

# **Selectarc Al112**

Aluminium Electrode with 12% Si

#### Classification

AWS A5.3 : E4047 DIN 1732 : EL-AISi12

### **Description & Applications**

Aluminium electrode with 12%Si for welding and repairing aluminium or aluminium alloy pieces (AlSi, AlCuSiMn, AlSiMg). Specially designed for welding cast or extruded aluminium alloys with Si-levels higher than 7%. Dissimilar joints between aluminium and aluminium alloys.

Main applications: Engine blocks, cylinder heads, tanks, containers, frames, lorry tipper.

#### **Base materials**

DIN	Material N°
G-AlS <mark>i</mark> 9Mg	3.2373
G-AIS <mark>i</mark> 10Mg	3.2381
G-AlS <mark>i</mark> 10MgCu	3.2383
G-AISi12	3.2581
G-AlSi12Cu	3.2583

## **Typical Weld Metal Composition (%)**

Si	Cu	Fe	Mg	Mn	Zn	Ti	Be	Al	A/C	A/T
12.1	0.001	0.2	0.01	0.003	0.001	0.008	0.0001	Bal.	< 0.05	<0.15

## All Weld Metal Mechanical Properties

R <sub>p0,2</sub> ( MPa )	R <sub>m</sub> (MPa)	A <sub>5</sub> (%)	Hardness
150	250	14	~50 HB

## **Welding Current & Instructions**

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

Clean the weld zone; preheat massive pieces (more than 6mm of thickness) to 150-250°C. In order to avoid all risks of porosity, weld with a short arc and guide the electrode at 90° to the piece to be welded. Use a fast travel speed, remove slag between passes and when finished.

**Warning!** Aluminium electrodes are very sensitive to humidity pick-up. Therefore, keep the opened tins in a dry place. In case of humidity pick-up, dry the electrodes 2h/100°C.

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