

1.4125 / 440C

Chemical Properties

Element	Chemical Composition %
Carbon (C)	0.95 - 1.20
Chromium (Cr)	16.00 - 18.00
Manganese (Mn)	0.00 - 1.00
Silicon (Si)	0.00 - 1.00
Phosphorous (P)	0.00 - 0.04
Sulphur (S)	0.00 - 0.03
Iron (Fe)	Balance

Mechanical Properties

Property	Value
Proof Stress	448 - 1900 MPa
Tensile Strength	758 - 2030 MPa
Elongation A50 mm	4-14%

Physical Properties

Property	Value
Density	7.65 g/cm ₃
Thermal Expansion	10.1 x 10 ⁻⁶ /K
Modulus of elasticity	200 GPa
Thermal conductivity	24.2 W/m.K
Electrical resistivity	0.06 x 10 ⁻⁶ Ω.m

Disclaimer

This data is indicative only and as such is not to be relied upon in place of the full specification. In particular, mechanical property requirements vary widely with temper, product and product dimensions. All information is based on our present knowledge and is given in good faith. No liability will be accepted by the Company in respect of any action taken by any third party in reliance thereon.

The information provided in this datasheet has been drawn from various recognised sources, including EN Standards, recognised industry references (printed & online) and manufacturers' data. No guarantee is given that the information is from the latest issue of those sources or about the accuracy of those sources.

Material supplied by the Company may vary significantly from this data, but will conform to all relevant and applicable standards.

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