

## Description

Stainless 321 is a heat resistant, titanium stabilized, austenitic alloy that is commonly used for service in the 1000°F-1600°F temperature range. Stainless 321 is primarily used in applications that involve continuous and intermittent service temperatures within the carbide precipitation range of 800°F-1500°F.

## 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"	40S, 80S, 120, 160, XXH	ASTM A312 / ASME SA312
Buttweld Fittings	1/2"-36"	40S, 80S, 160	ASTM A403 / ASME SA403
Flanges	1/2"-36"	150#, 300#, 600#	ASTM A182 / ASME SA182
Pressure Fittings	1/2"-2"	300#/6000#/9000# THRD/SW	ASTM A182 / ASME SA182

\*The material is also available with a stabilization heat treatment upon request: Pipe - A312 S6, Buttweld Fittings - A403 S2, Flanges - A182 S10.

## Limiting Chemical Composition %

C	Cr	Mn	Ni	P	S	Si	Ti
MAX 0.08	17.0-20.0	MAX 2.0	9.0-13.0	MAX 0.04	MAX 0.03	MAX 0.75	Trace*

\*The titanium content shall not be less than 5 times the carbon content and not more than 0.60%.

Note: 321H requires the titanium content to be not less than 4 times the carbon content and not more than 0.60%.

## Typical Industrial Applications

- High temperature chemical processes
- Heat exchanger tubes
- Refineries
- High temperature steam service

## Tensile Requirements

Tensile Strength (ksi)	Yield Strength (ksi)
75	30