



James Coppel Lee

# HTB3 AS-1565 Grade C86300 (Manganese Bronze)

## SAND CASTINGS

### ABOUT

HTB3, is a High Tensile Brass. High strength for heavy load. Good corrosion resistance.

### EQUIVALENT TO

Britain	BS1400 -HTB3
USA	SAE 430A, 430B
Japan	
Germany	

### 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	
60-66	0.2	22.0-28.0	1.0	0.20		5.0-7.50	2.0-4.0	2.50-5.0	*Ni max. incl. Co.

### MECHANICAL PROPERTIES / Typical

TENSILE (MPa)		ELONGATION (5-65/50% MIN.)		.2% PROOF (MPa)		HARDNESS RB	
Sand Cast		Sand Cast		Sand Cast		Sand Cast	
760		12		415		85	

Compressive Strength 0.1% Permanent Set	130 MPa
Specific Gravity	8.33
Machinability Rating (Free Machining Brass=100)	26
Max. Operating Temperature	250 (482 F)
Stress Relieving Temperature	260oC (500oF)
Time at Temperature	1 hour per 25mm of section thickness

### APPLICATIONS

- Heavy Load Bushes
- Worm Gears
- Wear Rings, Plates