RD-110M

LOW HYDROGEN - IRON POWDER ELECTRODE FOR WELDING STEELS WITH A MINIMUM UTS OF 760 N/mm²

DATA SHEET NO. 43

SPECIFICATION	AWS A5.5	BS EN ISO 18275B
CLASSIFICATION	E11018M	E7618-N4CM2

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

Designed for welding quenched and tempered low alloy steels such as HV80 and HV100. Such steels are not normally subjected to PWHT.
However, hydrogen release heat treatment is often applied at 250 °C for 1 hour per 15cms of plate thickness and this in combination of a preheat of 150°C min ensures the integrity of the HAZ areas.

WELD METAL ANALYSIS COMPOSITION % BY Wt.

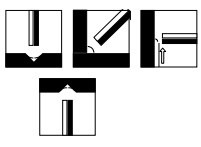
	C	Mn	Si	S	P	Cr	Ni	Mo	V	Fe
MIN	-	1.3	-	-	-	-	1.25	0.25	-	
MAX	0.1	1.8	0.6	0.03	0.03	0.4	2.5	0.5	0.05	
TYPICAL	0.06	1.6	0.3	0.02	0.01	0.3	1.60	0.4	0.01	Bal.

WELD METAL PROPERTIES (ALL WELD METAL)

PROPERTY	UNITS	MINIMUM	TYPICAL	OTHERS
Tensile strength	N/mm²	760	840	
0.2% Proof stress	N/mm²	680 ~ 760	740	
Elongation on 4d	%	20	22	
Reduction of Area (RA)	%	-	60	
Impact energy -50°C	J	27	45	

WELDING AMPERAGE AC or DC+

Ø (mm)	2.6	3.2	4.0	5.0
MIN	50	75	130	180
MAX	85	125	170	220



OTHER DATA

Electrodes that have become damp should be re-dried at 150°C for 1 hour

RELATED PRODUCTS

Please contact our Technical Department for detail.