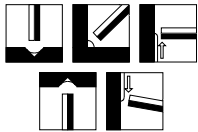


RD-360-1	BASIC LOW HYDROGEN ELECTRODE FOR WELDING STRUCTURAL STEELS WITH HIGHER SUB-ZERO TOUGHNESS PROPERTIES				DATA SHEET NO. 22												
SPECIFICATION	AWS A5.1	BS EN ISO 2560-B	JIS Z 3212														
CLASSIFICATION	E7016-1	E4916-1	D5016														
PRODUCT DESCRIPTION	<p>The design emphasis 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 but minimal iron powder, is extruded onto a high purity ferritic core wire and bound with a blend of silicates that ensure 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 its controlled coating factor allows the electrode to be used at relatively low amps. This factor together with the fairly fluid but quick freezing slag facilitate vertical up welding including controlled penetration root runs.</p> <p>Overall the arc is very stable, slag detachability is good, fillet welds are slightly convex and metal recovery is some 98% with respect to weight of the core wire.</p>																
APPLICATIONS AND MATERIALS TO BE WELDED	<p>Suitable for all grades of C-Mn structural steels. However, it is used to best advantage on fully deoxidised C-Mn steels when high toughness values are specified down to -45 °C.</p> <p>These toughness properties are maintained even after extended P.W.H.T. making it ideal for pressure vessel work. The low weld Si and high Mn to Si ratio ensure maximum resistance to solidification cracking on thick restrained sections.</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	0.20	0.30	0.30	0.08							
TYPICAL		0.06	1.4	0.4	0.01	0.02	0.05	0.05	0.05	0.01	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	660													
	0.2% Proof stress	N/mm ²	400	600													
	Elongation on 4d	%	22	26													
	Reduction of Area (RA)	%	-	70													
	Impact energy -45°C	J	27	120													
WELDING AMPERAGE AC or DC+	Ø (mm)	2.6	3.2	4.0	5.0												
	MIN	60	80	110	160												
	MAX	100	130	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.																
APPROVED BY	LR – Grade 4Y H5																