



C937 HIGH-LEADED TIN BRONZE

ASTM B271 ASTM B505 ASTM B584 QQ-C-390

UNS No.	Copper	Tin	Lead	Zinc	Nickel incl. Cobalt	Iron	Aluminum	Antimony	Sulfur	Phosphorus	Silicon
C93700	78.0-82.0	9.0-11.0	8.0-11.0	0.8 max	0.50 max	0.70 max	.005	0.50 max	0.08 max	1.5 max	0.005 max

C93700 High-Leaded Tin Bronze is also known as SAE 64 and 80-10-10 Bronze. The addition of tin increases the strength of alloy C937. The lead found in CDA 937 Tin Bronze acts as a natural lubricant and contributes to this alloys excellent machinability and good anti-friction properties. C93700 has reasonable corrosion resistance to seawater and brine and good overall wear resistance. C937 Bronze is available as centrifugal cast, continuous cast and sand cast bar. CDA 937 High-Leaded Tin Bronze is ideally suited for high speed, light duty applications, including crank shafts, washers, bushings, bearings, bearing plates and pump impellers.

Density @ 68° F	0.320 lb/in ³
Melting Range	1403-1705° F
Casting Yield	High
Electrical Conductivity % IACS at 68°F	10
Thermal Conductivity Btu/ sq ft/ ft hr/ °F at 68°F	27.1
Specific Heat Capacity Btu/ lb /°F at 68°F	0.09
Modulus of Elasticity in Tension ksi	11000
Machinability rating (C360 = 100)	80
Brazing	Good
Soldering	Good
Gas-shielded arc welding	Not recommended
Oxy-acetylene welding	Not recommended
Coated metal-arc welding	Not recommended

Form	Specification	Tensile, min ksi (MPa)	Yield, min ksi (MPa)	Elongation in 2", % min
Centrifugal Cast	ASTM B271	30 (207)	12 (83)	15
Continuous Cast	ASTM B505	35 (241)	20 (138)	6
Sand Cast	ASTM B584	30 (207)	12 (83)	15