NWB®

High Performance Bearing Technology

C95510 NICKEL ALUMINUM BRONZE (AMS 4880)



This is one of the most popular landing gear bushing materials specified today along with C63000 material. This continuous / centrifugal cast alloy is heat treated and exhibits high mechanical strength which meets the properties of C63000 (AMS 4640). In many cases C95510 (AMS 4880) can be substituted for C63000 with the advantage of this material being available in tube form, which provides economic cost savings for you, the customer.

Alternative Specifications

Continuous	**Centrifugal**
ASTM B-505	ASTM B-271
AMS 4880	AMS 4880
SAE J461, J462	SAE J461, J462

Physical Properties

(Based on C95500)

Melting Point - Liquidus	1930 F
Melting Point - Solidus	1900 F
Density	0.272 lb/in^3 at 68 F
Specific Gravity	7.53
Electrical Resistivity	122.8 ohms-cmil/ft at 68 F
Electrical Conductivity	8.5% IACS at 68 F
Thermal Conductivity	24.2 Btu · ft/(hr · ft2·°F) at 68F
Coefficient of Thermal Expansion	9.0 ·10^{-6} per °F (68-572 F)
Specific Heat Capacity	0.1 Btu/lb/°F at 68 F
Modulus of Elasticity in Tension	16000 ksi
Magnetic Permeability	1.2
Machinability Rating	50

Room Temp Tensile & Hardness Data

SECTION SIZE (INCHES)	TENSILE STRENGTH (KSI) MIN	YIELD STRENGTH (KSI) MIN	ELONGATION IN HD MIN	BRINELL (3000 KG)
1" AND UNDER	105	62.5	9%	-
1" AND OVER	95	50	8%	195

Typical Uses

Aerospace

Landing Gear Bushings & Bearings, Valve Guides, Stems, and Seats

Other Industrial

Corrosion Resistant Parts, Wear Rings, Machine Tool Parts, Piston Guides, Worm Wheels, Hot Mill Gurdes

Marine

Propeller Hubs, Wear Rings, Hardware, Worm Gears, Shafts, Sleeves

Chemical Composition

	Cu(1)	Al	Fe	Mn	Ni(1)	Sn	Zn
min/max	78.0 min	9.7-10.9	2.0-3.5	1.5	4.5-5.5	.20	.30
nominal	-	10.3	2.7	-	5.0	-	-

(1) Ni value includes Co.
Note: Cu + Sum of Named Elements, 99.8% min.

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