

Classification:

DIN1732: EL-AISI-5
AWS-5.3: E 4042
W.Nr.: ≈ 3.2245

ALU 5 Si

Description and application:

Electrode recommended for welding pure aluminium and aluminium alloys with less than 2% of alloying elements; also suitable for aluminium castings with Si content to 7%.
Slag residues should be removed to ensure non-corrosive weld beads.

Base materials:

Aluminium
Aluminium alloys with < 2% alloying elements
Al-alloy castings <7%
Al Si 5, AlMgSi0.5, AlMgSi0.8, AlMgSi1, AlMg1SiCu, AlCuMg

Heat treatment:

To obtain welds without pore formation, plates with thickness above 5 mm should be preheated to 200 - 250°C.

Coating type:

Welding current:

DC +

Welding positions:



Redrying temperature:

100 – 150 °C / 1 - 2h

Typical all weld metal properties :

Chemical composition,wt%

Al	Si	Fe
94.5	5	< 0.4

Mechanical properties:

Yield strength	$R_{eL} / R_{p0.2}$	> 70	MPa(N/mm ²)
Tensile strength	R_m	> 140	MPa(N/mm ²)
Elongation	A5	> 12	%

Welding and packing data:

	Welding parameters			Packing		
	φ mm	Length mm	Current A	Weight/ packet kg	Weight/ carton kg	Weight/ 1000 pcs kg *
Approvals:	2.5	350	50-90	2	8	9.4
	3.25	350	70-110	2	8	13.5
	4	350	90-130	2	8	19.4

* approximate data