

## E CuMn

**CATEGORY** SMAW Stick Electrodes

**TYPE** Copper based electrode developed for joining and cladding.

**APPLICATIONS** E CuMn is suitable for welding and overlaying copper and copper alloys, Cast Iron and steel.

**PROPERTIES** Ductile welding deposit with high conductivity and corrosion resistance. The weld deposit is free from porosity and offers similar strength as most commercial copper grades. Thicker sections than 5 mm should be preheated upto approximately 500°C.

**CLASSIFICATION**

AWS	A 5.6: ~E Cu UNS: ~W60189
EN ISO	no standard
DIN: W.Nr.	~2.1363
DIN	1733: EL-CuMn2

**SUITABLE FOR** Cladding steel, grey cast iron, copper, copper alloys and dissimilar welding. W.Nr: 2.0040, 2.0070, 2.0076, 2.0090. UNS: C10100, C11000, C10300, C11020, C12200

**APPROVALS** CE approved

**WELDING POSITIONS:**



**WELD METAL ANALYSIS %**

Cu	Si	Mn	Fe	Sn
rem	0.25	2.7	0.10	0.7

**MECHANICAL PROPERTIES**

Heat Treatment	R <sub>p0,2</sub> (N/mm <sup>2</sup> )	R <sub>m</sub> (N/mm <sup>2</sup> )	A <sub>5</sub> (%)	Impact Energy (J) ISO-V			Hardness HB
				-20°C	-40°C	-60°C	
AW		205	35				100

AW: as welded

**WELDING PARAMETERS / PACKING**

Welding Parameters			Packing		
D (mm)	Length (mm)	Current (A)	kg / can	kg / 6 pack	kg / 1000
2.5	350	60-85	3.5	21	15.8
3.2	350	90-120	3.5	21	31.9
4.0	350	120-145	3.5	21	47.7
5.0	350	130-190	3.5	21	85.7

**REDRYING TEMPERATURE** 150°C / 2hr