

# MEI-61(CuZn38 Sn 1) ROLLED PRODUCTS

CHEMICAL COMPOSITION(%)		
Cu	59.00-62.00	
Fe	≤0.1	
Pb	≤0.2	
Sn	0.5-1.00	
Zn	REM	

ALLOY DESIGNATIONS		
UNS	C46400	
EN	CuZn38Sn1	
JIS	C4640	
BS	CZ112	

SHEET/PLATE SPECIFICATIONS		
Thickness (mm)*	0.3- 25.00	
Width (mm) *	≤1250	
Length(mm)*	≤2500	

#### **CHARACTERISTICS**

Commercial Name is Naval Brass.

MEI-61 is brass alloy with Tin content and is highly resistant to corrosion.

	MECH.	ANICAL PROPE	ERTIES	
Temper		Tensile Strength MPa / Ksi (Min)	Yield Stress MPa/Ksi (Min)	Elongation % (Min)
Hotrolled & annealed	025	345/50	140/20	35
Hot rolled	H20	380/55	175/25	30
1/4 Hard	Ho1	480/70	400/58	10
Coldrolled & annealed	050	430/62	210/30	25

PHYSICAL PROPERTIES				
TYPICAL VALUES IN ANNEALED TEMPER AT 20 ° C				
Density	Electrical conductivity (% IACS)	Thermal Conductivity (W/m.K)	Modulus of Elasticity Gpa	Specific Heat J/kg.K
8.41	26	116	103	375

MITTAL ENGINEERING INDUSTRIES OLD BILASPUR ROAD , JAGADHRI-135003 (HARYANA) Website-mittalenggind.in



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Fabrication Properties			
TECHNIQUE	SUITABILITY		
Soldering	Excellent		
Brazing	Excellent		
Oxyacetylene Welding	Good		
Gas Shielded Arc Welding	Fair		
Coated Metal Arc Welding	Not Recommended		
Spot Weld	Good		
Seam Weld	Fair		
Butt Weld	Good		
Capacity for Being cold worked	Fair		
Capacity for Being Hot Formed	Excellent		
Forgeability Rating	90		
Machinability Rating	30		

#### **CORROSION RESISTANCE**

Wrought strengthening and the addition of tin makes MEI-61 highly resistance to dezincification, greatly inhabiting seawater corrosion at higher-than-normal temperatures. C46400 Naval Brass is resistant to wear, fatigue, galling, and stress corrosion cracking. It also offers good strength levels combined with an excellent hot formability. Its uses are mainly in seawater application such as marine hardware balls, nuts, bolts, rivers, valve, stems and propeller shafts.

### Packaging

Standard seaworthy packaging or as per specific requirements of customer.

#### TYPICAL APPLICATIONS

Precision Shipboard Equipment,
Pressure Vessels, Condenser Plates, Heat
Exchanger Plates, valve guides, Decorative Fitting,
Turn buckles, Marine Hardware, Missile
components, and Baffle Plates.

MEI-61 conform ROHS Directive

This data is general technical product information. Binding technical features are subject to the contract.