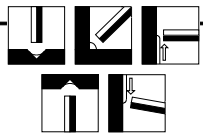


<h1>C-10</h1>	CELLULOSE COATED ELECTRODE FOR VERTICAL DOWN WELDS IN LARGE DIAMETER CROSS-COUNTRY PIPELINES				DATA SHEET NO. 1						
SPECIFICATION	AWS A5.1			BS EN ISO 2560-B							
CLASSIFICATION	E6010			E4310							
PRODUCT DESCRIPTION	The electrode contains some 35% of organic materials which in the 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 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 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: St52, St35.4, St45.4, St 52.4, StE210.7-StE415.7, StE290.7, TM-StE415.7TM, St35.8, St45.8. 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	0.6	0.2	0.03	0.02	0.04	0.05	0.02	0.01	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	430	580							
	0.2% Proof stress	N/mm ²	330	450							
	Elongation on 4d	%	22	30							
	Reduction of Area (RA)	%	-	70							
Impact energy -30 °C	J	27	50								
WELDING AMPERAGE DC+ ONLY	Ø (mm)	2.6	3.2	4.0							
	MIN	70	80	120							
	MAX	90	120	150							
OTHER DATA	Electrodes that have become damp should be re-dried at 60°C for 30 mins.										
APPROVED BY	LR - Grade 1										