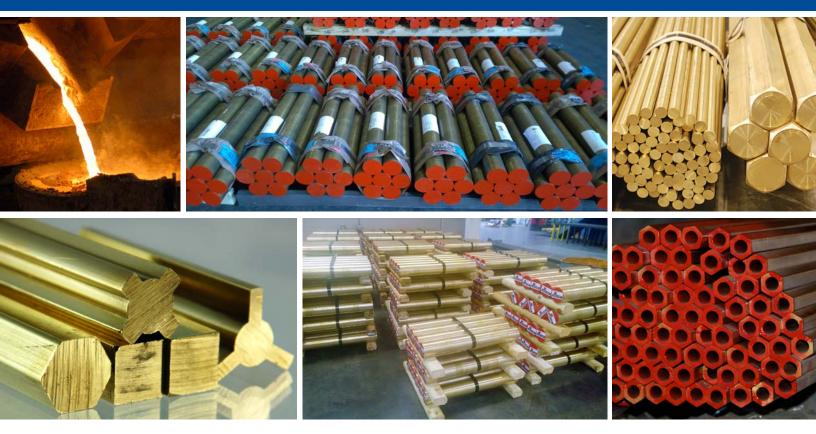
# C36000 FREE-MACHINING BRASS

Offered in solid, flats, hollow bars, and profiles.



C36000 is the most versatile and commonly used copper alloy bar stock used in both the North and South American Markets, second only to copper itself! It is used excessively to make an indescribable amount and variety of screw machine products. It's 100% machinability stems from a favorable interaction between the material's basic structure and a few percents of lead. The result is an alloy with good engineering properties and the ability to be machined at an extremely low cost.

## **Typical Uses**

### Automotive

Fluid Connectors, Threaded Inserts for Plastic Molding, Hose Barbs, Couplings, Fittings, Sensor Bodies, Thermostat Parts and Profiles

### **Builders Hardware**

Lock Bodies, Latches, Hardware, Fittings, Hinges

#### Fasteners

Bolts, Nuts, Screws, Barbs, Cable Glands

### **Other Industrial**

Automatic High Speed Screw Machine Parts, Valve Stems, Valve Seats, Fluid Connectors, Nozzles, Unions, Adapters, Pinions, Gears, Faucet Components, Pneumatic Fittings, Gauges

### Plumbing

Plumbers' Brass Goods, Faucet Stems, Faucet Seats, Plumbing Fittings, Hose Barbs

#### Plastic

Insert Molding Components

## Sizes Available from NBM

Hollow Bar	up to 3" O.D. (with min w/t of 3/16")
Solid Bar	3/32" - 16" diameter
Hex Bar	5/32" - 4" hex
Rectangular Bar	1/8" - 2" thick and to 8" wide
Square Bar	1/8" - 4" square
Profiles / Sections	made to order

## **Similar or Equivalent Specifications**

ASTM B-16, B-249	SAE J461, J463
AMS 4610	MIL-V-18436

# NBM Metals www.nbmmetals.com

The Leading USA Manufacturer & Master Distributor of Brass, Bronze, & Copper Alloys

# **C36000 FREE-MACHINING BRASS**

Chemical Composition, Thermal Properties, Physical Properties

# **Chemical Composition**

circinic							
	<b>Cu</b> <sup>(1)</sup>	Pb	Zn	Fe			
min	60.0	2.5	-	-			
max	63.0	3.0	Rem	0.35			
	amed Elements, 99.7% min.						

# **Thermal Properties**

Treatment	Minimum*	Maximum*
Annealing	800	1100
Hot Treatment	1300	1450

\*Measured in Fahrenheit

# **Physical Properties**

Melting Point - Liquidus °F	
Melting Point - Solidus °F	
Density lb/cu in @ 68 °F	
Specific Gravity	8.5
Electrical Conductivity % IACS @ 68 °F	
Thermal Conductivity Btu/ sq ft/ ft hr/ °F at 68°F	67
Coefficient of Thermal Expansion 10 <sup>-6</sup> per °F (68-212 °F)	
Specific Heat Capacity Btu/lb/ °F @ 68 °F	0.09
Modulus of Elasticity in Tension ksi	
Modulus of Rigidity ksi	
Machinability Rating	

The values listed on this document represent reasonable approximations suitable for general engineering use. Due to commercial variations in composition and to manufacturing limitations, they should not be used for specification purposes. See applicable A.S.T.M. Specification references.



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