



Adinath
Create, Enhance & Sustain

CZ135:HIGH TENSILE BRASS

Specification Sheet

DESCRIPTION

Manganese Bronze comes from a family of High strength copper based alloys which includes Manganese as an alloying agent with additions of Iron, Aluminium, Zinc, Lead and sometimes Nickel or Silicon. It has exceptionally high strength as compared to normal brass and therefore commonly known as High Tensile Brass, High Tensile Manganese Bronze, High Strength Brass or Manganese Aluminium Bronze.



CHEMICAL COMPOSITION

Element	Cu	Al	Fe	Ni	Mn	Zn	Pb	Sn	Si	Oi
Min (%)	57.00	1.00	-	-	1.50	Balance	-	-	0.30	-
Max (%)	60.00	2.00	0.50	0.20	3.50		0.80	0.30	1.30	0.50

Note: Ni includes Co; Cu+ named elements >= 99.5%; Unless otherwise noted, single values represent maximums.

SHAPE



SOLID ROUND BARS
Size Range :
Dia 10 mm up to 120 mm.



SOLID HEX BARS
Size Range :
A/F 10 mm up to 100 mm.



SOLID SQUARE BARS
Size Range :
A/F 10 mm up to 90 mm.



SOLID RECTANGLE BARS
Size Range :
A/F 10 x 12 mm up to 100 x 50 mm.



HOLLOW BARS
Outer Diameter : In Round, Hex & Square.
Size Range : 30 mm up to 120 mm.
Inner Diameter : Round
Size Range : 20 mm up to 80 mm.



PROFILES & SECTIONS
As per Customers' Drawing



BAR LENGTH
Length : Up to 4 Meters.
Delivery Condition : As Extruded or Cold Drawn.

STRAIGHT KNURLING



CROSS KNURLING



Straight Knurling & Cross Knurling will be available upon shape & size Feasibility of Brass Rod

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MECHANICAL PROPERTIES

Round (Dia)					
Range (mm)	UTS Min (N/MM ²)	PS Min (N/MM ²)	Elongation Min (%)	Hardness (HRB)	
4 to 40 Inclusive	550	270	12	-	
Over 40 to 75 Inclusive	550	270	12	-	
HEX (A/F)					
Range (mm)	UTS Min (N/MM ²)	PS Min (N/MM ²)	Elongation Min (%)	Hardness (HRB)	
4 to 40 Inclusive	550	270	12	-	
Over 40 to 70 Inclusive	550	270	12	-	
Square (A/F)					
Range (mm)	UTS Min (N/MM ²)	PS Min (N/MM ²)	Elongation Min (%)	Hardness (HRB)	
4 to 40 Inclusive	550	270	12	-	
Over 40 to 60 Inclusive	550	270	12	-	
Rectangle					
Range (mm)	UTS Min (N/MM ²)	PS Min (N/MM ²)	Elongation Min (%)	Hardness (HRB)	
Thickness	4 to 40 Inclusive	550	270	12	-
	Over 40 to 50 Inclusive	550	270	12	-

PACKING



-  PVC Pipe Packing for Small Diameter Rods.
-  Hessian Cloth Packing.
-  Wooden Box Packing as per Customer requirements.

FABRICATION PROPERTIES

Soldering	Brazing	Machinability Rating
Excellent	Good	30

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TYPICAL USES

Product Category	Product
Automotive & Hydraulic	Gas Valves and Fittings, Fasteners, Pump Trim, Gears, Locks, Heavy-Duty Electrical Connectors, Transmission Components, Safety Tools and Decorative Metalwork.

VALUE ADDED SERVICES

AEPL manufactures and supplies Copper Alloys Extruded Bars to Domestic as well as International Markets. Our customer base has a key advantage since our Foundries, Laboratories, Extrusion Mill, Shell Mouldings and CNC Machine shop are all located on a single site, which eliminates waste and allows excellent quality control at each stage. Our ability to reclaim swarf and machined chips allows us to offer competitive pricing for the parts that we either extrude or cast.

Casting Range



25 Grams to 10 Kgs

Forging Sizes



50 Grams to 6 Kgs

Machining Sizes



1 mm to 200 mm

CONNECT WITH US Adinath Extrusion Pvt. Ltd.

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