

BS S99 Steel

Smiths High Performance



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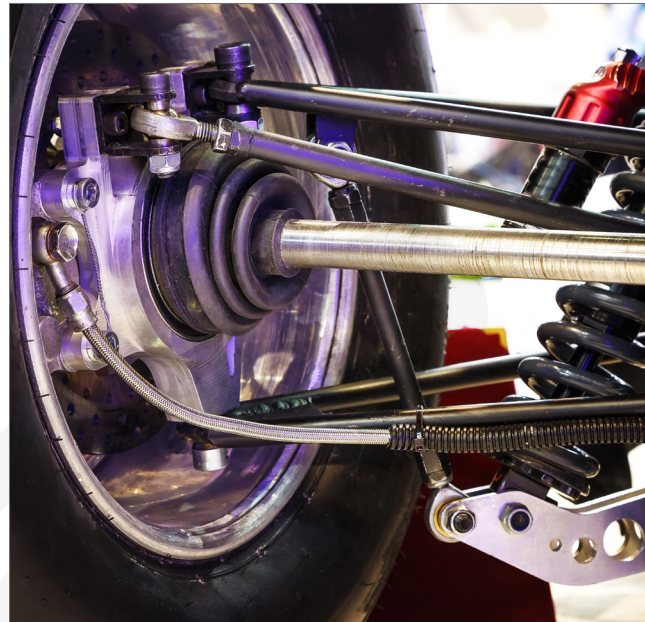
Temperature Performance

BS S99 steel retains its mechanical properties at low and elevated temperatures.

Our material is a non-corrosion resistant steel alloy containing nickel, chromium and molybdenum.

The high carbon steel alloy benefits from high strength, good ductility, creep resistance and notch toughness. Once quenched and tempered, **BS S99** is ideal for engineering applications, including large cross-sections.

The alloy is used in various applications in motorsport engineering, including structural chassis parts and fasteners. S99 has increased molybdenum content to prevent temper brittleness. We typically stock the alloy in annealed or bright annealed solid round bars. We also provide in-house processing services, cutting bar products to specific lengths and tight tolerances.



*Chemical Composition (weight %)

	C	Si	Mn	P	S	Cr	Mo	Ni	Al	Fe	
Min.	0.36	0.10	0.45			0.50	0.45	2.30	0.015	Bal	
Max.	0.44	0.35	0.70	0.025	0.015	0.80	0.65	2.80	0.050		

* Properties as per BS S99

*Mechanical Properties (typical)

Form	Tensile Strength	Proof Strength	Elongation	Hardness
S99D	-	-	-	277 HBW max
S99G	1,230 - 1,420 MPa	1,080 MPa min	10% min	363 - 415 HBW

* Properties as per BS S99

Benefits:

- Good notch toughness
- High strength
- Good ductility
- Good creep resistance

Motorsport Applications:

- Bolts
- Fasteners
- Structural chassis parts
- Heavy duty gears


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