ALLOY 625 | UNS N06625

emetalsinc.com | +1 (877) 971-4500

Description

Alloy 625 is a corrosion and oxidation resistant nickel alloy that is used both for its high strength and outstanding aqueous corrosion resistance. Its outstanding strength and toughness is due to the addition of niobium which acts with the molybdenum to stiffen the alloy's matrix. Alloy 625 has excellent fatigue strength and stress-corrosion cracking resistance to chloride ions. This alloy resists a wide range of severely corrosive environments and is especially resistant to pitting and crevice corrosion.

Product Capabilities

Form Name	Size Range	Schedules	Specifications
Welded Pipe	1/2"-36"	10S, 40S, 80S	ASTM B705 / ASME SB705
Seamless Pipe	1/2"-36"	10S, 40S, 80S, 160, XXH	ASTM B444 / ASME SB444
Buttweld Fittings	1/2"-36"	10S, 40S, 80S, 160	ASTM B366 / ASME SB366
Flanges	1/2"-36"	300#, 600#	ASTM B564 / ASME SB446
Pressure Fittings	1/2"-2"	3000# THRD/SW	ASTM B564 / ASME SB564 ASTM B446 / ASME SB446

Limiting Chemical Composition %

C	Cr	Fe	Ni	Al	Ti	Co + TA
MAX 0.10	20.0-23.0	MAX 5.0	MIN 58.0	MAX 0.40	MAX 0.40	3.15-4.15

Typical Industrial Applications

- Aircraft ducting systems
- Aerospace
- Jet engine exhaust systems
- Engine thrust-reverser systems
- Specialized seawater equipment
- Chemical process equipment

Tensile Requirements

Tensile Strength ksi (min.)	Yield Strength ksi (min.)
120	60