



**MANUFACTURERS OF A DIVERSE RANGE OF
ADVANCED WELDING CONSUMABLES**

**SECTION
3**

WI-0304 DS3B C-10G Rev. 0, Date 01.11.2011

C-10G	CELLULOSE COATED ELECTRODE FOR PIPE WELDING	DATA SHEET NO. 3B																																								
SPECIFICATION	AWS A5.5																																									
CLASSIFICATION	E7010-G																																									
PRODUCT DESCRIPTION	The electrode contains some 35% of organic materials which in the arc transform into a shielding gas and contributes to a concentrated deep penetrating arc with a fast-freezing slag. The flux is extruded onto a mild steel core wire using only sodium silicates which ensures coating strength.																																									
WELDING FEATURES OF THE ELECTRODE	The electrode is suited for use on DC+ only and is ideal for both full penetration root runs using a controlled root gap and root face and a stringer bead technique and the capping pass. Slight grinding of the stringer bead with wire brushes prevents lateral inclusions followed by a hot pass that particularly on high stressed and or high carbon steels promotes hydrogen diffusion and thus reduces the probability of hydrogen induced cracking.																																									
APPLICATIONS AND MATERIALS TO BE WELDED	<p>Cross country pipelines - storage tanks in following materials:</p> <p>Mild Steels : St 360 C-St 510 C, St 34.2, St 37.2, St 46.2, St 37.3, St 46.3, St 52.3.</p> <p>Pressure vessel steels : H1, H11, St 35 KKW, St 41 KKW.</p> <p>High strength steels : St 52, St 35.4, St 5.4, St 52.4, St E210.7-St E415.7, St E290.7TM-S t E415.7TM, St 35.8, St 45.8.</p> <p>Pipe : API 5L Grade A, B, X 42, X 46, X 52, X 56, X 60 For root runs suitable up to API 5L Grade X 70</p> <p>Suitable for root pass - hot pass - filler and capping passes.</p>																																									
WELD METAL ANALYSIS COMPOSITION % BY Wt.	<table border="1"> <tr> <td></td> <td>C</td> <td>Mn</td> <td>Si</td> <td>S</td> <td>P</td> <td>Ni</td> <td>Cr</td> <td>Mo</td> <td>Fe</td> </tr> <tr> <td>MIN.</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>0.2</td> <td>-</td> <td>-</td> <td></td> </tr> <tr> <td>MAX.</td> <td>0.2</td> <td>1.4</td> <td>0.6</td> <td>0.03</td> <td>0.03</td> <td>1.0</td> <td>0.3</td> <td>0.5</td> <td></td> </tr> <tr> <td>TYPICAL</td> <td>0.18</td> <td>1.0</td> <td>0.4</td> <td>0.02</td> <td>0.01</td> <td>0.4</td> <td>0.05</td> <td>0.35</td> <td>Bal.</td> </tr> </table>		C	Mn	Si	S	P	Ni	Cr	Mo	Fe	MIN.	-	-	-	-	-	0.2	-	-		MAX.	0.2	1.4	0.6	0.03	0.03	1.0	0.3	0.5		TYPICAL	0.18	1.0	0.4	0.02	0.01	0.4	0.05	0.35	Bal.	
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RELATED PRODUCTS	Please contact our Technical Department for detail																																									