ALUNOX welding alloys group

AX-CuAI8Ni2

Material-No.: 2.0922

Standards

EN ISO 24373: S Cu 6327 (CuAl8Ni2Fe2Mn2)

Properties

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

Important base materials / Important applications

Copper-Aluminium-alloys with increased wear resistant, for example Al-bronze with 7-9% Al. The alloy is also used for deposit welding on unalloyed and low alloyed steels and cast steel and is also used as metal spray wire.

Typical composition of welding rod / solid wire in %

Cu	Al	Ni	Fe	Mn
Base	8,1	2,1	1,7	1,6

Mechanical properties of all-weld metal (typical values)

Yield strength R _{p0,2}	[MPa]	270
Tensile strength R _m	[MPa]	530
Elongation A (L ₀ = 5d ₀)	[%]	25
Impact work KV	[J]	70 bei +20°C
Hardness	[HB]	160
Thermal conductivity	[W/(m*K)]	50

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	0,8	1,0	1,2	1,6		
Rods	Ø mm x 1000mm	2,0	2,4	3,2	4,0		

Other dimensions on request.