

# PB2 AS-1565 Grade C90810 (Phos Bronze)



James Coppell Lee

## SAND AND CHILL CASTINGS

### ABOUT

PB2 has good machining properties, high strength, shock resistance with good corrosion resistance to seawater and brine, making it suitable for pump and valve components.

PB2 is suitable for bearings having medium to high loads and speeds and good resistance to impact loading or pounding. PB2 bearings must have adequate lubrication and alignment.

PB2 is suitable for heavy duty gears and worm wheels with high working loads and high speeds and adequate lubrication and alignment.

### EQUIVALENT TO

Britain	BS1400 PB2
USA	SAE 65 ASTM 505-B427- C90800
Japan	JIS H5121 -CA502C PBC2C
Germany	DIN 1705 G – CUSn12

### NOMINAL CHEMICAL ANALYSIS

CHEMICAL COMPOSITION (Maximum % Unless Otherwise Listed)									OTHER ELEMENTS (*NOTES)
Copper Cu	Tin Sn	Zinc Zn	Nickel Ni	Lead Pb	Phos P	Alum Al	Iron Fe	Mang Mn	
85- 89	11.2- 13.0	0.30	0.50	0.25	0.15- 0.80	0.005	0.15		*Ni max. incl. Co.

### MECHANICAL PROPERTIES / Typical

TENSILE (MPa)		ELONGATION (5-65/50% MIN.)		.2% PROOF (MPa)		HARDNESS (RB)	
Sand Cast	Chill Cast	Sand Cast	Chill Cast	Sand Cast	Chill Cast	Sand Cast	Chill Cast
220	270	5	3	130	170	75	100

Compressive Strength 0.1% Permanent Set	130 MPa
Specific Gravity	8.8
Machinability Rating (Free Machining Brass=100)	30
Max. Operating Temperature	250oC (482oF)
Stress Relieving Temperature	260oC (500oF)
Time at Temperature	1 hour per 25mm of section thickness

### APPLICATIONS

- Bushes and Bearings
- Worm, Gears
- Pump & Valve Components
- Flanges
- Marine
- Rock Drill Parts
- Crusher Bearings
- Hose Nozzles
- Irrigation Equipment
- Rollers
- Washers
- Wear Rings