

**BAND-IT® Metals Data** All values in table are reference only.

Material	201 Stainless Steel	201 1/4 Hard	202 Stainless Steel	301 Stainless Steel	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	317L 1/4 Hard Stainless Steel	321 Stainless Steel	200/300 Series Stainless Steel	Alloy 400	Alloy 625	Titanium GR1	
Specification														
UNS Designation	S20100	S20100	S20200	S30100	S30200	S30400	S31600	S31703	S32100	---	N04400	N06625	R50250	
ASTM	A 666	A 666	A 666	A 666	A 666	A 666	A 666	A 240	A 240	---	B 127	B 443	B 265	
Principal Alloying Elements, %														
C	.015 Max	.015 Max	.015 Max	.15 Max	.15 Max	.08 Max	.08 Max	.03 Max	.08 Max	---	.3 Max	.10 Max	.08 Max	
Mn	5.50 - 7.50	5.50 - 7.50	7.5-10.0	2.0 Max	2.0 Max	2.0 Max	2.0 Max	2.0 Max	2.0 Max	---	2.0 Max	.50 Max	---	
P	.06 Max	.06 Max	.06 Max	.045 Max	.045 Max	.045 Max	.045 Max	.045 Max	.045 Max	---	---	.015 Max	---	
S	.03 Max	.03 Max	.03 Max	.030 Max	.030 Max	.030 Max	.030 Max	.030 Max	.030 Max	---	0.024 Max	.015 Max	---	
Si	.75 Max	.75 Max	.75 Max	1.00 Max	.75 Max	.75 Max	.75 Max	.75 Max	.75 Max	---	0.5 Max	50 Max	---	
Cr	16.0-18.0	16.0-18.0	17.0-19.0	16.0-18.0	17.0-19.0	18.0-20.0	16.0-18.0	18.0-20.0	17.0-19.0	---	---	20.0-23.0	---	
Ni	3.50-5.50	3.50-5.50	4.0-6.0	6.0-8.0	8.0-10.0	8.0-10.5	10.0-14.0	11.0-15.0	9.0-12.0	---	63.0 Min	58.0 Min	---	
N	.25 Max	.25 Max	.25 Max	.10 Max	---	.10 Max	---	.10 Max	.10 Max	---	---	---	.03 Max	
O	---	---	---	---	---	---	---	---	---	---	---	---	.18 Max	
H	---	---	---	---	---	---	---	---	---	---	---	---	.015 Max	
Mo	---	---	---	---	---	---	2.0-3.0	3.0-4.0	---	---	---	8.0-10.0	---	
Cu	---	---	---	---	---	---	---	---	---	---	28.0-34.0	---	---	
Fe	---	---	---	---	---	---	---	---	---	---	2.5 Max	5.0 Max	.20 Max	
Ti	---	---	---	---	---	---	---	---	---	---	---	0.40 Max	Balance	
Zn	---	---	---	---	---	---	---	---	---	---	---	0.40 Max	Balance	
Al	---	---	---	---	---	---	---	---	---	---	---	---	---	
Physical Properties														
Density, Lb/Cu. In.	0.287	0.287	0.287	0.290	0.290	0.290	0.290	0.290	0.286	0.287	0.319	0.305	0.163	
Structure	Austenitic	Austenitic	Austenitic	Austenitic	Austenitic	Austenitic	Austenitic	Austenitic	---	Austenitic	---	---	Alpha	
Melting Range	2550 - 2650°F	2550 - 2650°F	2550 - 2650°F	2550 - 2590°F	2550 - 2590°F	2550 - 2590°F	2550 - 2590°F	2540 - 2630°F	2540 - 2630°F	2550 - 2635°F	2550 - 2650°F	2370 - 2460°F	2500 - 2550°F	2500 - 2550°F
Electrical Properties	Non-Magnetic	Non-Magnetic	Non-Magnetic	Non-Magnetic	Non-Magnetic	Non-Magnetic	Non-Magnetic	Non-Magnetic	Non-Magnetic	Non-Magnetic	Slightly Magnetic	Non-Magnetic	Non-Magnetic	
Mechanical Properties														
Rockwell Hardness	100 Rb Max	---	100 Rb Max	95 Rb Max	92 Rb Max	92 Rb Max	95 Rb Max	95 Rb Max	95 Rb Min	70-95R	68 Rb Max	88-94R	64-70R	
Ultimate Tensile Strength	95,000	125,000	90,000	75,000	75,000	75,000	75,000	115,000	75,000	75,000	70,000	120,000	35,000	
Yield Strength	45,000	75,000	38,000	30,000	30,000	30,000	40,000	75,000	30,000	30,000	28,000	60,000	20,000	
% of Elongation in 2 inches, Min	40	25	40	40	40	40	35	10	40	30	35	30	24	
Corrosion Resistance														
Mild Atmospheric and Fresh Water	Good	Good	Good	Good	Very Good	Very Good	Excellent	Excellent	Excellent	Good	Good	Good	Good	
Industrial Atmosphere	Good	Good	Good	Good	Very Good	Very Good	Very Good	Very Good	Very Good	Good	Good	Good	Good	
Marine Atmosphere	Fair	Fair	Fair	Fair	Good	Good	Very Good	Very Good	Very Good	Fair	Excellent	Excellent	Good	
Salt Water	No	No	No	No	No	No	Good	Good	Good	No	Excellent	Excellent	Good	
Mild Chemical	Fair	Fair	Fair	Fair	Good	Good	Good	Very Good	Good	Fair	Good	Good	Good	
Oxidizing Chemical	Fair	Fair	Fair	Fair	Good	Good	Good	Good	Good	Fair	Good	Good	Excellent	
Reducing Chemical	No	No	No	No	No	No	Good	Good	Good	No	Good	Good	Fair	

