

C350 Maraging Steel

Product Data Sheet

High strength steel alloy

For high performance motorsport components

Containing 12.0% cobalt and 4.8% molybdenum.

It is produced by vacuum arc re-melting and provides a very high strength nominally 350 ksi tensile (2415 MPa) with an above average level of toughness. The alloy retains its strength up to 450°C and good notch impact is maintained down to minus 50°C and below. This material may be nitrided. C350 is supplied in the annealed condition where the microstructure consists of fine martensite before final heat treatment.

Applications:

- High performance motorsport components
- Missile Casings
- Tooling
- Ordnance mounting blocks
- Jet engine and helicopter drive shafts



Machining & Welding

Maraging steels are machined in the annealed condition, although they can be machined in the maraged condition. Components can be machined close to finished dimensions as the low temperature maraging treatment results in minimal distortion. Good weldability.

Chemical & Mechanical Properties

Chemical Composition (weight %)							Mechanical Properties (After Heat Treatment)	
Min	Ni	Co	Mo	Ti	Al	Si	Ultimate Tensile Strength	350,000 psi
	18.50	12.00	4.80	1.40	0.10	-	0.2% Yield Strength	340,000 psi
Max						0.10	Elongation	7 %
	Mn	C	S	P	Zr	B	Reduction of Area	35 %
Min	-	-	-	-	-	-	Notch Tensile (K=9.0)	330,000 psi
Max	0.10	0.03	0.01	0.01	0.01	0.0031		

About Smiths High Performance

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