

321/321H

(UNS S32100/S32109)

Availability:

Seamless Pipe: 1/2" - 16"
Weld Pipe: 6" - 12"
Butt-Weld Fittings: 1/2" - 12"
Butt-Weld Flanges: 1/2" - 12"
Flanges: 1/2" - 8"
Bar: 1" - 12"

Specifications:

ASTM A312, A403, A182,
A479, A276
ASME SA312, SA403, SA182
SA479, SA276

Description:

These titanium-bearing stainless steels are stabilized against carbide precipitation. They are designed for operation within the damaging temperature range where carbide precipitation develops. In this type of steel, the carbon combines preferentially with titanium to form a harmless titanium carbide, leaving the chromium in solution to maintain full corrosion resistance. Type 321 is basic type 304 modified by adding titanium in an amount at least 5 times the carbon-plus-nitrogen contents.

Typical Applications:

- High temperature chemical process
- Heat exchanger tubes
- Refineries
- High temperatures steam service

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	Ni	P	S	Si	Ti
MAX		MAX		MAX	MAX	MAX	
0.08	17.0 - 19.0	2.0	9.0 - 12.0	0.045	0.030	1.00	Trace*