310S/310H | UNS S31008/S31009

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

Description

Stainless steel 310S/310H is an austenitic heat resistant alloy with excellent resistance to oxidation under mildly cyclic conditions through 2000°F. Its high chromium and nickel contents provide comparable corrosion, superior resistance to oxidation and the retention of a larger fraction of room temperature strength than the common austenitic alloys like Type 304.

Product Capabilities

Form Name	Size Range	Schedules	Specifications
Welded Pipe	1/2”-36”	10S, 40S, 80S	ASTM A312 / ASME SA312
Seamless Pipe	1/2”-36”	10S, 40S, 80S, 160, XXH	ASTM A312 / ASME SA312
Buttweld Fittings	1/2”-36”	10S, 40S, 80S	ASTM A403 / ASME SA403
Flanges	1/2”-36”	150#, 300#	ASTM A182 / ASME SA182
Pressure Fittings	1/2”-2”	3000# THRD/SW	ASTM A182 / ASME SA182

Limiting Chemical Composition %

Cr	Ni	C	Si	Mn	P	S	Mo	Cu	Fe
24.0-26.0	19.2-22.0	MAX .25	MAX 1.50	MAX 2.00	MAX .045	MAX .03	MAX .75	MAX .50	Balance

Typical Industrial Applications

- Heat exchanger and heat recuperator tubing
- Molten salt applications
- Sulfur-bearing gas atmospheres

Tensile Requirements

Temperature (°F)	Tensile Strength ksi (min.)	Yield Strength ksi (min.)
70	80.0	35.0
1000	67.8	20.8
1200	54.1	20.7
1400	35.1	19.3
1600	19.1	12.2