

310S/310H

(UNS S31008)

Availability:

Seamless Pipe: 1/2" - 8"
Weld Pipe: 8" - 12"
Butt-Weld Fittings: 1/2" - 8"
Bar: 1" - 8"

Specifications:

ASTM A312, A403, A182
ASME SA312, SA403, SA182

Description:

Alloy 310S has excellent resistance to oxidation under constant temperatures up to 2000° F. Cyclic conditions reduce its oxidation resistance, and a maximum operating temperature of 1900° F is generally recommended if cycling is involved. Having a lower coefficient of expansion than most 300 stainless steels, 310S may be used in operations involving moderately severe thermal cycling, such as rapid air cooling. Its not usually recommended for liquid quenching. 310S is widely used in moderately carburizing atmospheres such as petro-chemical plants.

Typical Applications:

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

Tensile Requirements:

Tensile Strength Yield Strength
(KSI) = 75 (KSI) = 30

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

Chemical Composition %

C	Cr	Mn	Mo	Ni	P	S	Si
MAX		MAX	MAX		MAX	MAX	MAX
0.08	24.0 - 26.0	2.0	0.75	19.0 - 22.0	0.045	0.03	1.00