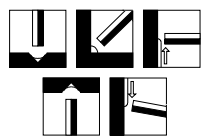


<b>C-11</b>	<b>CELLULOSE COATED ELECTRODE FOR VERTICAL DOWN WELDS IN LARGE DIAMETER CROSS- COUNTRY PIPELINES</b>				<b>DATA SHEET NO. 2</b>						
	SPECIFICATION	AWS A5.1	BS EN ISO 2560-B	JIS Z 3211							
CLASSIFICATION	E6011	E4311	D4311								
PRODUCT DESCRIPTION	The electrode contains some 35% of 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 potassium silicates which ensures coating strength.										
WELDING FEATURES OF THE ELECTRODE	The electrode is suited for use on AC or DC+ and is ideal for full penetration root runs using a controlled root gap and root face and a stringer bead technique. 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 - on site storage tanks in following materials - mainly root pass:</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.            Pressure vessel steels: H1, H11, St 35 KKW, St 41 KKW.            High strength steels: St 52, St 35.4, St 45.4, St 52.4, St E210.7-St E415.7, St E290.7TM-St E415.7TM, St 35.8, St 45.8.            API 5LX: X42, X46, X52, X56, X60.            May also be used in root runs for higher tensile steels.</p>										
WELD METAL ANALYSIS COMPOSITION % BY Wt.		C	Mn	Si	S	P	Cr	Ni	Mo	V	Fe
	MIN	-	-	-	-	-	-	-	-	-	-
	MAX	0.2	1.2	1.0	-	-	0.2	0.3	0.3	0.08	
	TYPICAL	0.1	0.5	0.2	0.03	0.02	0.04	0.04	0.01	0.003	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 <sup>2</sup>	430	500						
	0.2% Proof stress		N/mm <sup>2</sup>	330	430						
	Elongation on 4d		%	22	30						
	Reduction of Area (RA)		%	-	70						
Impact energy -30°C		J	27	40							
WELDING AMPERAGE AC or DC+	Ø (mm)	2.6		3.2		4.0					
	MIN	70	90	130							
	MAX	90	130	180							
OTHER DATA	Electrodes that have become damp should be re-dried at 60°C for 30 mins.										
APPROVED BY	LR and ABS - Grade 3										