Product Datasheet



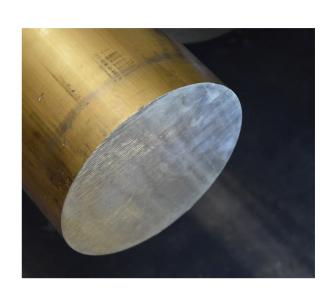
Lead-Free Naval Brass Service. Quality. Value.

High corrosion resistance

C46400 is an ideal product for use in marine and offshore applications.

C46400 is a lead-free naval brass designed for primary forming into wrought products. C46400 is the UNS designation while CW712R is the EN designation. Offering good strength and rigidity, the addition of tin gives the alloy greater corrosion resistance and resistance to dezincification. Therefore, C46400 is far less susceptible to the effects of saltwater corrosion. With other notable benefits such as wear, fatigue and galling resistance, the alloy also provides good resistance to stress corrosion cracking (SCC).

C46400 benefits from good overall strength.



Key Features

- Good overall strength
- Excellent corrosion resistance
- Resistance to dezincification
- Good rigidity
- Can be hot worked

Applications

- Naval hardware
- Propeller shafts
- Missile components
- Plumbing hardware
- Pressure vessels

Chemical Composition (weight %)

	Cu	Fe	Pb	Sn	Zn
Min	59.0			0.5	
Max	62.0	0.10	0.20	1.0	Rem

Mechanical Properties (typical)

Tensile Strength	Yield Strength	Elongation at break (in 431.8mm)	Shear Modulus
379 - 607 MPa	172 - 455 MPa*	50%	39 GPa

^{*} Yield strength dependent on temper.

We stock C46400 naval brass in hex, round, square, flat, sheet and plate forms.

UK Service Centres: Quality & Testing: Smiths Belfast 02895 908 897 Smiths Leeds 0113 307 5167 Smiths Biggleswade 01767 604 704 Smiths Manchester **0161 794 8650** ISO 9001 Smiths Birmingham 0121 728 4940 Smiths Norwich 01603 789 878 Smiths Nottingham 0115 925 4801 Smiths Bristol 0117 971 2800 CERTIFIED Smiths Chelmsford 01245 466 664 Smiths Redruth 01209 315 512 Smiths Verwood 01202 824 347 Smiths Horsham 01403 261 981 Main Office www.smithmetal.com info@smithmetal.com 0845 527 3331