

AX-CuAI8Ni6

Material-No.: 2.0923

Standards

EN ISO 24373:	S Cu 6328 (CuAl9Ni5Fe3Mn2)
AWS A5.7:	ERCuNiAl

Properties

Welding rod / wire of multi-component aluminium bronze with Ni and Fe addition for TIG or GMAW welding of copper-aluminium alloys. Corrosion and seawater resistant.

Important base materials / Important applications

Copper-Aluminium-Nickel-alloys, seawater resistant deposit welding on unalloyed and low alloyed steels and cast steel as well as for dissimilar joints of aluminium bronze with steel.

Typical composition of welding rod / solid wire in %

Cu	Al	Ni	Fe	Mn
Base	8,8	4,4	3,2	1,4

Mechanical properties of all-weld metal (typical values)

Yield strength R _{p0,2}	[MPa]	380	
Tensile strength R _m	[MPa]	600	
Elongation A ($L_0 = 5d_0$)	[%]	16	
Hardness	[HB]	200	
Thermal conductivity	[W/(m*K)]	30-40	

Shielding gas: 100% Argon, PWHT: untreated

Operating data

TIG:

Shielding gas: I1 (100%Argon)

acc. to ISO 14175



GMAW:

I1 (100%Argon) I3 (e.g. Ar+30%He)



TIG: Preheating of the base material is not usually necessary. To remove oxides, welding under AC

or the use of fluxing agents is recommended.

GMAW: Preheating only requested for large workpieces. Pulse arc welding is recommended for the first

layer of deposition welding on iron base materials.

Approvals

(Please ask for current scope)

Packaging and available sizes

Spools	Ø mm	1,0	1,2	1,6		
Rods	Ø mm x 1000mm	2,0	2,4	3,2	4,0	

Other dimensions on request.