



HIGH TENSILE BRASS HTB1

(BS 1400 1985 HTB1)

High tensile brass castings exhibit high strength and cost less than comparable high strength alloys. HTB1 has good resistance to both corrosion and oxidation. HTB1 castings are often heat treated to restore the alloy structure to its optimum condition and to further increase its resistance to corrosion as a result.

HTB1 and other high tensile brass castings are used extensively for wear-resisting applications because of their strength. It is also used for marine propellers, pump impellers and valve bodies due to its high corrosion resistance.

Chemical Composition - CuZn35AlFeMn

Element		%
Manganese	P	0.10 - 3.00
Iron	Fe	0.70 - 2.00
Aluminium	Al	0.50 - 2.50
Tin	Sn	1.00 maximum
Nickel	Ni	1.00 maximum
Lead	Pb	0.50 maximum
Silicon	Si	0.10 maximum
Copper	Cu	57.00 minimum
Zinc	Zn	Balance
Total Impurities 0.20 maximum		

Typical Mechanical Properties	
Ultimate Tensile Strength	470 - 570 MPa
Elongation (minimum)	18 - 35 %
Typical Hardness	100 - 150 BHN
Compressive Strength	170 - 280 MPa
Specific Gravity	8.3

Comparative Specifications	
BS 1400 HTB1	BS EN 1982:2008 GC CC756S
CuZn35Mn2Al1Fe1-C	ASTM B 505 C86500
ASTM B 271 C86500	ASTM B 584 C86500
SAE43	AS 1565-1985 C86500
AS 1565-1974 865C	

To discuss your requirements, call a member of NovaCast's team on +44 (0) 1225 707466, or email sales@novacast.co.uk

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