

THIS IS TOUGH STUFF



ECO BRONZE™
HIGH PERFORMANCE LEAD FREE BRONZE



LEAD-FREE BRONZE ENGINEERED FOR PERFORMANCE

ECO BRONZE has proven to be a great alternative to the standard C93200 leaded bronze alloy, while also providing lead-free, arsenic-free, and bismuth-free advantages. Tests show ECO BRONZE has a low coefficient of friction, superior compressive strength, and excellent machinability. ECO BRONZE is your environmentally friendly, cost effective, tough stuff bearing material.

To learn more or obtain a list of ECO BRONZE Bearing manufacturers visit:

www.ECOBRONZE-USA.COM

ph: 800-537-4291 • email: ecobronze@chasebrass.com



CHASE BRASS
AND COPPER COMPANY, LLC

SERVICE • SELECTION • SOLUTIONS



MADE IN THE USA



CHEMISTRY SPECIFICATION (ASTM B30)

Cu (%)	Si (%)	P (%)	Pb (%)	Fe (%)	Sn (%)	Ni (%)	Mn (%)	Sb (%)
75-78	2.7-3.4	0.05-0.20	0.09 max	0.10 max	0.30 max	0.20 max	0.10 max	0.10 max

MECHANICAL PROPERTIES

ECO BRONZE C87850:

Tensile Strength (min) KSI	65
Yield Strength (min) KSI	25
Elongation (min) %	8
Brinell Hardness (500 lb load)	103

PHYSICAL PROPERTIES

Melting Point - Liquidus (°F)	1616
Melting Point - Solidus (°F)	1571
Density (lb/cu in.)	0.300
Electrical Conductivity (%IACS at 68°F)	8
Thermal Conductivity (Btu/sq ft/ft hr/°F at 68°F)	21.8
Coefficient of Thermal Expansion (x10-6/°F, 68-212°F)	10.3
Coefficient of Thermal Expansion (x10-6/°F, 68-392°F)	10.3
Coefficient of Thermal Expansion (x10-6/°F, 68-572°F)	10.4
Specific Heat Capacity (Btu/lb/°F at 68°F)	0.09

FABRICATION PROPERTIES

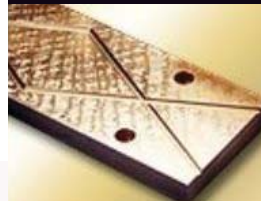
Joining Technique	Rating
Brazing	Excellent
Butt Welding	Good
Seam Welding	Good
Soldering	Excellent
Spot Welding	Good

THERMAL TREATMENTS

Treatment	Minimum	Maximum
Stress Relief	Not Required	
Annealing	930°F	1112°F
Hot Working	1200°F	1400°F

MACHINABILITY

Process	Rating
CNC	100%
Multispindle	85%



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