

UTP 48

Stick electrode, aluminium

Classifications

EN ISO 18273
E Al 4047 (AlSi12)

Characteristics and typical fields of application

UTP 48 contains 12% Si for welding of aluminium alloyed with copper, silicon, and magnesium. Also excellent for joining dissimilar grades of aluminium.

Unique self-lifting slag.

Pure white coating outlasts conventional products in moisture resistance.

Available in hermetically sealed aluminium tins

Base materials

EN AC-42100 G-AlSi7Mg 3.2371

EN AC-43000 G-AlSi10Mg 3.2381

EN AC-43200 G-AlSi10Mg(Cu) 3.2383

EN AC-43300 G-AlSi9Mg 3.2373

EN AC-44000 G-AlSi11 3.2211

EN AC-44200 G-AlSi12 3.2581

EN AC-47000 G-AlSi12(Cu) 3.2583

Typical analysis of all-weld metal

	Si	Mn	Ti	Fe	Cu	Al	Mg	Zn
wt.-%	11.8	0.04	0.18	0.8	0.23	Bal.	0.04	0.08

Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength R_e MPa	Tensile strength R_m MPa	Elongation A ($L_0=5d_0$) %
u u untreated, as welded	80	180	5

Operating data

	Polarity	DC+	Dimension mm	Current A
			2,5 × 350	50 – 80
			3,2 × 350	70 – 120
			4,0 × 350	110 – 150

Re-drying at bei 100°C, 1 – 1,5 h (not necessary straight out of the tin)

The stick electrode should be leaded almost at 90° to the base material, holding a short arc. For thicker walls (> 6 mm) pre-heating at 100 – 250°C is necessary to ensure a good bonding to the base material. If the seam is overarched the pre-heating was too low.

Approvals

CE