Systems, Balls, Gears, Cams, Pump Parts, Shafting, Condenser Tube for Power Stations and Desalting Units, Valve Seats **MARINE:** Pump Parts, Bolts, Nuts, Propellers, Ship Propellers **PLUMBING:** Faucets

CHEMICAL COMPOSITION

	Al	Cu	Fe	Mn	Ni	Si	Sn	Zn
Min/Max	9.0 - 11.0	Rem	2.0 - 4.0	1.5	4.0 - 5.5	0.25	0.2	0.3
Nominals	10.0000	82.0000	3.0000	-	5.0000	-	-	-

PHYSICAL PROPERTIES

Product Property	US Customary
Coefficient of Thermal Expansion	9.0 Å • 10 ⁻⁶ per oF (68-572 F)
Density	0.274 lb/in ³ @ 68 F
Electrical Conductivity	7 %IACS @ 68 F
Electrical Resistivity	116.0 ohms-cmil/ft @ 68 F
Melting Point Liquid US	1930 F
Melting Point Solid US	1895 F

SIZES AVAILABLE :

ROUND RODS/BARS
HEX
SQUARE
FLAT
BILLETS
INGOTS

8mm To 100 mm
10mm To 60mm
10mm To 60mm
10mm Min Thickness and max Width 120mm
Up to 200 mm
As per Specification

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