

IS 8737MOD

FORGING BRASS

DESCRIPTION

IS 8737 are the reference materials for hot working. The mean Lead content provides good machinability of the forged part. Because of its Composition this alloy is suited for the production of LPG Valve.

CHEMICAL COMPOSITION

Elements	Min (%)	Max (%)
Cu	56.50	60.000
Pb	1.00	2.00
Fe	-	0.30
Mn	0.50	-
Total Others	-	0.75
Zn	Remainder	

MECHANICAL PROPERTIES ACCORDING TO IS 8737 MOD (AS PER TEMPER HB)

Range (Inch)	From	To	UTS Min (Mpa)	PS Min (Mpa)	Elongation Min (%)	Hardness Min	Hardness Max
Round (Dia)	1.5	75.00	392.00	-	18.00	-	-
Hex (A/F)	3.00	70.00	392.00	-	18.00	-	-
Square (A/F)	3.00	60.00	392.00	-	18.00	-	-

PHYSICAL PROPERTIES

PHYSICAL PROPERTIES	METRIC	ENGLISH
Density	8.40 g/cc	0.303 lb/in ³
CTE. linear	26.0 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$	14.4 $\mu\text{in}/\text{in}\cdot^{\circ}\text{F}$
Specific Heat Capacity	0.380 J/g $\cdot^{\circ}\text{C}$	0.0908 BTU/lb $\cdot^{\circ}\text{F}$
Thermal Conductivity	113 W/m-K	784 BTU-in/hr-ft ² $\cdot^{\circ}\text{F}$
Melting Point	880-900 $^{\circ}\text{C}$	1620 – 1650 $^{\circ}\text{F}$
Solidus	880 $^{\circ}\text{C}$	1620 $^{\circ}\text{F}$
Liquidus	900 $^{\circ}\text{C}$	1650 $^{\circ}\text{F}$



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FABRICATION PROPERTIES

Technique	Suitability
Machinability (CuZn39Pb3 = 100 %)	80.00%
Capacity for Being Cold Worked	Poor
Capacity for Being Hot Worked	Excellent

TYPICAL USES

> Valves LPG

