Chemical Composition

1.4301 Steel — Spec: EN 10088-3:2005

Chemical Element	% Present
Carbon (C)	0.0 - 0.07
Chromium (Cr)	17.50 - 19.50
Manganese (Mn)	0.0 - 2.00
Silicon (Si)	0.0 - 1.00
Phosphorous (P)	0.0 - 0.05
Sulphur (S)	0.0 - 0.03
Nickel (Ni)	8.00 - 10.50
Nitrogen (N)	0.0 - 0.11
Iron (Fe)	Balance

Properties

Physical Property	Value
Density	8.00 g/cm³
Melting Point	1450 °C
Thermal Expansion	17.2 x10^-6 /K
Modulus of Elasticity	193 GPa
Thermal Conductivity	16.2 W/m.K
Electrical Resistivity	0.072 x10^-6 Ω .m

Bar & Section - Up to 160mm Dia / Thickness — Spec: EN 10088-3:2005

Mechanical Property	Value
Proof Stress	190 Min MPa
Tensile Strength	500 to 700 MPa
Elongation A50 mm	45 Min %
Hardness Brinell	215 Max HB