

# AISI 321 Stainless Steel Tube

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

**Outside Diameter:** 10mm

**Wall Thickness:** 1.5mm

**Inside Diameter:** 7mm

**Length:** 500mm

**Temper:** Annealed

**UOM Code:** 019-041-72

**SKU:** 1000002276-group

**Product Code:** FE21-TB-000110

## 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( μOhmcm )           | 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( x10 <sup>-6</sup> K <sup>-1</sup> ) | 18@20-100°C |

### Physical Properties

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