

MMA Electrodes C-Mn and low-alloy steels

Basic coated MMA electrode with very low diffusible hydrogen content for all highly reliable work on steels with ultimate tensile strength of less than 600 MPa. Recommended for welding very thick or tightly clamped assemblies. Very high impact toughness down to - 40 °C. Examples: welded structures for offshore drilling, boilerwork, construction and repair of pressurized equipment. CTOD tested.

Classification	
AWS	A5.1: E7018-1
EN	499: E 42 5 B 32 H5
EN ISO	2560-A: E 42 5 B 32 H5

Approvals	Grades
ABS	
BV	
DB	
DNV	
Force Institute	
GDF	
LRS	
Marine Nationale	
MOD	
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
0.07	1.30	0.40	≤ 0.025	≤ 0.020	-	-	-	-	-	-	-

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength N/mm ²	Tensile Strength N/mm ²	Elongation A5 (%)	Impact Energy ISO - V (J) - 50 °C	Hardness
As Welded	≥ 420	530-640	≥ 22	≥ 47	-

Materials

S(P)235-S(P)420, GP240-GP280

Storage and redrying

Keep dry and avoid condensation.

HD ≤ 5: Re-dry at 340-360 °C for 2 hours, 5 times max.

HD ≤ 10: Re-dry at 300-350 °C for 2 hours, 5 times max

Current condition and welding position

DC+, AC



Packaging data

Diameter (mm)	Length (mm)	Current (A)	Electrode average weight (g)	Weld metal weight per electrode (g)
2,5	350	60-90	20,0	13,1
3,2	350	90-130	35,0	19,6
3,2	450	90-130	46,0	27,2
4,0	450	120-170	65,0	42,7
5,0	450	175-210	102,0	65,8
6,0	450	220-300	115,0	107,3