

C	Cu	Mn	Ni	S	SI
MAX		MAX	MIN	MAX	MAX
0.15	28.0-34.0	1.25	63.0	0.02	0.50

CHEMICAL COMPOSITION %

DESCRIPTION

Alloy 400 is used for its excellent combination of corrosion resistance, strength, ductility and weldability. The corrosion resistance in seawater is especially good under high velocity conditions. Alloy 400 also is generally not susceptible to stress corrosion cracking.

DESIGN FEATURES

- Outstanding resistance to neutral and alkaline salt.
- One of few metallic materials which can be used in contact with fluorine, hydrofluoric acid, hydrogen fluoride and their derivatives.
- High resistance to caustic alkalis.
- Can be used in contact with dilute solutions of mineral acids such as sulfuric and hydrochloric, particularly if they are non-aerated.
- Resistance to chloride induced stress corrosion cracking.
- Good mechanical properties from sub-zero temperatures up to 1020F.

AVAILABILITY

SPECS

SEAMLESS PIPE	1/2" - 8"	B165
WELD PIPE	8" - 12"	B165
BUTT-WELD FITTINGS	1/2" - 8"	B366
FLANGES	1/2" - 8"	B164, B564,
		B16.5
BAR	1" - 8"	B164, B564
		Q0N-281D
PRESSURE FITTINGS	1/2" - 2"	B366
150# FITTINGS	1/4" - 1"	B366
TUBING	1/4", 3/8", 1/2"	B165
PLATE/SHEET	3/16" - 1"	B127
FORGINGS		B564

TYPICAL APPLICATIONS

Feed-water and steam generator tubing in power plants
 Brine heaters and evaporator bodies in salt plant
 Sulfuric and hydrofluoric acid alkylation plant
 Industrial heat exchangers
 Cladding for crude oil distillation columns
 Splash-zone sheathing in offshore structures
 Propeller and pump shafts for seawater service
 Plant for uranium refining and isotope separation in the production of nuclear fuel
 Pumps and valves used in the manufacture of chlorinated hydrocarbons
 Monoethanolamine (MEA) reboiler tubes

TENSILE REQ

Tensile Strength	(KSI) 81
Yield Strength	(KSI) 36

KSI can be converted to MPA (Megapascals) by multiplying by 6.895.