

Products & Sizes

Coil	Sheet	Bar	Precision Reroll Strip
0.010" - 0.125"	0.010" - 0.125"	0.250" - 6.250"	0.0008" - 0.015"

316/316L Chemical Composition

	Element	Min	Max
C	Carbon	-	0.08
Mn	Manganese	-	2.00
Si	Silicon	-	0.75
Cr	Chromium	16.00	18.00
Ni	Nickel	10.00	14.00
Mo	Molybdenum	2.00	3.00
P	Phosphorus	-	0.045
S	Sulfur	-	0.030
N	Nitrogen	-	0.10
Fe	Iron	-	Balance

316/316L Chemical Composition

	Element	Min	Max
C	Carbon	-	0.030
Mn	Manganese	-	2.00
Si	Silicon	-	0.75
Cr	Chromium	16.00	18.00
Ni	Nickel	10.00	14.00
Mo	Molybdenum	2.00	3.00
P	Phosphorus	-	0.045
S	Sulfur	-	0.030
N	Nitrogen	-	0.10
Fe	Iron	-	Balance

Industry Standards

- PWA-LCS
- GE Aircraft Engine (GT193)
- GE Aviation S-SPEC-35 AeDMS S-400
- RR SABRe Edition 2
- DFARS Compliant

Industry Applications

- Oil & petroleum refining equipment
- Aerospace structures
- Stainless steel base plates
- Food processing equipment
- Pulp and paper processing equipment
- Soap and photographic handling equipment
- Textile industry equipment
- Architectural
- Pharmaceutical processing equipment

Physical Properties

Property	Value
Density	0.29 lb/in ³ (8.027 g/cm ³)
Modulus of Elasticity in Tension	29 x 10 ⁶ psi (200GPa)
Melting Range	2540-2630°F (1390-1440°C)
Modulus of Shear	11.9 x 10 ⁶ psi (82 GPa)
Magnetic Permeability	H/m Annealed 1.02 Max @ 200 H

Linear Coefficient of Thermal Expansion			
Temperature Range		Mean Coefficient of Thermal Expansion	
°C	°F	cm/cm/°C	in/in/°F
20 - 100	68-212	16.5 · 10 ⁻⁶	9.2 · 10 ⁻⁶
20 - 500	68-932	18.2 · 10 ⁻⁶	10.1 · 10 ⁻⁶
20 - 1000	68-1832	19.5 · 10 ⁻⁶	10.8 · 10 ⁻⁶

Thermal Conductivity			
Temperature Range		W/m · K	Btu/(hr/ft ² /in/°F)
°C	°F		
20-100	68-212	14.6	100.8

Specific Heat			
°C	°F	J/kg °K	Btu/lb/°F)
20	68	450	0.108
93	200	450	0.116

Electrical Resistivity		
Type	Value at 68°F (20°C)	
	Microhm-cm	Microhm-in.
316	29.1	74.0

Mechanical Properties

Property	Type 316 (S31600)	Type 316L (S31603)	Type 317 (S31700)	Type 317L (S31703)
Yield Strength 0.2% Offset psi MPa	30,000 205	25,000 170	30,000 205	30,000 205
Ultimate Tensile Strength psi MPa	75,000 515	70,000 485	75,000 515	75,000 515
Percent Elongation in 2 in. or 51mm	40.0	40.0	35.0	40.0
Hardness, Max. Brinell RB	217 95	217 95	217 95	217 95