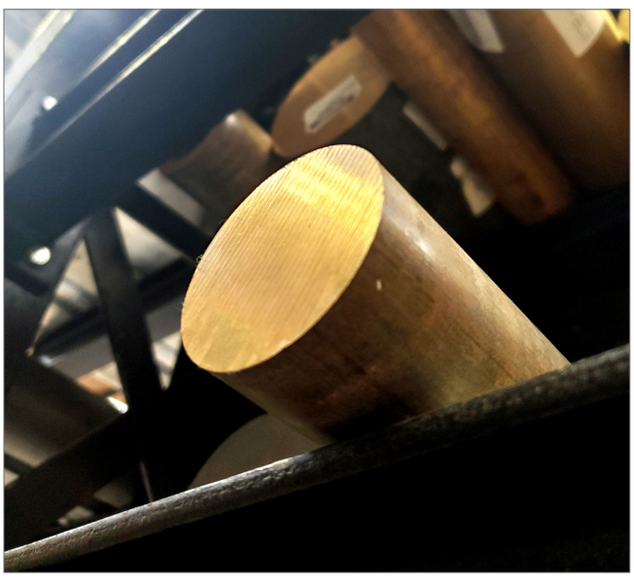
THAMES STOCKHOLDERS
A Division of SMITHS

LB1

LEADED BRONZE ALLOY



Product Overview

LB1 is a continuously cast leaded bronze alloy that benefits from excellent lubricity.

The alloy's lubricity makes it highly suitable for sliding applications, and it withstands high speeds under moderate loads. LB1 also performs well in bearing applications where the alignment is an issue. The product finds use in various applications, including the mining industry, where corrosive waters are present, and lubricity is poor. LB1 is a medium-strength alloy with good corrosion resistance and wear resistance characteristics. Machinability is also good.

Availability:

- Bar

Key Features

- Medium strength alloy
- Good corrosion resistance and wear resistance
- Good machinability
- Excellent lubricity

Applications

- Bearings
- Paper mill liners
- Pump components
- Valves

* Chemical Composition (weight, %)

	Cu	Sn	Pb	Zn	Ni	P	Sb	Si	S	Others
Min.	Rem	8.00	13.00							
Max.	Rem	10.00	17.00	1.00	2.00	0.10	0.50	0.02	0.10	0.30

* Properties as per BS 1400

* Mechanical Properties

	Tensile Strength (N/mm^2)	Proof/Yield Strength (N/mm^2)	Elongation %
Sand Cast	170	80	4
Chill Cast	200	130	3
Continuous Cast	230	130	9
Centrifugal Cast	220	130	4

* Properties as per BS 1400 (minimum unless stated)

Physical Properties

Density g/cm^3	9.1
Melting Temperature Range °C	855 - 970
Thermal Conductivity W/mK	47
Electrical Resistivity µΩ.m15°C	0.16
Coefficient of Thermal Expansion 0-250°C	19

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