

Description

Alloy 800H and 800HT are nickel-iron-chromium alloys with good strength and excellent resistance to oxidation and carburization in high-temperature exposure. These nickel steel alloys are identical except for the higher level of carbon in Alloy 800H, and the addition of up to 1.20% aluminum and titanium in Alloy 800HT.

Product Capabilities

Form Name	Size Range	Schedules	Specifications
Welded Pipe	1/2"-36"	10S, 40S, 80S	ASTM B514 / ASME B514
Seamless Pipe	1/2"-36"	40S, 80S, 160	ASTM B407 / ASME SB407
Buttweld Fittings	1/2"-36"	40S, 80S, 160	ASTM B366 / ASME SB366
Flanges	1/2"-36"	150#, 300#	ASTM B564 / ASME B408
Pressure Fittings	1/2"-2"	300#/6000#/9000# THRD/SW	ASTM B564 / ASME B408

Limiting Chemical Composition %

C	Cr	Fe	Ni	Al	Ti	Al/Ti
0.06-0.10	19.0-23.0	MIN 39.5	30.0-35.0	0.15-0.60	0.15-0.60	0.85-1.20

Typical Industrial Applications

- Ethylene furnace quench boilers
- Industrial furnaces
- Heat-treating equipment
- Chemical and petrochemical processing
- Super-heater and re-heaters in power plants
- Pressure vessels
- Heat exchangers

Tensile Requirements

Tensile Strength ksi (min.)	Yield Strength ksi (min.)
72.5	25