



EMH-Brass Tubes in CuZn30

CuZn30 has good cold working properties due to its medium copper content.

This alloy is suitable for stamping riveting, crimping, flanging, cold extrusion or other cold working operations.

Chemical Composition *

Cu	70 %
Zn	balance

* Standard values in % by weight

Material Description

EN	CuZn30, CW505L
UNS	C26000
DIN*	CuZn30, 2.0265
BS*	CZ106
NF*	CuZn30

* former national standards

Physical Properties *

Electrical conductivity

MS/m	16.3
% IACS	28

Thermal conductivity

W/(m*K)	126
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Thermal expansion coefficient

(0 – 300 °C) 10 ⁻⁶ /K	19.7
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Density

g/cm ³	8.55
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Modulus of elasticity

GPa	114
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* Standard values at room temperature
 1 GPa = 1 kN/mm²
 1 MS/m = 1 m/Ω · mm

Processing Properties

Forming

Machinability (CuZn39Pb3 = 100%)	25 %
Cold forming	excellent
Hot forming	good

Joining

Resistance welding	good
Inert gas shielded arc welding	fair
Hard soldering	excellent
Soft soldering	excellent

Surface Treatment

Polishing

mechanical	excellent
electrolytical	excellent

Electroplating

	excellent
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Heat Treatment

Melting point	910 – 965 °C
Hot forming	750 – 870 °C
Soft annealing	450 – 680 °C, 1-3 h
Thermal stress-relieving	200 – 300 °C, 1-3 h

Corrosion Resistance

Brasses with a high copper content are generally resistant to organic substances and neutral or alkaline compounds. They are virtually unsusceptible to stress corrosion cracking.

Mechanical Properties (attainable values, depending on the dimension and form)

Standard values	from (soft)	to (hard)
R _m [MPa]	320	1,000
R _{p 0.2} [MPa]	110	830
A ₅ [%]	50	3
HB	70	165

