PROTOLABS
Manufacturing. Accelerated.

Stainless Steel 316

Stainless steel 316 offers good machinability and outstanding uniformity. This material offers faster machining speeds, longer tool life, and improved part quality at a lower total cost.

Applications

Typical applications consist of medical and laboratory equipment, machine parts, food processing and handling equipment, chemical containers, heat exchangers, valves and pumps.

Key Product Benefits

- Corrosion Resistance
- Machinability
- Cost Effective
- Creep Resistance

Properties

Property	Value
Ultimate Tensile Strength	85 ksi
0.2% Offset Yield Strength	44 ksi
Elongation in 2 inches	56%
Reduction in Area	69%
Rockwell B Hardness	81
Density	0.285 lb/in^3
Modulus of Elasticity	29 × 10^6 psi
Coefficient of Thermal Expansion (68-212°F)	8.9 × 10^{-6}/°F
Thermal Conductivity	8.7 BTU/ft-hr-°F
Heat Capacity	0.12 BTU/lb-°F
Electrical Resistivity	27.6 × 10^{-6} ohm-inch