

MMA Electrodes C-Mn and low-alloy steels

Medium coated covered rutile type electrode, specially developed for welding mild steels for light metallic constructions and thin sheets. Suitable for use in structural engineering, shipbuilding and vehicle, boiler and tank construction.

Classification	
AWS	A5.1: E6013
EN	499: E 38 0 R 12
EN ISO	2560-A: E 38 0 R 12

Approvals	Grades
ABS	
DNV	
GL	
LRS	
RNR	
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
0.08	0.50	0.40	-	-	-	-	-	-	-	-	-

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength N/mm ²	Tensile Strength N/mm ²	Elongation A5 (%)	Impact Energy ISO - V (J) + 20 °C	Hardness
As Welded	≥ 430	490-550	≥ 24	≥ 70	-

Materials

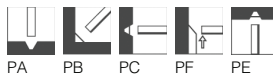
S(P)235 to S(P)355; GP240; GP280

Storage and redrying

Keep dry and avoid condensation. Re-drying not generally required.
If necessary: 100-110 °C for 1 hour.

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)
2,0	300	40-60	11,8	7,0
2,5	350	60-80	19,5	11,7
3,2	350	110-135	31,9	19,0
3,2	450	110-135	41,8	25,0
4,0	350	160-180	48,1	28,9
4,0	450	160-180	64,5	38,7
5,0	450	180-210	97,2	58,3