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MATERIAL DATA SHEET

MANGANESE BRONZE 863

Commonly known as:- 863; High tensile brass; HTB3

Typical Applications:- a high strength brass or bronze with good wearing characteristics and ductility used for heavy duty slow speed bearings, gears and heavy duty components.

Chemical Composition %

Element		Typical
Copper	Cu	63.0
Aluminium	Al	6.0
Iron	Fe	3.0
Manganese	Mn	3.5
Nickel	Ni	1.0 max
Tin	Sn	0.2 max
Lead	Pb	0.2 max
Zinc	Zn	Balance

Mechanical Properties: - Continuous cast (typical)

Ultimate Tensile Strength	800 MPa
Yield Strength	450 MPa
Elongation	14 %
Typical Hardness	200 BHN
Machinability	25 % (free machining brass = 100%)

Similar Specifications:- BS1400 – HTB3; ASTM B505; SAE 430

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