

Products & Sizes

Coil	Sheet	Plate	Bar
0.032" - 0.1425"	0.032" - 0.1425"	0.1875" - 2.500"	0.250" - 5.000"

17-4 PH Chemical Composition

	Element	Min	Max
C	Carbon	-	0.07
Mn	Manganese	-	1.00
P	Phosphorus	-	0.04
S	Sulfur	-	0.03
Si	Silicon	-	1.00
Cr	Chromium	15.00	17.50
Ni	Nickel	3.00	5.00
Cu	Copper	3.00	5.00
Nb/ Ta	Columbium + Tantalum	0.15	0.45

Industry Standards

- W.NR. 1.4542
- PWA-LCS
- S1000 / S-SPEC-1
- GE Aviation S-SPEC-35 AeDMS S-400
- RR SABRe Edition 2
- DFARS Compliant

Industry Applications

- Surgical instrumentation
- Fasteners
- Base plates
- Chemical processing equipment
- Oil and petroleum refining equipment
- Nuclear components and waste casks
- Food grade processing equipment
- Paper / pulp processing
- Aircraft and Aerospace materials

Physical Properties

Property	Value
Density	0.2820 lb/in ³
Melting Range	2560-2625°F (1404-1440°C)
Electrical Resistivity (Annealed Condition)	98 microhm-cm

Mean Coefficient of Thermal Expansion (Annealed Condition)

Temperature Range		Coefficients	
°C	°F	µm/m·°C	in/in/°F·106
21-93	70-200	10.8	6.0
21-204	70-400	10.8	6.0
21-316	70-600	11.2	6.2
21-427	70-800	11.2	6.3

Thermal Conductivity (H 900 Condition)			
Temperature Range		W/m·K	Btu/(hr/ft ² /in/°F)
°C	°F		
149	300	17.90	124
260	500	19.50	135
460	860	22.50	156
482	900	22.60	157

Specific Heat (Annealed Condition)			
Temperature Range		J/gg·K	Btu/lb/°F
°C	°F		
0-100	32-212	460	0.11

Mechanical Properties

Property	Value
Ultimate Tensile Strength, ksi (MPa)	160 (1103)
.02% Yield Strength, ksi (MPa)	145 (1000)
Elongation, % in 2" (50mm)	5.0
Hardness Rockwell C	35