



C63200 NICKEL ALUMINUM BRONZE

ASTM B150 ASTM B124 ASTM B171 ASTM B124

UNS No.		Aluminum	Copper	Iron	Lead	Manganese	Nickel	Silicon
C63200	Min/Max	8.7-9.5	Rem	3.5-4.3	0.02	12-20	4.0-4.8	0.1
	Nominals	9.0000	82.0000	4.0000	-	1.6000	4.4000	-

C63200 Bronze is a highly versatile alloy renowned for its exceptional strength, corrosion resistance, and excellent machinability. It is commonly supplied in various forms, including bar, plate, and forgings, making it suitable for a wide range of applications across different industries. In marine environments, C63200 Bronze is particularly valued for its durability and resistance to seawater corrosion. Typical applications include propellers, pumps, valves, and fittings, where reliable performance is crucial. Its ability to withstand harsh conditions while maintaining structural integrity makes it an ideal choice for demanding marine applications, contributing to the longevity and efficiency of maritime operations.

Fabrication Properties

Density @ 68°F	0.276 lb/in ³
Melting Range	1905-1940 °F
Hot Formability	Good
Cold Formability	Fair
Machinability Rating (C36000 = 100)	30
Brazing	Fair
Soldering	Fair
Gas-shielded Arc Welding	Excellent
Oxy-acetylene Welding	Not recommended
Coated Metal-Arc Welding	Good
Resistance Welding: Spot and Seam	Good
Resistance Welding: Butt	Good

Mechanical Properties

BAR Properties				
Temper	Size	Tensile (KSI Min)	Yield @ 0.5% min ksi	Elongation % Min
TQ50	Up to 3"	90	50	15
	Over 3" to 5"	90	45	15
	Over 5" to 12"	90	40	15
O20	All Sizes	90	40	15
O25	All Sizes	90	40	15
PLATE Properties				
Temper	Size	Tensile (KSI Min)	Yield @ 0.5% min ksi	Elongation % Min
M20/O25	Up to 2"	90	36	10
	Over 2" to 3-1/2"	85	33	10
	Over 3-1/2" to 5"	80	30	10

