



James Coppel Lee

# HTB1 AS-1565 Grade C86500 (Manganese Bronze)

## SAND CASTINGS

### ABOUT

HTB1, is a High Tensile Brass medium strength, with good corrosion resistance

HTB1 is used for Bearings, Propellers and Marine components. Brackets

### EQUIVALENT TO

Britain	BS1400 -HTB1
USA	SAE 430C
Japan	
Germany	CuZnAl2FeMnNi

### 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	
55-60	1.0	36.0-42.0	1.0	0.40		0.50-1.50	0.40-2.0	0.10-1.50	*Ni max. incl. Co.

### MECHANICAL PROPERTIES / Typical

TENSILE (MPa)		ELONGATION (5-65/50% MIN.)		.2% PROOF (MPa)		HARDNESS (BHN)	
Sand Cast		Sand Cast		Sand Cast		Sand Cast	
480		25		170		130	

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

- Bushes and Bearings
- Worm, Gears
- Marine Components
- Propellers
- Irrigation Equipment
- Wear Rings / bar