

C300 Maraging Steel

Smiths High Performance



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For strength & malleability

C300 Maraging Steel offers stable properties and weight reduction possibilities while maintaining strength

C300 maraging steel is age hardenable steel produced to create exceptional toughness and strength. With a nominal tensile strength of 300 ksi, the material can retain its tensile strength up to 450°C. The core alloying elements are iron, cobalt, nickel and molybdenum, and the product offers excellent toughness and resistance to crack propagation. The material may also be nitrided. C300 can be machined close to finished dimensions as the low-temperature maraging treatment results in minimal distortion.



*Chemical Composition (weight, %)

	C	Si	Mn	Ni	Co	Mo	Al	Ti	P	S	Cr	Cu	Fe
Min.				18.00	8.50	4.60	0.05	0.50					Bal
Max.	0.03	0.10	0.10	19.00	9.50	5.20	0.15	0.80	0.010	0.010	0.50	0.50	Bal

* Properties as per AMS 6514

Mechanical Properties (typical)

UTS, MPa	0.2% PS, MPa	Elongation on 4d (%)	Charpy Notch Impact, J	Young's Modulus, GPa
1,930	1,860	5	17	195

Hardness (HRC) in the annealed condition is 36 max. and for the maraged condition 52 min.

Characteristics:

- Excellent strength and toughness
- Excellent crack propagation resistance
- Readily weldable
- No loss in malleability

Applications:

- Torsion bars
- Chassis components
- Crankshafts
- Gears



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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