



# Adinath

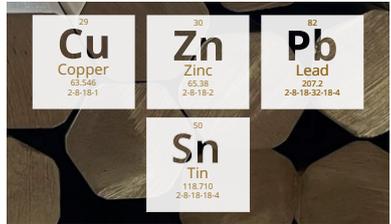
Create, Enhance & Sustain

## C-46400:NAVAL BRASS

### Specification Sheet

#### DESCRIPTION

C46400 is a type of Copper-Zinc-Tin alloy where the addition of Tin provides good strength and rigidity. The addition of tin also improves the corrosion resistance in seawater at higher than normal temperatures, specially against dezincification. The alloy is also noted for its resistance to wear, fatigue, galling, and stress corrosion cracking. Apart from this properties, C46400 is also known for its hardness and is suitable for a wide range of fresh and seawater applications. C46400 is slightly yellow then Architectural Bronze with good colour match for decorative and architectural products.



#### CHEMICAL COMPOSITION

Element	Cu	Fe	Zn	Pb	Sn	Oi
Min (%)	59.00	-	Balance	-	0.50	-
Max (%)	62.00	0.10		0.20	1.00	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 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

# C-46400:NAVAL BRASS



## MECHANICAL PROPERTIES

Round (Dia)					
Range (mm)	UTS Min (MPA)	PS Min (MPA)	Elongation Min (%)	Hardness (HRB)	
3 to 12 Inclusive	415	185	22	-	
12 to 25 Inclusive	415	185	25	60 - 80	
25 to 50 Inclusive	400	180	25	55 - 80	
50 to 75 Inclusive	370	170	25	55 - 80	
Hex (A/F)					
Range (mm)	UTS Min (MPA)	PS Min (MPA)	Elongation Min (%)	Hardness (HRB)	
3 to 12 Inclusive	415	185	22	-	
12 to 25 Inclusive	415	185	25	60 - 80	
25 to 50 Inclusive	400	170	25	55 - 80	
50 to 70 Inclusive	370	170	25	55 - 80	
Square (A/F)					
Range (mm)	UTS Min (MPA)	PS Min (MPA)	Elongation Min (%)	Hardness (HRB)	
3 to 12 Inclusive	415	185	22	-	
12 to 25 Inclusive	415	185	25	60 - 80	
25 to 50 Inclusive	400	180	25	55 - 80	
50 to 75 Inclusive	370	170	25	55 - 80	
Rectangle					
Range (mm)	UTS Min (MPA)	PS Min (MPA)	Elongation Min (%)	Hardness (HRB)	
Thickness	3 to 12 Inclusive	415	185	22	-
	12 to 25 Inclusive	415	185	25	60 - 80
	25 to 50 Inclusive	400	180	25	55 - 80

## PACKING



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

# C-46400:NAVAL BRASS



## FABRICATION PROPERTIES

Soldering	Brazing	Machinability Rating
Excellent	Excellent	70

## 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.

 Plot No. 4051-4055,  
Bhagwan Mahavir Swami Marg,  
G.I.D.C., Phase-III, Dared,  
Jamnagar - 361004, Gujarat, India.

 +91 7600 55 9243  +91 288 2730868  
 sales@adinathextrusion.com,  
marketing@adinathextrusion.com  
 www.adinathextrusion.com

