RD-718A

LOW HYDROGEN - IRON POWDER ELECTRODE FOR WELDING CREEP RESISTING Mo-CONTAINING FERRITIC STEELS OPERATING UP TO 450ºC

DATA SHEET NO. 46

SPECIFICATION	AWS A5.5	BS EN ISO 2560B
CLASSIFICATION	E7018-A1	E4918-1M3

PRODUCT DESCRIPTION

The design emphasis of the chemically basic flux is engineered to ensure the optimum weld metal properties demanded by the specification are fully met.

The basic flux containing the appropriate alloying elements with a controlled balanced addition of iron power, is extruded onto a high purity ferritic core wire with a blend of silicates that ensures both coating strength and a coating resistant to subsequent moisture absorption.

WELDING FEATURES OF THE ELECTRODE

The chemical nature of the flux together with a significant proportion of iron powder ensures maximum deposition efficiency without detracting from its ability to be used in all positions except vertical down.

Overall the arc is very stable, slag detachability is good and metal recovery is some 115% with respect to the core wire.

APPLICATIONS AND MATERIALS TO BE WELDED

Nominal 0.5Mo content improves elevated temperature performance of weld metal over C:Mn types operating at 450ºC.

Materials to be welded include:

ASTM A335-P1 A209 and A250-TI

BS3059-243-3606-243-245 2U

Forged ASTM A336-F1 A204 A, B and C.

Cast ASTM A217-WC1 A352-LC1

PRE-HEAT
50 – 250ºC DEPENDING ON THICKNESS AND RESTRAINT

WELD METAL ANALYSIS COMPOSITION % BY Wt.

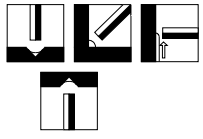
	C	Mn	Si	S	P	Mo	Fe
MIN	-	-	-	-	-	0.40	
MAX	0.12	0.9	0.8	0.03	0.03	0.65	
TYPICAL	0.09	0.8	0.4	0.01	0.01	0.50	Bal.

ALL WELD METAL PROPERTIES

PROPERTY	UNITS	MINIMUM	TYPICAL	OTHERS
Tensile strength	N/mm^2	490	550	PROPERTIES MAINTAINED AFTER PWHT AT 620 ºC
0.2% Proof stress	N/mm^2	390	480	
Elongation on 4d	%	22	30	
Reduction of Area (RA)	%	-	70	

WELDING AMPERAGE AC or DC+

Ø (mm)	2.6	3.2	4.0	5.0
MIN	60	90	140	180
MAX	100	150	190	200



OTHER DATA

Electrodes that have become damp should be re-dried at 350ºC for 1 hour.

RELATED PRODUCTS

Please contact our Technical Department for detail.