

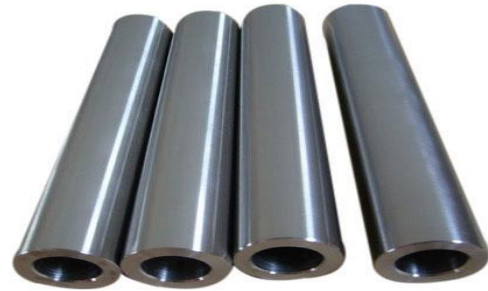
C95800 Alpha Nickel Aluminum Bronze Hollow Rods

The C95800 Alpha Nickel Aluminum Bronze is corrosion resistant against salt water, cavitation and erosion. The alloy is having the advantage of pressure tightness and is excellent for welding. It is available in many forms at a lower cost to you.

Cast ASTM: B271, B505, B148 Military/AMS: MIL-B-24480 Other: ABS - 4T

Common Applications :

- Piping for Vertical Pump Columns
- Firefighting and Fire Suppression Systems
- Seawater Lift Pumps
- Piping Layout, Flanges and Fittings
- Discharge Elbows
- Cooling Loops for Power Plants
- Bronze Valve Bodies
- Piping Systems
- Desalination Equipment
- Tube Sheets
- Circulating Pumps and Pump Shafts
- Fasteners, Hardware for Cooling towers



Equivalent Specifications:

Specifications	Designation
ISO	CuAl10Fe5Ni5
European	CuAl10Fe5Ni5
BS	CuAl10Fe5Ni5
JIS	C AC703
Russian	BrA10ZN4L

Chemical Composition:

	Al	Cu	Fe	Pb	Mn	Ni	Si
Min/Max	8.5-9.5	79.0 min	3.5-4.5	0.03	.8-1.5	4.0-5.0	0.1
Nominals	9	81	4	-	1	4.5	-

Specifications:

End Product	Specification
Centrifugal	ASTM B271, SAE J462, J461
Continuous	ASTM B505, SAE J461, J462
Ingot	ASTM B30
Precision	ASTM B806
Sand	ASTM B806

Fabrication

Joining Technique	Suitability
Brazing	Fair
Coated Metal Arc Welding	Good
Gas Shielded Arc Welding	Good
Machinability Rating	50
Oxyacetylene Welding	Not Recommended
Soldering	Good

Physical Properties

Product Property	US Customary	Metric
Coefficient of Thermal Expansion	9.0 $\times 10^{-6}$ per oF (68-572 F)	16.2 $\times 10^{-6}$ per oC (20-300 C)
Density	0.276 lb/in ³ at 68 F	7.64 gm/cm ³ @ 20 C

Electrical Conductivity	7 %IACS @ 68 F	0.041 MegaSiemens/cm @ 20 C
Electrical Resistivity	146.7 ohms-cmil/ft @ 68 F	34.39 microhm-cm @ 20 C
Information not available on website		
Magnetic Permeability	1.05	1.05
Melting Point - Liquidus	1940 F	1060 C
Melting Point - Solidus	1910 F	1043 C
Modulus of Elasticity in Tension	16500 ksi	114000 MPa
Poisson's Ratio	0.32	0.32
Specific Gravity	7.64	7.64
Specific Heat Capacity	0.105 Btu/lb/oF at 68 F	440.0 J/kg Â· oK at 293 K
Thermal Conductivity	20.8 Btu Â· ft/(hr Â· ft2Â·oF)at 68F	36.0 W/m Â· oK at 20 C

Sizes Available:

ROUND RODS	8mm To 70 mm
HEX	10mm To 60mm
SQUARE	10mm To 60mm
FLAT	10mm Min Thickness and max Width 120mm
BILLETS	Up to 200 mm
INGOTS	As per Specification

Regd. Office & Plant

Plot No. 6 & 7, Village: Lakhabaval, Post: Khodiyar Colony, Jamnagar - 361006.

Tel.: +91-288-2889251 / 52, Fax: +91-288-2889223, Cell: +91-9924443396

Email: info@metalalloyscorp.com • web: www.metalalloyscorp.com

World Class Sourcing Solution for Copper & Copper Alloys Products