ALUMIN 5

BASIC FLUX COATED ALUMINIUM 5 SILICON ELECTRODE FOR WELDING NON HEAT-TREATABLE ALUMINIUM ALLOYS CONTAINING UP TO 5% Si

DATA SHEET NO. **149**

SPECIFICATION	AWS A5.3	DIN-1732
CLASSIFICATION	E4043	EL–AlSi5

PRODUCT DESCRIPTION

Manufactured using a fully alloyed core wire, the chemically basic flux which contains a high proportion of chlorides and fluorides using a silicate with a high molecular ratio of silica to sodium oxide. The flux, as well as providing a shielding gas, also produces a slag with a vigorous cleaning action.

WELDING FEATURES OF THE ELECTRODE

The electrode is suitable for use on DC+ only.
Aluminium has a low melting point, therefore the electrode burn-off rate is considerably higher than all other electrodes, thus necessitating high travel speeds.
As the alloy is non-heat-treatable, it will only match the properties of cast alloys.

APPLICATIONS AND MATERIALS TO BE WELDED

May be used for rectification of casting defects, particularly those present at the surface. Also for welding cast aluminium components which have become worn or damaged in service.
May also be used for cosmetic repairs on similarly alloyed wrought components.
The weld metal conforms to aluminium association designation cast alloys A43 or 43.

WELD METAL ANALYSIS COMPOSITION % BY Wt.

	Mn	Si	Be	Ti	Zn	Fe	Mg	Cu	Al
MIN	-	4.5	-	-	-	-	-	-	
MAX	0.05	6.0	0.0008	0.2	0.1	0.8	0.05	0.3	
TYPICAL	0.04	5.1	0.0001	0.1	0.08	0.7	0.04	0.2	Bal.

WELD METAL PROPERTIES (ALL WELD METAL)

PROPERTY	UNITS	MINIMUM	TYPICAL	OTHERS
Tensile strength	N/mm^2	95	200	
0.2% Proof stress	N/mm^2	-	-	-
Elongation on 4d	%	-	18	
Reduction of Area (RA)	%	-	-	

WELDING AMPERAGE DC+

∅ mm	3.2
MIN	70
MAX	130

OTHER DATA	Electrodes that have become damp should be re-dried at 60°C for 30 minutes.
RELATED PRODUCTS	Please contact our Technical Department for detail.