



James Coppel Lee

PB1 AS-1565 Grade 90710 (PHOS BRONZE)

CONTINUOUS CAST ROD, HOLLOW, PLATE

ABOUT

PB1 has good machining properties, high strength, and good corrosion resistance to seawater and brine, making it suitable for pump and valve components.

PB1 is suitable for bearings having medium to high loads and speeds and good resistance to impact loading or pounding. PB1 bearings must have adequate lubrication and alignment.

PB1 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 PB1
USA	SAE 65 ASTM 505-B271- C90700
Japan	JIS H5113-PBC2C * near spec
Germany	DIN 1705 G – CUSn10

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	
84.0- 86.0	10.2- 12.0	0.05	0.10	0.25	0.6- 1.2	0.005	0.10		*Ni max. incl. Co.

MECHANICAL PROPERTIES / Typical

TENSILE (MPa)		ELONGATION (5-65/50% MIN.)		.2% PROOF (MPa)		HARDNESS (BHN)	
Continuous	Centrifugal	Continuous	Centrifugal	Continuous	Centrifugal	Continuous	Centrifugal
360	340	10	8	170	170	100-150	100-150

Compressive Strength 0.1% Permanent Set	130-160 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

ADVANTAGES OF CONTINUOUS CAST

Reduced Machining allowance, excellent mechanical properties. Complete freedom from gas and porosity, ensuring very good pressure tightness. 3 – 3.5 metre feed stock for machining

APPLICATIONS

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