

(UNS N06625)

#### Availability:

Welded Pipe: 1/2" - 8" Butt-Weld Fittings: 1/2" - 8" Flanges: 1/2" - 8" Bar: 1" - 4 1/2"

# Specifications:

ASTM B443, B705, B366, B446 B564

ASME SB443, SB705, SB366 SB446, SB564

## **Description:**

Alloy 625 is a nickel-chromium alloy used for its high strength, excellent fabricability and outstanding corrosion resistance. Service temperatures range from cryogenic to 1800° F. Alloy 625 strength is derived from the stiffening effect of molybdenium so that precipitation-hardening treatments are not required. This combination of elements also is responsible for superior resistance to a wide range of corrosive environments of unusual severity, as well as to high temperature effects such as oxidation and carburization.

### **Typical Applications:**

- Used for structures in contact with seawater and subject to high mechanical stress
- Flue gas scrubber components
- Chimney linings
- Superphosphoric acid production equipment
- Sour gas production tubes
- · Offshore industry, marine equipment

#### **Tensile Requirements:**

Tensile Strength Yield Strength (KSI) = 120 - 150 (KSI) = 60 - 95

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

#### **Grade 1 - Chemical Composition %**

C	Cr	Fe	Ni	Al	Ti	Мо	Cb + Ta	Mn	Si	Р	S	Co
MAX		MAX	MIN	MAX	MAX			MAX	MAX	MAX	MAX	MAX
0.10	20.0 - 23.0	5.0	58.0	0.40	0.40	8.00 - 10.00	3.15 - 4.15	0.50	0.50	0.015	0.015	1.0

