Mild Steel AISI 1008

Inconel 718 is a nickel-based superalloy known for its excellent high-temperature strength, corrosion resistance, and creep resistance. It is widely used in applications that require exceptional performance in extreme environments, such as aerospace, gas turbines, and nuclear reactors.

Chemical Composition

Element	Maximum Unless Range is Specified
Carbon	.10
Phosphorus	.040
Sulfur	.050
Manganese	.30-.50
Iron	Balance

Physical Properties

Property	Maximum Unless Range is Specified
Density,lbs/in3	0.284
Specific Heat,BTU/lb-°F	0.12
Thermal Conductivity ,BTU/ft hr-°F	37.7
Electrical Resistivity, Micohm-in	5.59
Modules of Elasticity ,ksi	29,000

Mechanical Properties

Property	Maximum Unless Range is Specified
Ultimate Tensile Strength,ksi	43.9-51.9
Yield Strength,ksi	26.1-34.8
Elongation at Break	42%-48%

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.