

## AX-CuAl8

Material-No.: 2.0921

### Standards

EN ISO 24373:	S Cu 6100 (CuAl7)
AWS A5.7:	ERCuAl-A1

### Properties

Welding rod / wire Copper-Aluminium-alloy for TIG or GMAW welding. Corrosion and seawater resistant, good sliding characteristics. Preheating is only necessary for large workpieces.

### Important base materials / Important applications

Copper-Aluminium-alloys, e.g. Al-bronze with 7-9% Al, Copper- and Copper-Zinc-alloys (Brass). The alloy is also used for deposit welding on unalloyed and low alloyed steels and cast steel.

### Typical composition of welding rod / solid wire in %

Cu	Al	Fe
Base	7.8	0.04

### Mechanical properties of all-weld metal (typical values)

Yield strength $R_{p0.2}$	[MPa]	200
Tensile strength $R_m$	[MPa]	430
Elongation A ( $L_0 = 5d_0$ )	[%]	40
Impact work KV	[J]	100 at +20°C
Hardness	[HB]	100
Thermal conductivity	[W/(m*K)]	65

Shielding gas: 100% Argon, PWHT: untreated

### Operating data

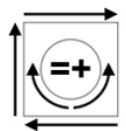
#### TIG:

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	1.6	2.0	2.4	3.2	4.0	

Other dimensions on request.