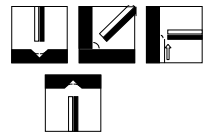


RD-16C2	LOW HYDROGEN ELECTRODE FOR WELDING LOW ALLOY FERRITIC STEELS SUBJECT TO SERVICE TEMPERATURES DOWN TO -80 °C				DATA SHEET NO. 32																
SPECIFICATION	AWS A5.5		BS EN ISO 2560-B		JIS Z 3241																
CLASSIFICATION	E8016-C2		E5516-N7		DL5016-6P3																
PRODUCT DESCRIPTION	<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	<table border="0"> <tr> <td>PLATES</td> <td>BS 1501-503, ASTM A203, A300, Grades D and E.</td> </tr> <tr> <td>FORGINGS</td> <td>BS 1503-503, ASTM A336 Class F31</td> </tr> <tr> <td>PIPES</td> <td>BS 3603:1977, Grades HFS 503 LT100, CFS 503 LT100, ASTM A333 Grade 3.</td> </tr> <tr> <td>TUBES</td> <td>ASTM A334 Grade 3.</td> </tr> <tr> <td>CASTINGS</td> <td>BS 1504-503 LT60, ASTM A352, Grade LC3</td> </tr> <tr> <td>FLANGES</td> <td>ASTM A350 Grade LF3, German DIN Steel 10Ni4,</td> </tr> <tr> <td>FITTINGS/VALVES</td> <td>Werkstoff No. 1.5637.</td> </tr> </table>							PLATES	BS 1501-503, ASTM A203, A300, Grades D and E.	FORGINGS	BS 1503-503, ASTM A336 Class F31	PIPES	BS 3603:1977, Grades HFS 503 LT100, CFS 503 LT100, ASTM A333 Grade 3.	TUBES	ASTM A334 Grade 3.	CASTINGS	BS 1504-503 LT60, ASTM A352, Grade LC3	FLANGES	ASTM A350 Grade LF3, German DIN Steel 10Ni4,	FITTINGS/VALVES	Werkstoff No. 1.5637.
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WELD METAL ANALYSIS COMPOSITION % BY Wt.		C	Mn	Si	S	P	Ni	Fe													
	MIN	-	-	-	-	-	3.0														
	MAX	0.12	1.25	0.6	0.03	0.03	3.75														
	TYPICAL	0.06	0.8	0.3	0.011	0.011	3.5	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	700	MAX STRESS RELIEF TEM: 620 °C (1 hour)																
	0.2% Proof stress	N/mm ²	460	650																	
	Elongation on 4d	%	19	27																	
	Reduction of Area (RA)	%	-	70																	
	Impact energy -75°C	J	27	70																	
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.																				