

## ALUMINIUM BRONZE : ALLOY 954

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**Alloy 954 Aluminium Bronze, offering high strength with good impact, wear and corrosion resistance, high resistance to oxidation and good strength at elevated temperatures, but poor anti-seizure properties.**

### Typical Applications:

High strength bearings, bushings, bolts, gears, gear wheels, guides, pump rods, propellers, pickling hooks, valve seats, worm wheels and non-sparking tools etc.

### Production Range:

**Continuous Cast:** Solid & Hollow

Outside diameter 12mm – 305mm  
 Inside diameter 12mm – 254mm  
 Length 305mm – 3100mm  
 In multiples of 305mm – 1000mm  
 Round/hexagon/octagon  
 Rectangular: Solid only

**Centrifugal Cast:** Hollow only

Outside diameter 330mm – 560mm  
 Inside diameter 175mm – 500mm  
 Length 305mm – 1000mm

**NB:** Smaller I/D produced to order

### Chemical Composition

Copper	(Cu)	83% min
Nickel	(Ni)	1.50% max
Aluminium	(Al)	10.00 – 11.50%
Iron	(Fe)	3.00 – 5.00%
Manganese	(Mn)	0.50% max

### Other Elements (\*Notes)

\*Welding grade Pb 0.01% max.

### Related Specifications:

AS 1565	C95400
ASTM B505 & B271	954
SAE	CA954
UNS	C95400

Electrical conductivity – 13%  
 Freezing range 1040°C (approx)

### Other:

Activity	Rating
Machinability	3
Pressure Tightness	1
Weldability (Mig)	1

1 – 4 in decreasing order of merit

### Typical Mechanical Properties – for guidance only

0.2% Proof Stress MPa	Tensile Strength MPa	Elongation %	Hardness HB
210 – 250	520 – 595	12 – 18	140 – 170