C46400 NAVAL BRASS PLATE

Cut to size | Waterjet cutting | Ready for Immediate Shipment!















Wrought strengthening and the addition of tin gives C46400 Naval Brass a resistance to dezincification, greatly inhibiting seawater corrosion at higher-than-normal temperatures. C46400 Naval Brass is resistant to wear, fatigue, galling, and stress corrosion cracking. It also offers good strength levels combined with an excellent hot formability. Its uses are mainly in seawater applications such as marine hardware, balls, nuts, bolts, rivets, valve stems and propeller shafts.

Typical Uses

Hardware: Aircraft Turnbuckle Barrels, Balls, Bolts, Marine Hardware, Nuts, Propeller Shafts, Rivets, Structural Uses, Valve Stems

Industrial: Condenser Plates, Welding Rod

Similar or Equivalent Specifications

Plate

ASTM B171

Rod

ASTM B21, ASTM B124

Shapes

ASTM B21, ASTM B124, ASTM B283

Sizes Available from NBM

 Plate
 37"W / 48" W / 61" W X 120"L

 Sheet
 37"W / 48"W / 61" W X 120"L

 Sheet
 up to 6"

- Larger than listed sizes are available on request.
- Our waterjet cutting service can provide your company with precision blanks, near net shape parts, and semi finished components.
- We maintain a large inventory of plate and sheet stock suitable for use in a wide variety of applications.



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

C46400 NAVAL BRASS PLATE

Chemical Composition, Thermal Properties, Physical Properties

Chemical Composition

	Cu ⁽¹⁾	Fe	Pb	Sn	Zn	
min	59.0	-	-	0.5	Rem	
max	62.0	0.1	0.2	1.0	Rem	

^{1.} Cu + Sum of Named Elements, 99.6% min.

Thermal Properties

Treatment	Minimum*	Maximum*
Annealing	800	1100
Hot Treatment	1200	1500

^{*}Measured in Fahrenheit

Physical Properties

Melting Point - Liquidus °F.	1650
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Melting Point - Solidus °F	
Density lb/cu in @ 68 °F	0.304
Specific Gravity	8.41
Electrical Conductivity % IACS @ 68 °F	26
Thermal Conductivity Btu/ sq ft/ ft hr/ °F at 68°F	67
Coefficient of Thermal Expansion 10 ⁻⁶ per °F (68-212 °F)	11.8
Specific Heat Capacity Btu/lb/ °F @ 68 °F	0.09
Modulus of Elasticity in Tension ksi	15000
Modulus of Rigidity ksi	5600
Machinability Rating %	30

The values listed on this document represent reasonable approximations suitable for general engineering use. Due to

