

S132

Smiths Advanced Metals

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Nitriding Steel Bars

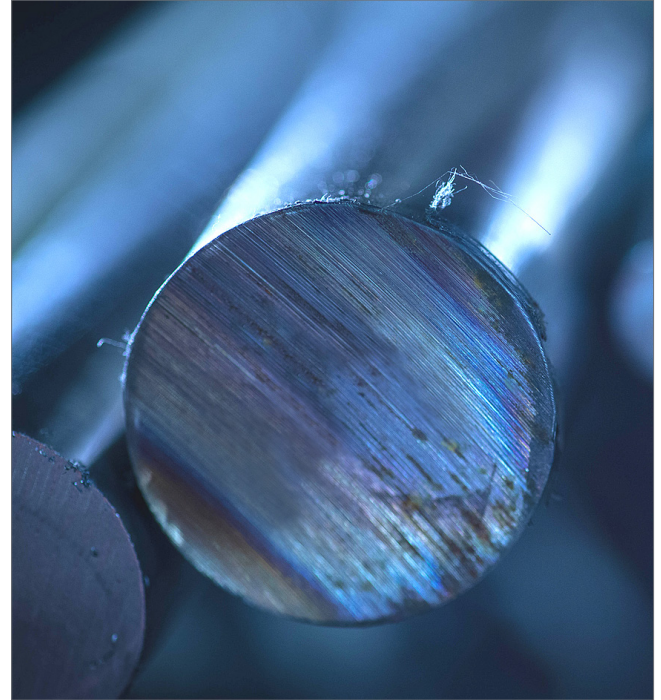
Chrome-Molybdenum-Vanadium Steel.

S132 is a nitriding steel alloy that develops a hard, wear-resistant case after surface treatment. The result is a high tensile alloy that is highly suitable for applications such as engine shafts, crankshafts and gearboxes.

The alloy benefits from excellent hardenability for high core strength, providing a tensile strength of 1,320 - 1,470 MPa. The material produced by single melting in air and subsequently followed by ESR (electroslag refining). However, there is also a vacuum arc remelted version of this alloy. S132 bars and forgings should be subjected to ultrasonic testing where possible, and the material is typically supplied in bright and softened condition.

Applications include gearboxes, shafts, turbine/engine parts and motorsport components.

We stock bars of grade S132 in various sizes and closer incremental sizes to suit your individual engineering requirements.



Grades / Specifications

- 1.8523
- 40CDV12
- 40CrMoV13-9
- AIR0819
- BS S100
- BS S132
- MSRR6038
- MSRR6119

Benefits

- Excellent hardenability for high core strength
- High mechanical strength
- Hard wear-resistant after surface treatment
- ESR and vacuum arc remelted versions available

*Chemical Composition (weight %)

	C	Si	Mn	P	S	Cr	Mo	Ni	Sn	V	Fe
min.	0.35	0.10	0.40			3.00	0.80			0.15	Rem
max.	0.43	0.35	0.70	0.020	0.020	3.50	1.10	0.30	0.030	0.25	Rem

* As per BS S132

*Mechanical Properties

Ultimate Tensile Strength	1320 - 1470 MPa
0.2% Proof Strength	1130 MPa
Elongation	8%
Reduction of Area	35%
Izod impact, ft lbf	20j
Hardness HB	388 - 429

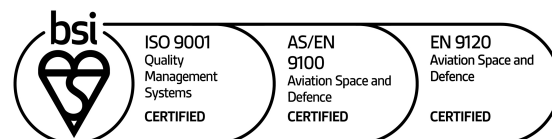
* Properties as per BS S132

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