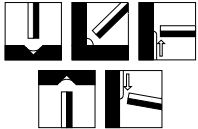


RD-16C	LOW HYDROGEN ELECTRODE FOR WELDING LOW ALLOY FERRITIC STEELS USED FOR SEMI-CRYOGENIC WORK				DATA SHEET NO. 31			
SPECIFICATION	AWS A5.5		BS EN ISO 2560-B		JIS Z 3241			
CLASSIFICATION	E8016-C1		E5516-N5		DL5016-6P2			
PRODUCT DESCRIPTION	<p>The design emphasis of the chemically basic flux is 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>C-Mn and low alloy steel plate, pipe forgings and castings used extensively for service at cryogenic temperatures, eg: LT50.</p> <p>BS 1501-224 Grade 490B Plate.</p> <p>ASTM A333 Grade 6 Pipe.</p> <p>ASTM A350 Grades LF1/LF2 Forgings.</p> <p>ASTM A352 Grade LC2 Castings.</p> <p>Maximum stress relief temperatures should be 620 °C.</p>							
WELD METAL ANALYSIS COMPOSITION % BY Wt.		C	Mn	Si	S	P	Ni	Fe
	MIN	-	-	-	-	-	2.0	
	MAX	0.12	1.25	0.6	0.03	0.03	2.75	
	TYPICAL	0.06	0.9	0.3	0.01	0.01	2.5	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	550	600				
	0.2% Proof stress	N/mm ²	460	500				
	Elongation on 4d	%	19	26				
	Reduction of Area (RA)	%	-	75				
Impact energy -60°C	J	27	80					
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.							