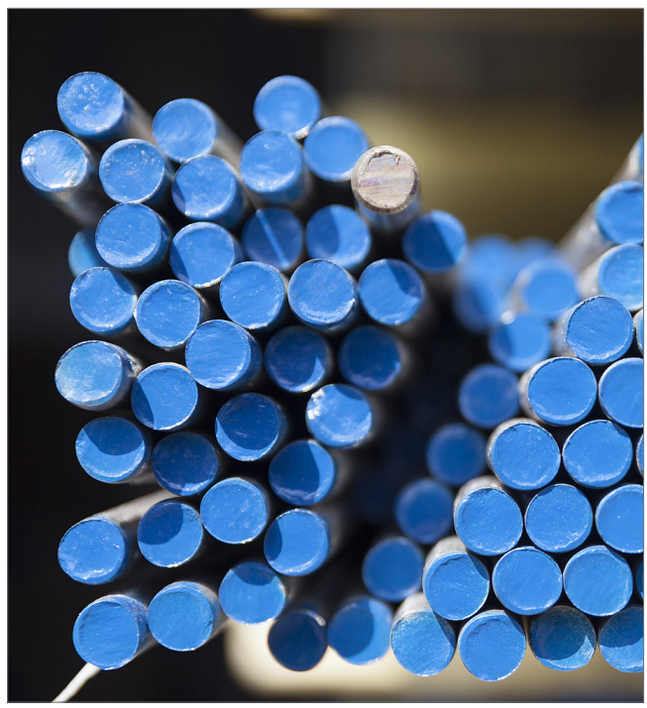
S154

Smiths Advanced Metals

Aerospace Steel Bars

Nickel-Chromium-Molybdenum Steel.



S154 is an aerospace-grade steel alloy that includes nickel, chromium, and molybdenum additions.

The alloy offers high tensile and yield strength (the tensile strength being 880 - 1080 N/mm^2). The high strength and toughness of the material are typical in large sections. The alloy is available in bars and forgings and offers good creep resistance, good toughness and performs well in high-temperature environments.

826M31 (EN25) is the equivalent to S154. The material is regarded as a good general engineering alloy that may be utilised in numerous applications such as the production of crankshafts, aerospace components, and high-strength bolts.

Smiths Advanced Metals stocks S154 steel bars in the hardened and tempered condition in various incremental sizes to suit your engineering requirements. We also process your steel bars in-house.

Grades / Specifications

- 1.6743
- 826M31
- BS S100
- BS S154
- Capable of BS S140
- Capable of BS S97
- MSRR6043

Benefits

- High tensile & yield strength
- Good ductility
- Performs well in elevated temperatures
- Good toughness

*Chemical Composition (weight %)

	C	Si	Mn	P	S	Cr	Mo	Ni
min.	0.27	0.15	0.45			0.50	0.45	2.30
max.	0.35	0.35	0.70	0.025	0.020	0.80	0.65	2.80

* As per BS S154

*Mechanical Properties

Tensile Strength	880 - 1080 N/mm^2
Proof Stress Rp 0.2,	690 min
Elongation	12% min
Impacts	40 ft lbf
Hardness (Brinell)	255 - 321 HB

* Properties as per BS S154

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AS/EN 9100 Aviation Space and Defence CERTIFIED
EN 9120 Aviation Space and Defence CERTIFIED

UKAS TESTING 1930

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