

Aerospace Steel Bar

Product Description

BS S99 aerospace steel bar is a nickel-chromium-molybdenum steel and is used for general aerospace use. The alloy benefits from high tensile strength and good notch toughness and is used as a structural alloy in applications where surface pressure is apparent. The material is usually supplied in annealed or bright annealed condition. Applications for the alloy are widespread and is used as a general alloy in the aerospace sector. Smiths supplies S99 in bar which can be processed to your original size requirements.

Availability

Bar

Typical Applications

- Connecting rods
- Sockets
- Spindles
- Hydraulic shafts
- Torsion bars
- Axles

Key Features

- Classed as a hardenability steel
- Higher tensile and yield strength
- Good creep resistance and toughness
- Supplied annealed and bright annealed
- Wide range of applications
- A general aerospace alloy

Chemical Composition (weight %)

Weight (%)	C	Si	Mn	P	S	Cr	Mo	Ni	Al
Min	0.36	0.10	0.45			0.50	0.45	2.3	0.015
Max	0.44	0.35	0.70	0.025	0.020	0.80	0.65	2.8	0.050

Mechanical Properties

Tensile strength MPa:	1230 - 1420
0.2% Proof stress MPa:	1080 min
Elongation (%):	10 min
Hardness (Brinell):	363 - 415 HB

Property ranges for final heat treated condition

Technical Assistance

Our knowledgeable staff backed up by our resident team of qualified metallurgists and engineers, will be pleased to assist further on any technical topic.

UK Service Centres:

Smiths Belfast **02895 908 897**
 Smiths Biggleswade **01767 604 704**
 Smiths Birmingham **0121 728 4940**
 Smiths Bristol **0117 971 2800**
 Smiths Chelmsford **01245 466 664**
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 Smiths Redruth **01209 315 512**
 Smiths Verwood **01202 824 347**
 Main Office **0845 527 3331**

Quality & Testing:



www.smithmetal.com info@smithmetal.com