


ALUMIN 12	BASIC FLUX COATED ALUMINIUM-12 SILICON ELECTRODE FOR WELDING NON HEAT-TREATABLE ALUMINIUM ALLOYS CONTAINING UP TO 12% Si				DATA SHEET NO. 150					
SPECIFICATION	DIN 1732									
CLASSIFICATION	EL-AISi12									
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 aluminium association designations for 12% Si aluminium includes 13, A13, B13 and 3S4.									
WELD METAL ANALYSIS COMPOSITION % BY Wt.		Mg	Mn	Si	Fe	Cu	Zn	Ti	Al	Other Impurities
	MIN	-	-	11.0	0.5	0.05	0.10	-		-
	MAX	0.05	0.3	13.5	-	-	-	0.15		0.15
	TYPICAL	0.04	0.04	12	0.8	0.23	0.08	0.1	Bal.	
WELD METAL PROPERTIES (ALL WELD METAL)	PROPERTY	UNITS	MINIMUM	TYPICAL	OTHERS					
	Tensile strength	N/mm ²	-	170						
	0.2% Proof stress	N/mm ²	-	-						
	Elongation on 4d	%	5	9						
	Reduction of Area (RA)	%	-	-						
WELDING AMPERAGE DC+	Ø (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.									