


RD-718G	LOW HYDROGEN - IRON POWDER ELECTRODE WITH GOOD TOUGHNESS AT -50 °C				DATA SHEET NO. 37																																
SPECIFICATION	AWS A5.5																																				
CLASSIFICATION	E7018-G																																				
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 115% with respect to the core wire.</p>																																				
APPLICATIONS AND MATERIALS TO BE WELDED	<p>PRESSURE VESSEL STEELS</p> <p>PIPES All grades up to BS 1501-225</p> <p>FORGINGS All grades up to BS 1503-224</p> <p>PIPES LT50 quality of grade 410 in BS 3603:1977</p> <p>Such steels and similar are used for the fabrication of LPG tankers and storage vessels.</p> <p>The 1% nickel max meets NACE MR0175 requirements for corrosion resistance in marine environments.</p>																																				
WELD METAL ANALYSIS COMPOSITION % BY Wt.	<table border="1"> <thead> <tr> <th></th> <th>C</th> <th>Mn</th> <th>Si</th> <th>S</th> <th>P</th> <th>Ni</th> <th>Fe</th> </tr> </thead> <tbody> <tr> <td>MIN</td> <td>-</td> <td>1.2</td> <td>0.2</td> <td>-</td> <td>-</td> <td>0.8</td> <td></td> </tr> <tr> <td>MAX</td> <td>0.12</td> <td>1.7</td> <td>0.45</td> <td>0.03</td> <td>0.03</td> <td>1.2</td> <td></td> </tr> <tr> <td>TYPICAL</td> <td>0.08</td> <td>1.4</td> <td>0.3</td> <td>0.01</td> <td>0.015</td> <td>1.0</td> <td>Bal.</td> </tr> </tbody> </table> <p><i>* Undiluted weld metal shall have the minimum of at least one of the element (AWS A5.5-2006)</i></p>						C	Mn	Si	S	P	Ni	Fe	MIN	-	1.2	0.2	-	-	0.8		MAX	0.12	1.7	0.45	0.03	0.03	1.2		TYPICAL	0.08	1.4	0.3	0.01	0.015	1.0	Bal.
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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.																																				