

S145

Smiths Advanced Metals

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Aerospace Stainless Steel Bar

High strength Stainless Steel.

S145 is a precipitation hardening stainless steel and a British Standard aerospace grade.

The alloy provides high strength and medium to good corrosion resistance. S145 offers a chemical composition identical to S143 and S144 but differs because of greater tensile strength achieved after additional heat treatment. As a high strength aerospace alloy, S145 finds use in producing mechanical components found in aircraft, nuclear parts and defence applications. Although defined as an aerospace-grade material, the alloy offers usage in a broad range of general engineering applications.

We stock and supply [S145 stainless steel bars](#) in solution tempered condition and various incremental sizes to suit your engineering requirements. We stock alloys to much closer sizes, which often removes the need for further machining; this will undoubtedly save you time and money.



Grades / Specifications

- BS S145
- BS S100
- MSRR6647

Benefits

- Good toughness
- High strength
- Good resistance to corrosion
- Higher tensile strength than S143 & S145

* Chemical Composition (weight %)

	C	Cr	Cu	Mn	Mo	Nb	Ni	P	S	Si	Fe
min.		13.20	1.20		1.20	0.10	5.00				Bal
max.	0.07	14.70	2.00	1.00	2.00	0.40	5.80	0.035	0.025	0.60	Bal

* As per BS S145

* Mechanical Properties

Condition	Tensile Strength	Proof Strength	Elongation	Hardness
S145D**	-	-	-	<363 HBW
S145H	1,270 - 1,470 MPa	1,030 MPa min	10% min	375 - 429 HBW

* Properties as per BS S145

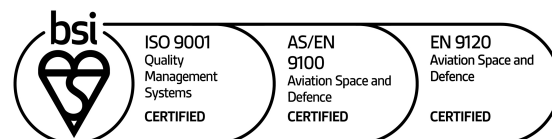
** Can be heat treated to H condition

www.smithsadvanced.com

info@smithsadvanced.com



Stratton Business Park,
London Road, Biggleswade,
Bedfordshire SG18 8QB
Tel: **+44 (0) 1767 604710**



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