



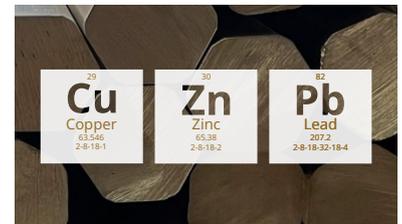
Adinath
Create, Enhance & Sustain

IS:319 Grade-II:FREE MACHINING BRASS

Specification Sheet

DESCRIPTION

IS 319 Grade 2 is the Indian Standard similar to UNS C36000 or CDA360. When machinability is the prime consideration, this alloy stands out as a preferred choice. It is one of the most economical material used for tapping, threading, and milling or turning primarily due to the presence of 3% Lead in the material. It has excellent cutting properties with long tool life and excellent surface finish.



CHEMICAL COMPOSITION

Element	Cu	Fe	Zn	Pb	Oi
Min (%)	60.00	-	Balance	2.50	-
Max (%)	63.00	0.35		3.70	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

IS:319 Grade-II:FREE MACHINING BRAS



MECHANICAL PROPERTIES

Round (Dia)					
Range (mm)	UTS Min (MPA)	PS Min (MPA)	Elongation Min (%)	Hardness (HRB)	
Over 4 to 12 Inclusive	395	-	7	66 to 81	
Over 12 to 25 Inclusive	385	-	10	64 to 78	
Over 25 to 50 Inclusive	345	-	15	52 to 72	
Over 50 to 75 Inclusive	315	-	20	47 to 66	
Hex (A/F)					
Range (mm)	UTS Min (MPA)	PS Min (MPA)	Elongation Min (%)	Hardness (HRB)	
Over 4 to 12 Inclusive	395	-	7	66 to 81	
Over 12 to 25 Inclusive	385	-	10	64 to 78	
Over 25 to 50 Inclusive	345	-	15	52 to 72	
Over 50 to 75 Inclusive	315	-	20	47 to 66	
Square (A/F)					
Range (mm)	UTS Min (MPA)	PS Min (MPA)	Elongation Min (%)	Hardness (HRB)	
Over 4 to 12 Inclusive	395	-	7	66 to 81	
Over 12 to 25 Inclusive	385	-	10	64 to 78	
Over 25 to 50 Inclusive	345	-	15	52 to 72	
Over 50 to 75 Inclusive	315	-	20	47 to 66	
Rectangle					
Range (mm)	UTS Min (MPA)	PS Min (MPA)	Elongation Min (%)	Hardness (HRB)	
Rectangle (Thickness)	6 to 12	395	-	7	66 to 81
	12 to 25	385	-	10	64 to 78
	25 to 50	345	-	12	52 to 72

PACKING



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

IS:319 Grade-II:FREE MACHINING BRASS



FABRICATION PROPERTIES

Soldering	Brazing	Machinability Rating
Excellent	Good	100

TYPICAL USES

Product Category	Product
Architecture	Terrazzo Strip.
Automotive	Fluid Connectors, Sensor Bodies, Thermostat Parts, Threaded Inserts for Plastic.
Builders Hardware	Fittings, Hardware, Lock Bodies.
Consumer	Hot Combs (to Straighten Hair).
Fasteners	Bolt, Nuts, Screws.
Industrial	Adapters, Automatic Screw Machine Parts, Faucet Components, Fluid Connectors, Gauges, Gears, Nozzles, Pinions, Pneumatic Fittings, Screw Machine Products, Unions, Valve Seats, Valve Trim.
Plumbing	Faucet Seats, Faucet Stems, Plumbers' Brass Goods, Plumbing Fittings.

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



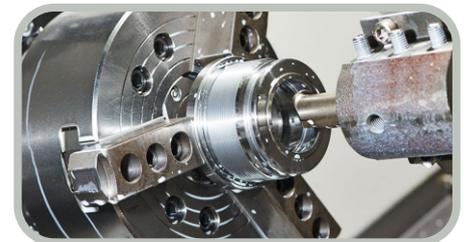
25 Grams to 10 Kgs

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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