



MARMETAL

C90300 TIN BRONZE

ASTM B271 ASTM B505 ASTM B584 QQ-C-390

UNS No.	Copper	Tin	Lead	Zinc	Nickel incl. Cobalt	Iron	Antimony	Sulfur	Phosphorus	Aluminum	Silicon
C90300	86.0-89.0	7.5-9.0	0.30 max	3.0-5.0	1.0	0.20 max	0.20 max	0.05 max	0.05 max	0.005 max	0.005 max

C90300 Tin Bronze, also known as Navy G and SAE 620, offers excellent corrosion resistance with high wear resistance and low coefficient of friction. CDA C90300 Gear Bronze is well suited for applications involving high loads and low speeds. C90300 Tin Bronze is available as centrifugal cast, continuous cast and sand cast. CDA C90300 Navy G bronze has a wide variety of uses, including bushings, bearings, gear blanks, pump bodies, valve bodies and steam fittings.

Fabrication Properties

Density @ 68° F	0.318 lb/in ³
Melting Range	1570-1832° F
Casting Yield	Medium
Drossing	Low
Effect on Section Size	High
Fluidity	Medium
Gassing	Medium
Machinability rating (C36000= 100)	30
Brazing	Good
Soldering	Excellent
Gas-shielded arc welding	Fair
Oxy-acetylene welding	Fair
Coated metal-arc welding	Fair

Mechanical Properties

Form	Specification	Tensile, min ksi (MPa)	Yield, max ksi (MPa)	Elongation in 2", % min
Centrifugal Cast	ASTM B271	40 (276)	18 (124)	20
Continuous Cast	ASTM B505	44 (303)	22 (152)	18
Sand Cast	ASTM B584	40 (276)	18 (124)	20

