



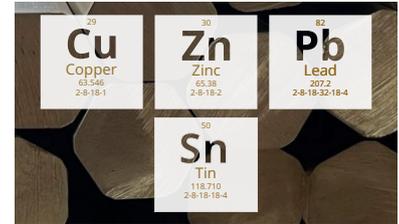
Adinath
Create, Enhance & Sustain

IS:291 GRADE -I:NAVAL BRASS

Specification Sheet

DESCRIPTION

IS 291 Grade I Naval Brass is defined as per the Bureau of Indian Standards. This alloy contains higher Copper and Tin content when compared to IS 291 Grade II Naval Brass. This alloy offers excellent hot formability along with good corrosion resistance properties. They are widely used in marine construction where hard and strong material is required.



CHEMICAL COMPOSITION

Element	Cu	Fe	Zn	Pb	Sn	Oi
Min (%)	61.00	-	Balance	-	1.00	-
Max (%)	64.00	0.10		0.20	1.50	0.20

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

SHAPE



SOLID ROUND BARS
Size Range :
Dia 7 mm up to 120 mm.



SOLID HEX BARS
Size Range :
A/F 7 mm up to 100 mm.



SOLID SQUARE BARS
Size Range :
A/F 7 mm up to 90 mm.



SOLID RECTANGLE BARS
Size Range :
A/F 7 x 10 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

IS:291 GRADE - I:NAVAL BRASS



MECHANICAL PROPERTIES

Round (Dia)					
Range (mm)		UTS Min (MPA)	PS Min (MPA)	Elongation Min (%)	Hardness (HRB)
3 to 12.50 Inclusive		390	-	18	-
Over 12.50 to 50 Inclusive		380	-	18	-
Over 50 to 75 Inclusive		345	-	18	-
Hex (A/F)					
Range (mm)		UTS Min (MPA)	PS Min (MPA)	Elongation Min (%)	Hardness (HRB)
3 to 12.50 Inclusive		390	-	18	-
Over 12.50 to 50 Inclusive		380	-	18	-
Over 50 to 65 Inclusive		345	-	18	-
Square (A/F)					
Range (mm)		UTS Min (MPA)	PS Min (MPA)	Elongation Min (%)	Hardness (HRB)
3 to 12.50 Inclusive		390	-	18	-
Over 12.50 to 50 Inclusive		380	-	18	-
Over 50 to 60 Inclusive		345	-	18	-
Rectangle					
Range (mm)		UTS Min (MPA)	PS Min (MPA)	Elongation Min (%)	Hardness (HRB)
Thickness	3 to 12.50 Inclusive	390	-	18	-
	Over 12.50 to 50 Inclusive	380	-	18	-

PACKING



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

IS:291 GRADE - I:NAVAL BRASS



FABRICATION PROPERTIES

Soldering	Brazing	Machinability Rating
Excellent	Excellent	30

TYPICAL USES

Product Category	Product
Marine	Marine applications.
Industrial	Automatic Screw Machine Parts.
Fasteners	Fasteners and hardware for corrosion resistant service.

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



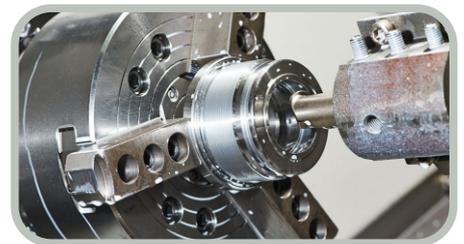
 25 Grams to 10 Kgs

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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