

C300 Maraging Steel

Product Datasheet

For strength and malleability

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

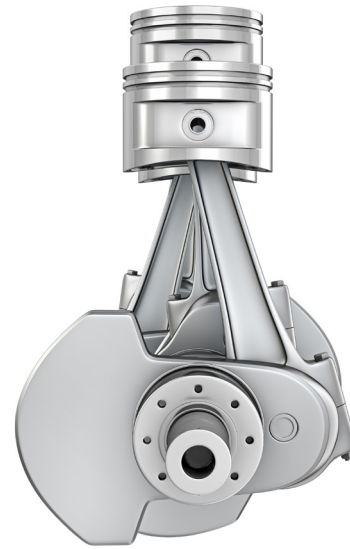
C300 maraging steel is age hardenable steel produced to create exceptional toughness and strength. With a nominal tensile strength of 300 ksi, the material can retain its tensile strength up to 450°C. The core alloying elements are iron, cobalt, nickel and molybdenum, and the product offers excellent 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.

Characteristics

- Excellent strength and toughness
- Excellent resistance to crack propagation
- Can be readily welded
- Retains properties with no loss of malleability

Applications

- Torsion bars
- Chassis components
- Crankshafts
- Gears



Chemical Composition (weight = %)

	C	Si	Mn	Ni	Co	Mo	Al	Ti	Fe
Min				18.00	8.50	4.60	0.05	0.50	Bal
Max	0.3	0.10	0.10	19.00	9.50	5.20	0.15	0.80	Bal

Mechanical Properties (annealed and maraged condition)

UTS, MPa	0.2%PS, MPa	Elongation on 4D, %	Charpy Notch Impact, J	Youngs Modulus GPa
2,035	2,000	12	17	195

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

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