CW721R

MANGANESE BRONZE

DESCRIPTION

High Tensile Brass are alloys of Copper and Zinc. CW721R is a duplex or alpha/beta alloy. Brass alloy CW 721R 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	57.00	59.00
Pb	0.80	1.60
Sn	0.20	1.00
Fe	0.20	1.20
Al	0.30	1.30
Mn	0.80	1.80
Ni	-	0.30
Total others	-	0.30
Zn	-	-
	Remainder	

MECHANICAL PROPERTIES CW721R (AS PER TEMPER R440)

Range (mm)	From	To	UTS Min (N/mm^2)	PS Min (N/mm^2)	Elo Min (%)	Hardness Min	Hardness Max
Round (Dia)	40	75	440	180	20	-	-
Hex (a/F)	40	60	440	180	20	-	-
Square (A/F)	40	60	440	180	20	-	-
Rectangle (Thickness)	40	50	440	180	20	-	-

RAJHANS METALS PRIVATE LIMITED

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PHYSICAL PROPERTIES

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

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

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

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