

1.4462 / F51 Duplex / 1.4462

Chemical Properties

| Element | Chemical Composition % |
|-----------------|------------------------|
| Carbon (C) | 0.0 - 0.03 |
| Chromium (Cr) | 21.0 - 23.0 |
| Manganese (Mn) | 2.00 max |
| Silicon (Si) | 1.00 max |
| Phosphorus (P) | 0.0- 0.03 |
| Sulphur (S) | 0.0 - 0.02 |
| Nickel (Ni) | 4.50 - 6.50 |
| Nitrogen (N) | 0.08 - 0.20 |
| Molybdenum (Mo) | 2.50 - 3.50 |
| Iron (Fe) | Balance |

Mechanical Properties

| Property | Value |
|------------------|-------------|
| Proof Stress | 450 min MPa |
| Tensile Strength | 620MPa |
| Elongation | 25% min |
| Hardness Brinell | 290 HB max |

Physical Properties

| Property | Value |
|------------------------|------------------------------|
| Density | 7.805 g/cm ³ |
| Thermal Expansion | 13.7 x 10 ⁻⁶ /K |
| Modulus of Elasticity | 200 GPa |
| Thermal Conductivity | 19.0 W/m.K |
| Electrical Resistivity | 0.085 x 10 ⁻⁶ Ω.m |

Product Forms

Round Bar

Seamless Pipe

Disclaimer

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