

Bronze Alloy

Typical Applications

- General purpose bushes & bearings
- Bearings for lifting tackle
- Automotive fittings
- Fuel & water pump bushings
- Valve & slide seating rings
- Hydraulics
- Fittings
- Thrust washers

Product Description

SigmaBronze 7 is a leaded continuously cast copper based alloy that is suitable for a variety of applications that are under medium loads whilst using adequate lubrication. This alloy offers good sliding and dry running properties and is not subject to dezincification and has a reasonable resistance to brine making it suitable for pump and valve components. SigmaBronze 7 can be used as an alternative to SAE660 in many applications but has the advantage of being available in metric sizes.

Corrosion resistance

Reasonable corrosion resistance

Related material specifications

- SAE660
- BS1400 LB4

Key features

- Excellent machining properties
- Used in bushes and bearings under medium loads
- Higher running speeds
- Good wear resistance
- Excellent anti-friction qualities
- A versatile bronze that can be used in many applications

Availability

Bar, tube & 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.

Weldability

Not recommended but SigmaBronze 7 is soft-solderable and to some extent also brazable.

Machinability

Excellent machinability

Chemical Composition (weight %)

	Cu	Al	Fe	Ni	P	Pb	Si	Sn	Zn	S	Sb
min	81.00					5.00		5.40	2.00		
max	85.00	0.01	0.20	2.00	0.10	8.00	0.01	8.00	5.00	0.10	0.30

Mechanical Properties (actual properties according to specification chosen)

Hardness Brinell	min. 70
Tensile Strength (N/mm ²)	min. 260
Yield Point (N/mm ²)	min. 120
Elongation at break (%)	min. 12

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**
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Quality & Testing:



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