



Adinath

Create, Enhance & Sustain

C-67410: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.

Cu Copper 63.546 2-8:18-1	Al Aluminium 26.982 2-8:3	Mn Manganese 54.938 2-8:18-2
Fe Iron 55.845 2-8:14-2	Pb Lead 207.2 2-8:18:30-18:4	Zn Zinc 65.38 2-8:18-2

CHEMICAL COMPOSITION

Element	Cu	Al	Fe	Ni	Mn	Zn	Pb	Sn	Si
Min (%)	55.00	1.30	-	-	1.00	Balance	-	-	0.70
Max (%)	59.00	2.30	1.00	2.00	2.40		0.80	0.50	1.30

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

C-67410:HIGH TENSILE BRASS



MECHANICAL PROPERTIES

Round (Dia)						
Range (mm)		UTS Min (MPA)	PS Min (MPA)	Elongation Min (%)	Hardness (HRB)	
8 to 75 Inclusive		630	370	8	170 - 210	
HEX (A/F)						
Range (mm)		UTS Min (MPA)	PS Min (MPA)	Elongation Min (%)	Hardness (HRB)	
8 to 70 Inclusive		630	370	8	170 - 210	
Square (A/F)						
Range (mm)		UTS Min (MPA)	PS Min (MPA)	Elongation Min (%)	Hardness (HRB)	
8 to 60 Inclusive		630	370	8	170 - 210	
Rectangle						
Range (mm)		UTS Min (MPA)	PS Min (MPA)	Elongation Min (%)	Hardness (HRB)	
Thickness	8 to 50 Inclusive	630	370	8	170 - 210	

PACKING



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

FABRICATION PROPERTIES

Soldering	Brazing	Machinability Rating
Fair	Good	30

TYPICAL USES

Product Category	Product
Industrial	Bushings, Cams, Chain Guides, Food Conveyor Chain, Gears, Shafts, Wear Plates.

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Product Category	Product
Others	Connecting Rods.

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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