

C250 Maraging Steel

Smiths High Performance



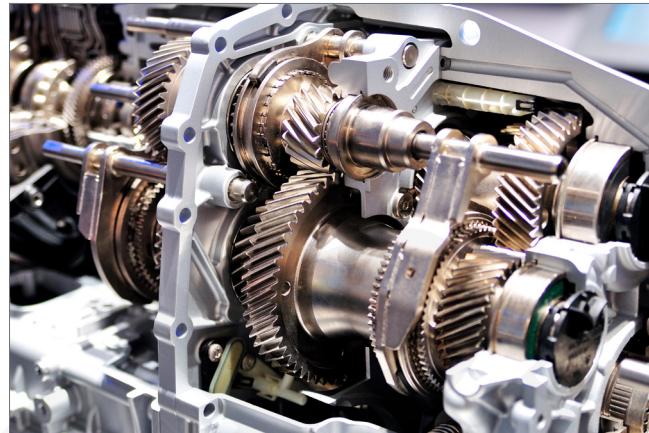
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Page: 1 of 1

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.



*Chemical Composition (weight, %)

	C	Si	Mn	Ni	Co	Mo	Al	Ti	P	S	Cr	Cu	Fe
Min.	0.03	0.10	0.10	17.00	7.00	4.60	0.05	0.30	0.010	0.010	0.50	0.50	Bal
Max.				19.00	8.50	5.20	0.15	0.50					Bal

* Properties as per AMS 6512

Mechanical Properties (typical)

UTS, MPa	0.2% PS, MPa	Elongation on 4d (%)	Charpy Notch Impact, J	Young's Modulus, GPa
1,760	1,725	6	20	150

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

Characteristics:

- Good notch impact toughness
- Very high tensile strength (250 ksi)
- Readily weldable
- The material can be nitrided

Applications:

- Crankshafts
- Gears
- Chassis components
- Torsion bars



About Smiths High Performance

Smiths High Performance is a leading stockholder and supplier of high-performance engineering materials. We are material supply chain partners supporting **high-technology market sectors**.

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