C250 Maraging Steel

Product Datasheet

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...where performance matters

Combining strength & toughness

C250 maraging steel offers very high strength and above-average toughness

We supply Type C250 maraging steel in the annealed condition where the microstructure consists of fine martensite. Final properties are achieved as a result of the precipitation-hardening process to produce a very high strength steel product with a nominal tensile strength of 250 ksi. The alloy also benefits from good notch impact toughness to temperatures below 50°C. The product is readily weldable, and the material can also be machined close to finished dimensions.

Characteristics

- Good notch impact toughness
- Very high tensile strength (250 ksi)
- Can be readily welded
- The material can be nitrided

Applications

- Crankshafts
- Gears
- Chassis components
- Torsion bars

Chemical Composition (weight = %)

	C	Si	Mn	Ni	Co	Mo	Al	Ti	Fe
Min				17.00	7.00	4.60	0.05	0.30	Bal
Max	0.3	0.10	0.10	19.00	8.50	5.20	0.15	0.50	Bal

Mechanical Properties (annealed and maraged condition)

UTS, MPa	0.2% PS, MPa	Elongation on 4D, %	Charpy Notch Impact, J	Youngs Modulus GPa
1,860	1,725	12	20	190

Hardness (HRC) in the annealed condition is 34 max. and for the maraged condition 48 min

About Smiths High Performance

Smiths High Performance is a leading stockholder and supplier of high-performance engineering materials to the global motorsport sector. We are supply partners in a range of specialist motorsport markets including **Formula 1, Formula E, NASCAR, MOTO GP, WEC & WRC**.

www.smithshp.com

info@smithshp.com

Unit 3, Juno Place
Stratton Business Park
Biggleswade SG18 8XP

Tel: +44 (0)1767 604 708

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