

## Repair electrode

### Classification

AWS A5.3-99 : E4043  
 ISO 18273-01 : Al 4043A\*

\* Nearest classification

### General description

Coated electrode for welding aluminium-silicon alloys and dissimilar welding of aluminium alloys  
 Weldmetal aluminium-silicon alloy

### Welding positions



### Current type

DC electr. +

### Chemical composition (w%), typical, all weld metal

Al	Si
bal.	5

### Mechanical properties, all weld metal

Condition	0.2% Proof strength (N/mm <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)
Required: AWS A5.3-99		95	
Typical values	AW 90	160	15

### Packaging, available sizes and identification

	Diameter (mm)	2.5	3.2
	Length (mm)	350	350
Unit: Can	Pieces / unit (nominal)	227	152
	Net weight unit (kg)	2.0	2.0

Identification Imprint:

Tip colour:

RepTec AlSi 5: rev. EN 15

# RepTec AlSi 5

## Materials to be welded

Aluminium-silicon alloys, and dissimilar of several aluminium alloys

With restriction: precipitation hardening alloys such as:

- AlCuMg (3.1325)
- AlMgSi1 (3.2315)
- AlZn 4.5Mg1 (3.4335)

## Calculation data

Sizes Diam. x length (mm)	Current range (A)	Current type	Arc time - per electrode at max. (s)*	Energy E(kJ)	Dep.rate - H(kg/h)	Weight/ 1000 pcs. (kg)	Electrodes/ kg weldmetal B	kg Electrodes/ kg weldmetal 1/N
2.5 x 350	40 - 70	-	-	-	-	9.0	-	-
3.2 x 350	60 - 90	-	-	-	-	13.2	-	-

\* stub end 35mm

## Welding parameters, optimum fill passes

Welding positions Diameter (mm)	PA/1G Current (A)	PB/2F	PF/3G up
2.5	60	60	55
3.2	90	80	75

## Remarks

After welding of precipitation hardening alloys the strength in H.A.Z. is decreasing

## Application advice

Welding with short arc preferable

Electrode with 90° angle on material

At wall thickness >15 mm preheating 150 - 250°C