

OVERVIEW

MEI-95 (Gilding Metal) has very good cold forming characteristics with slightly higher strength than pure copper. Excellent welding and brazing. Very low sensitivity to stress corrosion cracking and dezincification. Suitable for coinage, ammunition components and jewellery.

CHEMICAL COMPOSITION (wt. %)		ALLOY DESIGNATIONS		COIL / SHEET SPECIFICATIONS	
Element	Composition (%)	Standard	Designation	Specification	Range
Cu	94.00 – 96.00	IS	IS 3167	Thickness (mm)	0.04 – 3.0
Fe	≤0.05	ASTM	C21000	Width (mm)	6.00 – 406
Pb	≤0.02	BS 2870	CZ125	Inner Dia. (mm)	100/150/200/300/400/500
Ni	≤0.10	DIN 17660	2.0220	Coil Wt. (kg/mm)	1.0 – 4.0
Zn	Rem.	EN 1652	CW500L	Sheet Length (m)	0.50 – 4.00
		JIS 3100	C2100		

MECHANICAL PROPERTIES — typical values at 20°C

Temper	HV	Tensile MPa	Elong. %	Grain Size mm
Annealed	55–75	230–280	≥35	≤0.050
1/4 Hard	70–90	255–325	≥12	—
1/2 Hard	80–100	290–355	≥7	≤0.020
Hard	100–115	≥345	≥3	≤0.010
Extra Hard	115–125	≥385	—	—
Spring Hard	120–135	≥415	—	—

PHYSICAL PROPERTIES — annealed temper at 20°C

Density (g/cm³)	Elec. Conductivity (% IACS)	Thermal Conductivity (W/m·K)	Modulus of Elasticity (GPa)	Specific Heat (J/kg·K)
8.86	56.9	234	127	380

FABRICATION PROPERTIES

Fabrication Property	Rating	Fabrication Property	Rating
Capacity for Cold Working	Excellent	Soft Soldering	Excellent
Machinability	Less suitable	Resistance Welding	Good
Electroplating	Excellent	Gas Shielded Arc Welding	Good
Hot Dip Tinning	Excellent	Laser Welding	Fair

CORROSION RESISTANCE

MEI-95 has very low sensitivity to stress corrosion cracking. Not sensitive to dezincification that could occur in water with high chlorine content. Largely resistant to industrial atmosphere but not resistant to oxidizing acids.

TYPICAL APPLICATIONS

• Coins, medals and tokens	• Bullet jackets, fuse and primer caps, firing pin supports
• Components for the electrical industry, connectors, AC motors	• Jewelry, emblems and plaques