

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

Cellulosic coated electrode for welding girth seams of pipelines. It is suitable for welding root passes, fill and cover passes. FLEXAL 60 is also suited for depositing root passes on high-strength pipe steels.

Classification	
AWS	A5.1:E 6010
EN	499: E 38 3 C 21
EN ISO	2560-A: E 38 3 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
0.10	0.60	0.20	-	-	-	-	-	-	-	-	-

### 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) - 30 °C	Hardness
As Welded	≥ 380	470-560	≥ 24	≥ 47	-

### Materials

L210-L360, X42-X52

### Storage and redrying

Do not re-dry

### Current condition and welding position

DC+; DC-; AC



### Packaging data

Diameter (mm)	Length (mm)	Current (A)	Electrode average weight (g)	Weld metal weight per electrode (g)
2,5	350	50-70	16,2	10,3
3,2	350	80-120	26,7	18,0
4,0	350	110-150	40,0	26,4
5,0	350	140-200	60,0	41,8