



Selectarc Cu118

Complex Aluminium-Bronze Electrode

Classification

AWS A5.6 : ECuMnNiAl
ISO 17777 : E Cu 6338
(CuMn13Al7Fe3Ni2)

DIN 1733 : EL-CuMn14Al
N° de Mat. : 2.1368

Description & Applications

Basic coated manganese bronze electrode (Cu Mn Al Ni Fe) for welding and surfacing on aluminium bronzes and for dissimilar joints between steels and copper alloys. Also recommended for overlays on cast iron, steels and copper alloys. Excellent welding characteristics, stable arc, low spatters, very easy slag removal.

Main applications: Naval constructions, sea water applications and chemical industry (pumps, propellers, ...). Its favourable coefficient of friction makes this electrode ideal to overlay sliding guides.

Base materials

UNS	DIN	Material N°
C62300	CuAl10Fe3Mn2	2.0936
C63000	CuAl10Ni5Fe4	2.0966
	G-CuAl10Fe	2.0940
	CuAl9Mn2	2.0960
	G-CuAl8Mn	2.0962

Typical Weld Metal Composition (%)

Mn	Al	Fe	Ni	Pb	Cu
12.0	6.0	2.2	2.2	0.02	Rem.

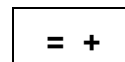
All Weld Metal Mechanical Properties

R _{p0.2} (MPa)	R _m (MPa)	A ₅ (%)	Hardness
400	640	>20	200 HB

Welding Current & Instructions

Electrode	ØxL (mm)	2,5x350	3,2x350	4,0x350
Current	(A)	60-80	80-100	90-120

Redrying 2 h at 250°C. Joints to weld must be clean, exempt from grease, cracks. Guide electrodes with a slight declination (10-20°) inclined in direction of travel. Weld with a short arc. To improve degassing of the deposit, adopt a low welding speed. Heavy pieces (sections above 8 mm) have to be preheated to 150-250°C. Hardfacing possible up to 3 layers.



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