

## High Tensile Manganese Bronze

### C86200 High Tensile Manganese Bronze Hollow Rod

The High Tensile Manganese Bronze - copper casting alloy UNS C86200 consists primarily of copper, zinc, aluminum and High Tensile Manganese Bronze. Manganese existing in UNS C86200 provides an attractive chocolate brown color which is commonly used in architecture. The presence of lead in the alloy improves the longevity of the alloy.



#### Typical Uses :

- **Builders:** Hardware Brackets, Structural Parts
- **Fasteners:** Screw Down Nuts
- **Industrial:** Struts, Gears, Valve Stems, Bushings, Cams, Wear Rings for Pressing Dies for Wood Pulp Industry, High Strength Machine Parts, Hooks, Frames, Shafts, Marine Racing Propellers, Worm Gears, Pressing Dies for Wood Pulp
- **Marine:** Rudders, Marine Castings, Boat Parts, Clamps

#### Equivalent specification

Specifications	Designation
UNS	C86200
ISO	CuZn26Al4Fe3Mn3
JIS	CAC303

#### Chemical Composition:

	Zn	Cu	Fe	Mn	Ni	Pb	Sn
Min/Max	22-28	60-66	2-4	2.5-5	1.0max	0.2max	0.2 max
Nominals	25	63	3	3.7	-	-	-

#### Physical Properties:

Product Property	US Customary
------------------	--------------

Melting Point - Liquidus	1725 F
Melting Point - Solidus	1650 F
Density	0.288 lb/in <sup>3</sup> at 68 F
Specific Gravity	7.97
Electrical Resistivity	136.70 ohms-cmil/ft @ 68 F
Electrical Conductivity	8 %IACS @ 68 F
Thermal Conductivity	20.50 Btu · ft/(hr · ft <sup>2</sup> ·°F)at 68F
Coefficient of Thermal Expansion	120 ·10 <sup>-6</sup> per oF (68-392 F)
Specific Heat Capacity	0.090 Btu/lb/°F at 68 F
Modulus of Elasticity in Tension	15000 ksi
Magnetic Permeability*	1.24

#### Sizes Available

ROUND RODS/BARS	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: Lakhavaval, Post: Khodiyar Colony, Jamnagar - 361006.  
Tel: +91-288-2889251 / 52, Fax: +91-288-2889223, Cell: +91-9924443396  
Email: [info@metalalloyscorp.com](mailto:info@metalalloyscorp.com) • web: [www.metalalloyscorp.com](http://www.metalalloyscorp.com)

World Class Sourcing Solution for Copper & Copper Alloys Products