

Product Information Sheet

ISSUE A

ALLOY HTB2

A. W. Fraser Alloy HTB2 is a manganese bronze or high tensile brass conforming to the requirements of BS 1400 Alloy HTB2.

Alloy HTB2 has good strength and reasonable machining properties and is suitable for machinery parts requiring strength and toughness. This alloy is susceptible to dezincification and is not suitable for plumbing fittings or for use in a marine environment.

The composition of A. W. Fraser alloy HTB2 is strictly controlled as are the casting conditions. Alloy HTB2 products are manufactured using the latest continuous and centrifugal casting technology.

ALLOY HTB2 - MANGANESE BRONZE

SUMMARY OF PROPERTIES

Chemical Composition - percent

| Element | | | Nominal |
|-----------|----|--------------|---------|
| Copper | Cu | 58.0 - 61.0 | 60 |
| Aluminium | Al | 5.0 max | 2.5 |
| Iron | Fe | 0.50 - 2.5 | 1.5 |
| Manganese | Mn | 3.0 max | 1.5 |
| Nickel | Ni | 2.0 maximum | |
| Tin | Sn | 0.50 maximum | |
| Lead | Pb | 0.50 maximum | |
| Zinc | Zn | Balance | |

Mechanical Properties [Typical]

Yield Strength

Ultimate Tensile Strength

Elongation

Typical Hardness

Compressive Strength 0.1% Permanent Set

Specific Gravity

Machinability Rating (Free Machining Brass=100)

Max. Operating Temperature

Stress Relieving Temperature

Time at Temperature

Continuous Cast

280 MPa (41,000 psi)

590 MPa (85,000 psi)

15%

155 BHN

8.0

Centrifugal Cast

280 MPa (41,000 psi)

590 MPa (85,000 psi)

15%

155 BHN

Comparative Specifications