

C89831 Federalloy® I-844

Bronze Family:	Bismuth Tin Bronze
Type:	Copper alloy
Solids:	½" to 10" OD
Tubes:	1⅞" to 9" OD
Rectangles:	Up to 15" wide
Shape/Form:	Bar stock, flats/rectangular bar, hex, squares

BENEFITS:

Good machinability, unique Federalloy technology enables production engineers to tailor any Federalloy alloy to their own requirements, good polishing and plating characteristics, better castability at lower temperatures which results in lower costs to end users, assures that elongation approximates its leaded alloy counterparts, "no burn-in" feature enables Federalloy castings to have more definition which results in crisper markings and more legible identification numbers, superior microstructural characteristics, improved finish requires less shot blast which reduces cleaning costs and shortens cycle times

APPLICATIONS:

High Speed, Heavy Pressure Bearings, Corrosion Resistant, Pressure Tight Castings, Impellers, Pumps

Chemical Composition

Cu%	Sn%	Pb%	Zn%	Fe%	Ni%	Sb%	P%	S%	Al%	Mn%	Si%	Bi%
87.00-91.00	2.70-3.70	0.10	2.00-4.00	0.30	1.00	0.25	0.05	0.08	0.005	N/A	0.005	2.70-3.70

Note: Single values represent maximums.

Mechanical Properties

Tensile	Yield	% Elongation in 2"	Hardness
29 ksi min	13 ksi min	5% min	55 typical Bhn (500 kg)

Machinability

Alloy	Machinability Rating	Density (lb/cu in.)
C89831	85	0.318