

Aerospace Steel Bar

Product Description

BS S140 aerospace steel bar is a 2½% Nickel-Chromium-Molybdenum steel alloy with a tensile strength (Rm) of 1080-1280 N/mm². The alloy is supplied as a bright steel product and offers high tensile and yield stress. With good notch toughness and creep resistance, the alloy can be used in elevated temperature service. It is classed as an alloy structural steel product and is used in the fabrication of parts in the aerospace, motorsport, oil & gas and automotive sectors among others, although it finds many uses in general engineering.

Availability

Bar

Typical Applications

- Fasteners
- Mechanical parts
- Connecting rods
- Shafts and gears
- Boiler support rods
- Bolts and nuts

Key Features

- 2½% Nickel chromium molybdenum steel
- Supplied as bright steel
- Good notch toughness and creep resistance
- Structural steel product
- Varied general engineering use
- High tensile and yield strength

Chemical Composition (weight %)

Weight (%)	C	Si	Mn	P	S	Cr	Mo	Ni
Min	0.27	0.15	0.45			0.50	0.45	2.3
Max	0.35	0.35	0.70	0.025	0.020	0.80	0.65	2.8

Mechanical Properties

Tensile strength:	1080 - 1280 N/mm ²
Proof Stress Rp 0.2,	880
Elongation (%):	10
Hardness (Brinell)	311 - 388 HB
Hardness (Vickers)	325 - 410 HV
Izod Impacts	25 lt lb f min

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**
 Smiths Gateshead **0191 469 5428**
 Smiths Horsham **01403 261 981**

Smiths Leeds **0113 307 5167**
 Smiths Manchester **0161 794 8650**
 Smiths Norwich **01603 789 878**
 Smiths Nottingham **0115 925 4801**
 Smiths Redruth **01209 315 512**
 Smiths Verwood **01202 824 347**
 Main Office **0845 527 3331**

Quality & Testing:



www.smithmetal.com info@smithmetal.com