

# AISI 321 Stainless Steel Rod

**Formula:** Fe/Cr18/Ni 9/Ti

**Diameter:** 25.4mm

**Length:** 500mm

**UOM Code:** 080-235-20

**SKU:** 1000011478-group

**Product Code:** FE21-RD-000140

## Material Properties for Alloys

### Mechanical Properties

Element	Value
Hardness - Brinell	160-190
Elongation at break( % )	60
Modulus of elasticity( GPa )	190-210
Izod impact strength( J m <sup>2</sup> )	20-136
Tensile strength( MPa )	560

### Electrical Properties

Element	Value
Electrical resistivity( $\mu\text{Ohmcm}$ )	70-73
Temperature coefficient( K <sup>-1</sup> )	-

### Thermal Properties

Element	Value
Maximum use temperature in air( C )	800
Melting point( C )	1400-1425
Thermal conductivity( W m <sup>-1</sup> K <sup>-1</sup> )	16.3@23°C
Coefficient of thermal expansion( $\times 10^{-6}$ K <sup>-1</sup> )	18@20-100°C

### Physical Properties

Element	Value
Density( gcm <sup>3</sup> )	7.9