

Products & Sizes

Coil	Sheet	Plate	Precision Reroll Strip
0.016" - 0.125"	0.016" - 0.125"	0.1875" - 2.000"	0.0008" - 0.015"

304 Chemical Composition

	Element	Min	Max
C	Carbon	0.08	-
Mn	Manganese	-	2.00
P	Phosphorus	-	0.045
S	Sulfur	-	0.03
Si	Silicon	-	0.75
Cr	Chromium	18.000	20.000
Ni	Nickel	8.000	12.00
N	Nitrogen	-	0.10
Fe	Iron	-	Balance

Industry Standards

- W.NR 1.4307
- PWA-LCS
- GE Aircraft Engine (GT193)
- GE Aviation S-SPEC-35 AeDMS S-400
- RR SABRe Edition 2
- DFARS Compliant

Industry Applications

- Aerospace structures
- Base plates and fasteners
- Food and beverage industry
- Pressure containing applications
- Architectural structures and design features, moldings and trims
- Sanitary or cryogenic applications
- Chemical industry processing equipment
- Containers for chemicals or transport
- Burst discs

Physical Properties

Property	Value
Density	0.29 lb/in ³ (8.03 g/cm ³)
Modulus of Elasticity in Tension	29 x 10 ⁶ psi (200GPa)
Magnetic Permeability	H/m Annealed 1.02 Max @ 200 H

Linear Coefficient of Thermal Expansion

Temperature Range		Mean Coefficient of Thermal Expansion	
°C	°F	mm/mm/°C	in/in/°F · 10 ⁶
20 - 100	68 - 212	16.6 · 10 ⁻⁶	9.2 · 10 ⁻⁶
20 - 870	68 - 1600	19.8 · 10 ⁻⁶	11 · 10 ⁻⁶

Thermal Conductivity			
Temperature Range		W/m · K	Btu/(hr/ft ² /in/°F)
°C	°F		
100	212	16.3	9.4
500	932	21.4	12.4

Specific Heat			
°C	°F	J/kg °K	Btu/lb/°F)
0-100	32-212	500	0.12

Electrical Resistivity			
°C	°F	Microhm-cm	Microhm-in.
20	68	72	28.3
100	212	78	30.7
200	392	86	33.8
400	752	100	39.4
600	1112	111	43.7
800	1472	121	47.6
900	1652	126	49.6

Mechanical Properties

Property	302, 304	304L
0.2% Offset Yield Strength, psi (MPa)	42 (290)	35 (241)
Ultimate Tensile Strength, psi (MPa)	90 (621)	85 (586)
Elongation % in 2 in. (50.8 mm)	55	55
Hardness Rockwell	B82	B80