

Bronze Alloy

Typical Applications

- Valve bodies
- Marine hardware
- Worm Gears
- Wear plates
- Fasteners
- Heavy duty bearings
- Propeller hubs
- Non sparking tools

Product Description

BS1400 AB2 is the most commonly used cast aluminium bronze and is known for its excellent resistance to corrosion, cavitation and erosion in seawater as well as other chloride containing environments due to a tough oxide film. It is the cast version of the 10/5/5 aluminium bronze and is usually compared with CA104 when a wrought alternative is required. BS1400 AB2 is also known for its high strength and excellent shock and wear resistance.

Weldability

Good.

Related material specifications

- CC333G
- C95800

Key features

- Excellent cavitation, corrosion and erosion resistance
- High wear & abrasion resistance
- Good strength & toughness
- Excellent retention of properties at cryogenic temperatures
- Good resistance to shock loading
- Non-sparking

Availability

Round bar, hollow bar, plate, hexagon, flat bar,

Cut to size capability

There are thirty power saws within the Smiths group including a fully automated magazine feed CNC rod blanking line. We can economically cut from one off blanks to the largest production run for immediate or just in time deliveries.

Corrosion Resistance

Excellent

Machinability

Good.

Chemical Composition (weight %)

	Cu	Al	Ni	Fe	Mn	Zn	Sn	Pb	Si	Total Imps
min	Rem	8.80	4.00	4.00						
max	Rem	10.00	5.50	5.50	3.00	0.50	0.10	0.05	0.10	0.30

Mechanical Properties

0.2% Proof Stress	250 N/mm ²
Tensile Strength	640 N/mm ²
Elongation	13 %

Physical Properties

Density	7.64 g/cm ³
Melting Point	1060 °C
Thermal Conductivity	35.9W/m ² C
Coeff. of Thermal Expansion	16.2 x10 ⁻⁶
Electrical Conductivity 20°C	7.1% IACS

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
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Quality & Testing:



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