

Stainless Steel 304 is a widely used austenitic stainless steel alloy. It is composed primarily of iron, chromium (18-20%), and nickel (8-12%), with small amounts of other elements such as manganese and carbon. Stainless Steel 304 offers excellent corrosion resistance, high strength, and good formability.

### Chemical Composition

Element	Maximum Unless Range is Specified
Silicon	.75
Carbon	.08
Phosphorus	.045
Sulfur	.030
Manganese	2.00
Chromium	18.00-20.00
Nickel	8.00-12.00
Nitrogen	.10
Iron	Balance

### Physical Properties

Property	Maximum Unless Range is Specified
Density,lbs/in3	0.29
Specific Heat,BTU/lb-°F (32–212°F)	0.12
Thermal Conductivity ,BTU/hr/ft2/ft°F	9.4
Electrical Resistivity, Micohm-in at 68°F	28.4
Melting Point (Deg°F )	2550-2650
Modules of Elasticity ,ksi	28,000

### Mechanical Properties

Property	Maximum Unless Range is Specified
Ultimate Tensile Strength,ksi	90
Yield Strength,ksi	42
Elongation in 2in	55%
Hardness, Rockwell B	82

The material properties in this datasheet are provided by one of the manufacturers collaborating with Naxtry. Please note that material properties may slightly vary among different manufacturers. Naxtry can accommodate customer requests for specific materials or brands.