

E CuMnAlNi

CATEGORY SMAW Stick Electrodes

TYPE Manganese aluminium bronze electrode developed for welding on DC+. High tensile strength alloy with good sliding properties.

APPLICATIONS CuMnAlNi is designed for welding and overlaying of almost all bronzes but can also be used on cast iron and most kind of steels. Due to the high tensile strength and the very good sliding properties it is often used for surfacing of shafts, ship propellers, bearings, dies etc...

PROPERTIES This alloy has exceptional corrosion resistance against several items such as seawater or other chemical attack when accompanied by erosion. - Welding instructions: CuMnAlNi is only Weldable on DC + and has an easy removable slag. Use the normal standard welding techniques.

CLASSIFICATION

AWS	A 5.6: E CuMnNiAl
EN ISO	1071: CuAlMn 2 B2
DIN: W.Nr.	2.1368
DIN	1736: E 31-UM-200-CN

SUITABLE FOR joining brass, bronze, and steel, ship propellers, dies, shafts, pump parts, valves, UNS : C62300 - C63000, DIN : CuAl10Fe3Mn2 - CuAl10Ni5Fe4 - G-CuAl10Fe, Mat n° : 2.0936 - 2.0966 - 2.0940! Cunial.

WELDING POSITIONS:



Cu	Mn	Si	Al	Ni	Mo
Rem	12-13	0,4	7-9	2-3	

MECHANICAL PROPERTIES

Heat Treatment	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V			Hardness HB
				-20°C	-40°C	-60°C	
AW		640-735	< 20				220

AW: as welded

WELDING PARAMETERS PACKING

D (mm)	Welding Parameters			Packing	
	Length (mm)	Current (A)	kg / can	kg / 6 pack	
2.5	350	55-80	2.5	15	
3.2	350	80-120	2.5	15	
4.0	350	120-160	3.0	18	

REDRYING TEMPERATURE 300C / 2hr

EQUIVALENT GMAW- CuMn13Al7Ni2