



Metal Alloys Corporation



COPPER NICKEL "90/10"

EQUIVALENT SPECIFICATIONS

SPECIFICATIONS	DESIGNATION
ISO	CuNi10Fe1Mn
European	CuNi10Fe1Mn
BS	CN 102
JIS	C 7060
Russian	MNZMo10-1-1

C70600 , Copper nickel offers excellent corrosion resistance, especially in marine salt water environments. The main, wrought copper-nickel alloys chosen for sea water service contain 10 or 30 percent nickel. They also have important additions of iron and manganese which are necessary to maintain good corrosion resistance.

TYPICAL USES for C70600 Copper Nickel "90/10":

AUTOMOTIVE: Power Steering Tube, Brake Lines **CONSUMER:** Screw Lamp Bases **INDUSTRIAL:** Condenser Plates, Condensers, Weld Torch Tips, Heat Exchanger Tubes, Valve Bodies, Evaporator Tubes, Pressure Vessels, Distiller Tubes, Pump Impellers for Oil Refining, Ferrules, Evaporators **MARINE:** Boat Hulls, Tube Sheet for Salt Water Service, Salt Water Pipe Fittings, Salt Water Piping Systems, Salt Water Piling Wrap, Hot Water Tanks, Salt Water Baffles, Propeller Sleeves, Ship Hulls, Water Hoses **PLUMBING:** Flanges

CHEMICAL COMPOSITION

	Cu	Fe	Pb	Mn	Ni	Zn
Min/Max	Rem	1.0 - 1.8	0.05	1	9.0 - 11.0	1
Nominals	88.6000	1.4000	-	-	10.0000	-

PHYSICAL PROPERTIES

Product Property	US Customary
Coefficient of Thermal Expansion	9.5 Å • 10-6 per oF (68-572 F)
Density	0.323 lb/in3 at 68 F
Electrical Conductivity	9 %IACS @ 68 F
Electrical Resistivity	115.0 ohms-cmil/ft @ 68 F
Melting Point - Liquidus	2100 F
Melting Point - Solidus	2010 F
Modulus of Elasticity in Tension	18000 ksi
Modulus of Rigidity	6800 ksi
Specific Gravity	8.94
Specific Heat Capacity	0.09 Btu/lb/oF at 68 F
Thermal Conductivity	26.0 Btu Å • ft/(hr Å • ft2Å • oF)at 68F

SIZES AVAILABLE :

HOLLOW RODS
 ROUND RODS/BARS
 HEX
 SQUARE
 FLAT
 BILLETS
 INGOTS

Min Bore Size 20 mm and Max OD 100 mm
 8mm To 100 mm
 10mm To 60mm
 10mm To 60mm
 10mm Min Thickness and max Width 120mm
 Up to 200 mm
 As per Specification

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