

BS B23 Bronze Bar

Smiths Advanced Metals

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Aerospace Engineering Bronze

Bronze for aerospace engineering applications

BS B23 bronze bar finds typical use in aerospace, marine and petrochemical applications.

The material is a complex copper-based product containing 10% aluminium, 5% nickel and 5% iron.

BS B23 benefits from high mechanical strength, similar to medium carbon steel, and combines good machinability with excellent corrosion resistance. With good weldability, the alloy also benefits from excellent wear resistance and will maintain high mechanical strength at elevated and cryogenic temperatures. The product is available in a range of specifications that offer different balances between strength, elongation, and notch ductility.

We offer bars of grade BS B23 in various incremental sizes to suit your engineering requirements.



Grades / Specifications

- ASTM B150
- BS 2874
- BS B23
- DTD 197A
- EN 12163
- CA104
- CuAl10FeNi4
- CW307G

Key Applications

- Aircraft components
- Heavy-duty bushes and bearings
- Marine propeller & pump shafts
- High strength fasteners

Chemical Composition (weight %)

	Cu	Al	Ni	Fe	Mn	Total Impurities	Sn	Pb	Si	Zn
min.	Bal	8.50	4.00	4.00						
max.	Bal	11.00	5.50	5.50	0.50	0.50	0.10	0.05	0.20	0.40

As per BS 2 B23

Mechanical Properties

Diameter	6-18mm incl.	>18-80mm incl.	>80mm
UTS	700 MPa	650 MPa	650 MPa
0.2% Proof Strength	400 MPa	370 MPa	320 MPa
Elongation	10%	12%	12%
Hardness	188 - 268 HV or 179 - 255HBW		

Technical Sales Assistance

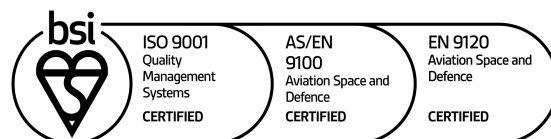
To find out more about the BS B23 bar and for other technical advice, contact [Smiths Advanced Metals](mailto:info@smithsadvanced.com) today. Our team of qualified metallurgists and engineers will be pleased to assist further on any technical topic.

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