IS 320 HT2

MANANESE BRONZE

DESCRIPTION

High Tensile Brass are alloys of Copper and Zinc. HT2 is a duplex or alpha/beta alloy. Brass alloy HT2 is a versatile high strength, hot workable, machinable engineering alloy sometimes referred to as a Manganese Bronze or High Tensile Brass.

CHEMICAL COMPOSITION

Elements	Min (%)	Max (%)
Cu	56.00	61.00
Pb	0.50	1.50
Sn	-	1.00
Fe	0.20	1.50
Al	0.30	2.00
Mn	0.50	2.00
Total Others	-	0.50
Zn	Remainder	

MECHANICAL PROPERTIES (AS PER TEMPER HBSR)

Range (mm)	From	To	UTS Min (Mpa)	PS Min (Mpa)	Elo Min (%)	Hardness Min	Hardness Max
Round (Dia)	10	40	520	-	12	-	-
	40	75	500	-	15	-	-
Round (Dia)	40	70	500	-	15	-	-
Square (A/F)	40	60	500	-	15	-	-
Rectangle (Thickness)	10	40	520	-	12	-	-
	40	50	500	-	15	-	-

RAJHANS METALS PRIVATE LIMITED

3985, GIDC, Phase-III, Dared, Jamnagar - 361 004. (Gujarat) INDIA. +91 2882573820 www.rajhans.com

IS 320 HT2

MANANESE BRONZE

PHYSICAL PROPERTIES

Melting Point	865°C
Density	8.63g/cm3
Electrical Conductivity	0.09 x 10-6O.m
Thermal Conductivity	88.3W/m.K
Modulus of Elasticity	96.5 GPa

FABRICATION PROPERTIES

Capacity for being Cold formed	Poor
Capacity for being Hot worked	Good
Machinability Ration	30%
Resistance to Corrosion	Excellent
Suitability for soldering	Excellent

TYPICAL USES

- Gas valves and fittings
- Fasteners
- Pump trim
- Gears
- Locks
- Heavy-duty electrical connectors
- Transmission components
- Marine hardware
- Safety tools and decorative metalwork

RAJHANS METALS PRIVATE LIMITED

3985, GIDC, Phase-III, Dared, Jamnagar - 361 004. (Gujarat) INDIA. +91 2882573820 www.rajhans.com