

## 954 ALUMINIUM BRONZE

954 Bronze is a high strength aluminium bronze, with high hardness and abrasion resistance. 954 combines excellent strength and wear resistance with reasonable machining properties and good general corrosion resistance. 954 Bronze is suitable for high strength bearings with good impact resistance, but requires reliable full film lubrication due to poor anti seizing properties.

<b>Sizes Available</b> -	Solid	3/4" – 8" Ø
	Hollow	1" – 8" O/D

### Related Specifications

United Kingdom	BS1400 AB-1
UNS	C95400
German	CuAl11Fe4
Japan	CAC702C
USA	ASTM B271/B505 SAE 9C

### Chemical Composition\*

	Min. %	Max %
Aluminium	10.0	11.5
Iron	3.0	5.0
Nickel	0	1.5
Manganese	0	0.5
Copper	Balance	

### Typical Mechanical Properties – (For Guidance Only)

Tensile Strength (Mpa)	510-590 MPa
Yield Strength (Mpa)	200-230 MPa
Elongation (%)	12% Min
Hardness (Brinell BHN)	170-180 BHN

### Other Information

Specific Gravity	7.45
Maximum Recommended Operating Temperature	260 Deg C
Stress Relieving Temperature	316 Deg C
Time at Temperature	1 hour per 25mm of section thickness

## LG-2 BRONZE

LG-2 Bronze is a general purpose leaded gunmetal conforming to BS1400 – 1985. Lg-2 has excellent machining properties, medium strength, and is not subject to dezincification (Category I alloy). It has reasonable resistance to saltwater and brine making it suitable for pump and valve components. LG-2 is also suitable for bearing and gearing applications that are light duty and negligible loading.

**Stocked Sizes** - Solid  $\frac{1}{2}'' - 8'' \varnothing$   
Hollow  $1'' - 10''$  O/D

### Related Specifications

UNS	C83600
German	CuSn5ZnPb
Japan	JIS CAC402C (BC6)
USA	ASTM B271/B505 SAE 40/J462

### Chemical Composition\*

	Min. %	Max %
Tin	4.0	6.0
Lead	4.0	6.0
Zinc	4.0	6.0
Nickel	0	1.0
Copper	Balance	

### Typical Mechanical Properties – (For Guidance Only)

Tensile Strength (Mpa)	270-300 MPa
Yield Strength (Mpa)	120 MPa
Elongation (%)	20
Hardness (Brinell BHN)	75 BHN

### Other Information

Specific Gravity	8.8
Maximum Recommended Operating Temperature	230 Deg C
Stress Relieving Temperature	260 Deg C
Time at Temperature	1 hour per 25mm of section thickness

## PB-1 PHOSPHOR BRONZE

PB-1 is a phosphor bronze in accordance with BS1400 (1985). It has good machining properties and combines high strength with good corrosion resistance to saltwater and brine. This makes it ideally suitable for pump and valve components. PB-1 is also suitable for bearings with medium to high loads but must have adequate lubrication and good alignment. It is also ideally suited for heavy duty gears and wormwheels with high working loads and speeds providing adequate lubrication and alignment is considered.

<b>Sizes Available</b>	-	Solid	3/4" – 8" Ø
		Hollow	1" – 8" O/D

### Related Specifications

United Kingdom	BS1400 PB-1
UNS	C90700/C90710
German	CuSn10
Japan	CAC502C (PBC2C)
USA	ASTM B505 SAE 65

### Chemical Composition\*

	Min. %	Max %
Tin	10.0	11.0
Phosphorous	0.50	1.0
Lead		0.25
Copper	Balance	

### Typical Mechanical Properties – (For Guidance Only)

Tensile Strength (Mpa)	340-360 MPa
Yield Strength (Mpa)	170 MPa
Elongation (%)	10%
Hardness (Brinell BHN)	100-150 BHN

### Other Information

Specific Gravity	8.8
Maximum Recommended Operating Temperature	250 Deg C
Stress Relieving Temperature	260 Deg C
Time at Temperature	1 hour per 25mm of section thickness