

# C250 Maraging Steel

## Product Datasheet

## 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.