# CuSn4Pb2P

Tin Bronze Alloy

Standardization:
**Tin Bronze / Phosphor Bronze**

## ALLOY DESCRIPTION

A hard-surfaced Tin Bronze alloy with high tin content, showing superior resistance to deformation under heavy loads.

## CHEMICAL COMPOSITION (% WEIGHT)

| Fe (%) | Ni (%) | P (%) | Pb (%) | Zn (%) | Sn (%) |
|---|---|---|---|---|---|
| max 0.1 | max 0.2 | 0.2 - 0.4 | 1.5 - 2.5 | max 0.3 | 3.5 - 4.5 |

## MECHANICAL PROPERTIES (MIN.)

| | |
|---|---|
| Elongation (A) | **10** |
| Hardness (HB) | **140** |

## PHYSICAL PROPERTIES

| | |
|---|---|
| Density | **8.80 [kg/dm³]** |
| Melting Temperature | **~830 - 990 [°C]** |
| Elk. Conductivity | **~6 - 8 [MS/m]** |
| Elasticity Modulus | **100 [kN/mm²]** |

## CASTING / MANUFACTURING METHODS

| | |
|---|---|
| EK | **Extrusion (Rod/Profile)** |
| GS | **sand casting** |
| GM | **Permanent mold casting** |
| GZ | **Centrifugal casting** |

## AREAS OF APPLICATION

- Worm Gears
- Heavy Load Bushes
- Nuts and Screws
- Piston Skirts
- Wear Shoes

## MACHINABILITY & CHARACTERISTICS

Perfectly withstands high surface pressures. A classic choice for heavy-working worm gears and bearing applications where the load/speed combination is demanding. Corrosion resistance and machinability are well-balanced.

The technical information specified in this document reflects the standard reference values of international EN and DIN norms. Deviations may be observed depending on final production conditions.

**CORUM BRONZE**

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