

BRODER METALS GROUP Alloy 400

Alloy 400 is a nickel-copper alloy that is resistant to sea water and steam at elevated temperatures., used widely for valves, fasteners and marine engineering.

Alloy 400 Specifications and Stock

BS 3076 NA13
ASTM B164 N04400
ASTM B164 N04405
QQ-N-281

Broder Metals Group stock Alloy 400 in sizes 12.7mm dia to 250mm, however we can provide additional sizes with quick lead times on request.

Applications

- Chemical and hydrocarbon processing equipment
- Valves
- Pumps
- Propeller shafts
- Oil and freshwater tanks
- Fittings
- Fasteners
- Heat exchangers

Mechanical Properties—room temperature tensile properties

Condition	Yield Strength 0.2% offset		Tensile Strength		Elongation % in 2"	Elastic Modulus (E)	
	Psi	Mpa	Psi	Mpa		Psi	Gpa
Allealed	35000	240	75000	520	45	26 x 10 ⁶	180
Hot rolled as rolled	45000	310	80000	550	30	26*10 ⁶	180



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Alloy 400 Chemical Composition by percent

Carbon	0.3 Maximum
Silicon	0.5 Maximum
Manganese	2.0 Maximum
Sulfur	0.24 Maximum
Nickel	63.0 - 70.0
Copper	28.0 - 34.0
Iron	2.5 Maximum
Aluminium	0.5 Maximum

Alloy 400 is just one of a range of nickel alloys stocked by Broder Metals Group Ltd – please see our website for the full range stocked: www.broder-metals.com



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