

300M Steel

Smiths High Performance



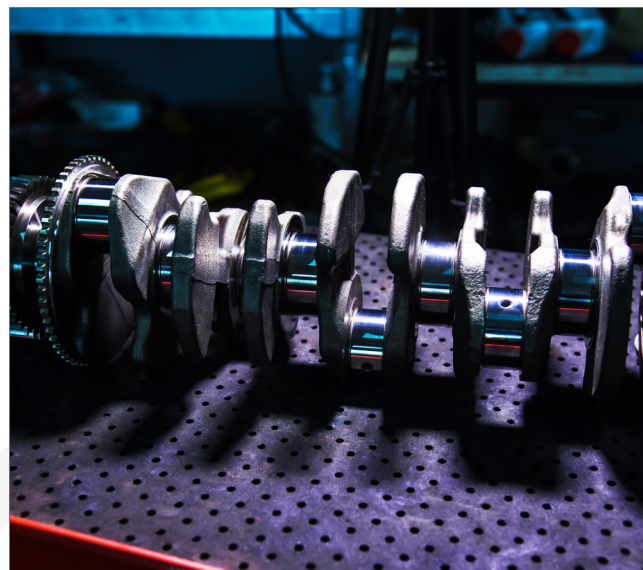
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Offering Outstanding Strength

300M through-hardening steel alloy combines ultra-high strength with superior fatigue resistance.

The alloy finds use in high-performance applications, particularly in aerospace and motorsport. The product benefits from good ductility and toughness and promotes excellent transverse characteristics. The alloy is a modified version of AISI 4340 but with slightly greater inclusions of molybdenum and carbon. As a vacuum melted grade, we supply **300M steel alloy** in the normalised and tempered/softened delivery condition, improving overall machinability before subsequent heat treatment. Our product finds use in aircraft landing gear, gears and high-strength bolts.



* Chemical Composition (weight, %)

	C	Si	Mn	P	S	Cr	Mo	Ni	V	Cu
Min.	0.40	1.45	0.65			0.70	0.35	1.65	0.05	
Max.	0.44	1.80	0.90	0.010	0.008	0.95	0.45	2.00	0.10	0.35

*Properties as per AMS 6257

Mechanical Properties (typical)

	0.2% Proof Stress	Tensile Strength	Elongation	Reduction of Area
Longitudinal	1,555 MPa min	1,900 - 2,100 MPa	8%	30%
Transverse	1,555 MPa min	1,900 - 2,100 MPa	5%	20%

Characteristics:

- Ultra-high tensile strength
- Good ductility and toughness
- Excellent transverse properties
- Good fatigue resistance

Applications:

- High strength bolts
- Gears
- Fasteners
- Landing gear



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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