



**All America Threaded Products, Inc.**  
**MID-ATLANTIC DIVISION**

731 Martha Avenue

Lancaster, Pennsylvania 17601

Phone: (717) 283-4344 Fax: (717) 283-4677

www.AATProd.com

## 360 Brass

C360000 Free machining brass, produced from a combination of copper and zinc, has the highest machinability of all copper alloys, and is the standard against which all the others are compared to 360 Brass, known for its strength and resistance to corrosion with properties closely resembling that of steel, is one of the most popular copper alloys used today. 360 Brass can be precision machined easily. Although ductile in its softened state, 360 Brass is a strong material to work with and maintains its strength even under some of the most demanding conditions. 360 Brass forms a thin protective "patina", which, unlike steel and iron, will not rust when exposed to the atmosphere. As a high-density material, 360 Brass is ideal for heavy industrial parts.

### ANALYSIS

<i>Copper (Cu)</i>	<i>Iron (Fe)</i>	<i>Lead (Pb)</i>	<i>Zinc (Zn)</i>
60-63	0.35 max	2.5-3.7	32.95-37.15

Conforms to ASTM B16

### MECHANICAL PROPERTIES

<i>Tensile Strength (PSI)</i>	<i>Yield Strength (PSI)</i>	<i>Elongation in 2"</i>	<i>Rockwell Hardness</i>	<i>Melting Point</i>	<i>Electrical Conductivity (%)</i>	<i>Machinability Rating (%)</i>
55,000	25,000	10	B60-80	1,630-1,650	26	100

\* 360=100% Above is representative of 1" rd sampling of C360000 Brass

### APPLICATIONS

360 Brass has a wide range of applications, such as screw machine parts, couplings, bushings, connectors, fittings, circuit board relays, electronic components, switches, nuts, bolts, valve stems and valve components, pump shafts, brackets, frames, fixtures, ornamental works, and used extensively in the musical instrument, electrical equipment, plumbing, central heating, seawater lines and desalination fields.

### MACHINABILITY AND WELDABILITY

360 Brass is the highest rated (100%) of the copper alloys and is the standard in which all other copper alloys are compared. 360 Brass has just fair hot forming capabilities and very poor cold forming characteristics. Welding is not recommended, although 360 Brass has low to fair soldering and brazing capabilities. 360 Brass has poor butt-welding characteristics.

### HEAT TREATING

#### FORGING

The recommended hot working temperature for 360 Brass is 1300°-1450°F.

#### ANNEALING

The annealing temperature of 360 Brass is 800°-1100°F.