C6783

MANGANESE BRONZE

DESCRIPTION

High Tensile Brass are alloys of Copper and Zinc. C6783 is a duplex or alpha/beta alloy. Brass alloy C6783 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	55.00	59.00
Pb	-	0.50
Fe	0.20	1.50
Al	0.20	2.00
Mn	1.00	3.00
Total Others	-	-
	Remainder	

Mechanical Properties According To JIS H3250 Grade C6782 (As Per Temper BD)

Range (MM)	From	To	UTS Min (Mpa)	PS Min (Mpa)	Elongation Min (%)	Hardness Min	Hardness Max
Round (Dia)	6	50	540	-	12	-	-
Hex (A/F)	6	50	540	-	12	-	-
Square (A/F)	6	50	540	-	12	-	-
Rectangle (Thickness)	6	50	540	-	12	-	-

PHYSICAL PROPERTIES

Specific Gravity	8.63

FABRICATION PROPERTIES

Technique	Suitability
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

- Marine hardware
- Valve seats
- Synchronizer ring
- Propeller shaft
- Pump shaft
- Fasteners
- Lead screw nuts

RAJHANS METALS PRIVATE LIMITED

3985, GIDC, Phase-III, Dared, Jamnagar - 361 004. (Gujarat) INDIA. +91 288 2573820 www.rajhans.com