



# CEWELD E CuMn

TYPE	Copper based electrode developed for joining and cladding.																
APPLICATIONS	CEWELD® E CuMn is for joining and surfacing aluminum and bronze, for welding steel and cast iron with copper and bronze.																
PROPERTIES	CEWELD® E CuMn show a 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 up to approximately 500 °C.																
CLASSIFICATION	<table><tr><td>AWS</td><td>A 5.6: E Cu</td></tr><tr><td>EN ISO</td><td>17777: E Cu 1893</td></tr><tr><td>W.Nr.</td><td>~2.1363</td></tr><tr><td>F-nr</td><td>31</td></tr></table>							AWS	A 5.6: E Cu	EN ISO	17777: E Cu 1893	W.Nr.	~2.1363	F-nr	31		
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SUITABLE FOR	<p>Cladding steel, Grey cast iron, Copper, Copper Alloys and dissimilar welding. <b>Mat.n:</b> 2.0040, 2.0060, 2.0070, 2.0076, 2.0080, 2.0090, 20100, 2.0110, 2.0150, 2.0170, <b>UNS:</b> C10100, C11000, C10300, C11020, C12000, C12200, C12250, C14200, CW008A, CW021A, CW023A, CR024A Cu-OF, E Cu, Cu-SE, Cu-SW, CU-SA, Cu-F, Cu-SF, Cu-D, Cu-DLP, Cu-DHP</p>																
APPROVALS																	
WELDING POSITIONS																	
TYPICAL CHEMICAL ANALYSIS OF WELD METAL (%)	Si	Mn	P	Fe	Sn	Ni+Co	Cu										
	0.25	2.5	0.08	0.1	0.7	0.2	96										
MECHANICAL PROPERTIES	<table><thead><tr><th>Heat Treatment</th><th><math>R_{P0.2}</math> (MPa)</th><th>Rm (MPa)</th><th>A5 (%)</th><th>Hardness</th></tr></thead><tbody><tr><td>As Welded</td><td></td><td>205</td><td>35</td><td>100 HB</td></tr></tbody></table>							Heat Treatment	$R_{P0.2}$ (MPa)	Rm (MPa)	A5 (%)	Hardness	As Welded		205	35	100 HB
Heat Treatment	$R_{P0.2}$ (MPa)	Rm (MPa)	A5 (%)	Hardness													
As Welded		205	35	100 HB													
REDRYING	300°C / 2 hr																

GAS ACC. EN ISO 14175