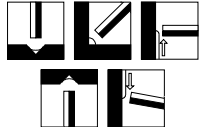


RD-718	LOW HYDROGEN - IRON POWDER ELECTRODE WITH OPTIMUM WELDABILITY FOR WORKSHOP AND SITE FABRICATIONAL WORK				DATA SHEET NO. 23						
SPECIFICATION	AWS A5.1	BS EN ISO 2560-B		JIS Z 3212							
CLASSIFICATION	E7018	E4918		D5016							
PRODUCT DESCRIPTION	<p>The design emphasis of the chemically basic 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 510 N/mm² max. Typical grades :</p> <p>BS 1449 plate and sheet BS 4360 grades 43A and 43C Lloyds A & 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)	<u>PROPERTY</u>	<u>UNITS</u>	<u>MINIMUM</u>	<u>TYPICAL</u>	<u>OTHERS</u>						
	Tensile strength	N/mm ²	490	600							
	0.2% Proof stress	N/mm ²	400	550							
	Elongation on 4d	%	22	28							
	Reduction of Area (RA)	%	-	70							
	Impact energy -30°C	J	27	80							
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										