STAINLESS STEEL 316-316L

316/1.4401/UNS S31600
316L/1.4404/UNS S31603

Chemical Composition

Element	316	316L
Carbon	0.08	0.030 max
Chromium	16.0-18.0	16.0-18.0
Nickel	10.0-14.0	10.0-14.0
Molybdenum	2.00-3.00	2.00-3.00
Manganese	2.00	2.00
Silicon	0.75	0.75
Nitrogen	0.10	0.10
Phosphorus	0.045	0.045
Sulfur	0.030	0.030

Mechanical properties

Property	316	316L
Yield Strength, min. (ksi)	30	25
Tensile Strength, min. (ksi)	75	70
Elongation, min. (%)	40	40
Hardness, max. (Rb)	95	95

Physical properties

Property	316/316L Data
Density, lb/in3	0.290
Modulus of Elasticity, psi	29.0×10^{6}
Coefficient of Thermal Expansion, 68-212˚F, /˚F	9.2×10^{-6}
Thermal Conductivity, Btu/ft hr ˚F	9.4
Specific Heat, Btu/lb ˚F	0.12
Electrical Resistivity, Microohm-in	29.4