C-10P1

CELLULOSE COATED ELECTRODE FOR PIPE WELDING

DATA SHEET NO. 3A

SPECIFICATION	AWS A5.5
CLASSIFICATION	E7010-P1
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	Cross country pipelines - storage tanks in following materials: 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 5.4, St 52.4, St E210.7-St E415.7, St E290.7TM-S t E415.7TM, St 35.8, St 45.8. 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 Suitable for root pass - hot pass - filler and capping passes.

WELD METAL ANALYSIS COMPOSITION % BY Wt.

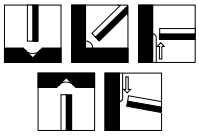
	C	Mn	Si	S	P	Ni	Cr	Mo	V	Fe
MIN.	-	-	-	-	-	-	-	-	-	
MAX.	0.2	1.2	0.6	0.03	0.03	1.0	0.3	0.5	0.1	
TYPICAL	0.14	0.9	0.3	0.015	0.015	0.02	0.04	0.3	0.01	Bal.

WELD METAL PROPERTIES (ALL WELD METAL)

PROPERTY	UNITS	MINIMUM	TYPICAL	OTHERS
Tensile strength	N/mm^2	490	580	
0.2% Proof stress	N/mm^2	415	500	
Elongation on 4d	%	22	25	
Reduction of Area (RA)	%	-	70	
Impact energy -30 °C	J	27	60	

WELDING AMPERAGE DC+ ONLY

Ø (mm)	2.6	3.2	4.0
MIN	40	80	130
MAX	90	130	160



OTHER DATA	-
RELATED PRODUCTS	Please contact our Technical Department for detail