



C86300 HIGH-STRENGTH MANGANESE BRONZE

ASTM B271 ASTM B505 ASTM B584 QQ-C-390

UNS No.	Copper	Tin	Lead	Zinc	Nickel incl. Cobalt	Iron	Aluminum	Manganese
C86300	60.0-66.0	0.20 max	0.20 max	22.0-28.0	1.0	2.0-4.0	5.0-7.5	2.5-5.0

C86300 High-Strength Manganese Bronze, also known as SAE 430B, offer some of the highest mechanical properties available in cast bar. C86300 Manganese Bronze has good corrosion and wear resistance and is well suited for applications involving high loads and low speeds. C86300 Manganese Bronze is available as centrifugal cast, continuous cast and sand cast bar. CDA C86300 Manganese Bronze is ideally suited for heavy duty applications, including bridge pins, bushings, wear rings, clamps hydraulic cylinder parts and rudders.

Fabrication Properties

Density @ 68° F	0.283 lb/in ³
Melting Range	1625-1693° F
Casting Yield	Low
Drossing	High
Effect on Section Size	Low
Fluidity	Medium
Gassing	Low
Machinability rating (C36000 = 100)	8
Brazing	Poor
Soldering	Poor
Gas-shielded arc welding	Poor
Oxy-acetylene welding	Poor
Coated metal-arc welding	GOOD

Mechanical Properties

Form	Specification	Tensile, min ksi (MPa)	Yield, max ksi (MPa)	Elongation in 2", % min
Centrifugal Cast	ASTM B271	110 (758)	60 (414)	12
Continuous Cast	ASTM B505	110 (758)	62 (427)	14
Sand Cast	ASTM B584	110 (758)	60 (414)	12

