

## MMA Electrodes C-Mn and low-alloy steels

Cellulosic coated electrode for welding girth seams of pipe lines, using the vertical-down technique. It is suitable for welding root passes, fill and cover passes.

Classification	
AWS	A5.5: E 8010-G
EN	499: E 46 2 1Ni C21
EN ISO	2560-A: E 46 2 1Ni C 21

Approvals	Grades
ABS	
DNV	
LRS	
TÜV	

see Appendix, Classification Society Approvals, for details pag. 521

### Analysis of all-weld metal (Typical values in %)

C	Mn	Si	P	S	Cr	Ni	Mo	Nb	V	N	Cu
0.12	0.90	0.25	-	-	-	0.80	-	-	-	-	-

### All-weld metal Mechanical Properties

Heat Treatment	Yield Strength N/mm <sup>2</sup>	Tensile Strength N/mm <sup>2</sup>	Elongation A5 (%)	Impact Energy ISO - V (J) - 20 °C	Hardness
As Welded	≥ 460	550-650	≥ 24	≥ 47	-

### Materials

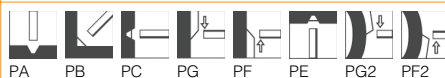
L360-L450, X52-X65

### Storage and redrying

Do not re-dry

### Current condition and welding position

DC+



### Packaging data

Diameter (mm)	Length (mm)	Current (A)	Electrode average weight (g)	Weld metal weight per electrode (g)
2,5	350	50-70	15,5	10,2
3,2	350	80-120	25,7	18,4
4,0	350	110-150	39,7	25,9
5,0	350	140-200	61,7	41,7