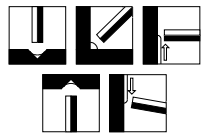


<b>RD-718</b>	<b>LOW HYDROGEN - IRON POWDER ELECTRODE          WITH OPTIMUM WELDABILITY FOR WORKSHOP          AND SITE FABRICATIONAL WORK</b>				<b>DATA SHEET          NO.          23</b>						
	SPECIFICATION	AWS A5.1	BS EN ISO 2560-B	JIS Z 3212							
CLASSIFICATION	E7018	E4918	D5016								
PRODUCT DESCRIPTION	<p>The design emphasis of the chemically basic flux is engineered to ensure the optimum weld metal properties demanded by the specification are fully met.</p> <p>The basic flux containing the appropriate alloying elements with a controlled balanced addition of iron powder, 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.</p>										
WELDING FEATURES OF THE ELECTRODE	<p>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.</p> <p>Overall the arc is very stable, slag detachability is good and metal recovery is some 120% with respect to the core wire.</p>										
APPLICATIONS AND MATERIALS TO BE WELDED	<p>Medium and high tensile carbon-manganese steels with UTS of up to 510N/mm<sup>2</sup> max. Typical grades : BS 1449 plate and sheet BS 4360 grades 43A and 43C Lloyds A &amp; D ship steel BS 4360 grade 50B, Lloyds grades AH and DH BS 3059 and BS 3601 grade 320-410 API 5L A-B and X42, BS 4360-50B-50C-50D, BS 1501-151 430-490, BS 3602-410-460.</p> <p>Such steels are used in ship construction, bridge building and pressure vessel work as well as general construction work.</p>										
WELD METAL ANALYSIS COMPOSITION % BY Wt.		C	Mn	Si	S	P	Cr	Ni	Mo	V	Fe
	MIN	-	-	-	-	-	-	-	-	-	-
	MAX	0.15	1.6	0.75	0.035	0.035	0.2	0.3	0.3	0.08	
	TYPICAL	0.1	1.0	0.35	0.01	0.01	0.1	0.01	0.02	0.02	Bal.
WELD METAL PROPERTIES (ALL WELD METAL)	PROPERTY	UNITS		MINIMUM	TYPICAL		OTHERS				
	Tensile strength	N/mm <sup>2</sup>		490	660						
	0.2% Proof stress	N/mm <sup>2</sup>		400	600						
	Elongation on 4d	%		22	24						
	Reduction of Area (RA)	%		-	70						
Impact energy -30°C	J		27	100							
WELDING AMPERAGE AC or DC+	Ø mm)		2.6	3.2	4.0	5.0					
	MIN	50	90	130	170						
	MAX	100	140	180	220						
OTHER DATA	Electrodes that have become damp should be re-dried at 150°C for 1 hour.										
APPROVED BY	LR; ABS; GL – Grade 3Y										