

MMA Electrodes C-Mn and low-alloy steels

Medium-coated rutile electrode with a fast freezing slag. Universal all-positional electrode which is very easy to weld when used for all kinds of light constructional work, including pipework. Suitable for vertical down welding of thin plates. Operates on low open circuit voltage, recommended for tack welding. Good slag detachability and excellent bead appearance. Efficiency 100%.

Classification	
AWS	A5.1:E 6013
EN	499:E 38 0 R 12
EN ISO	2560-A: E 42 0 R 12

Approvals	Grades
ABS	
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	0.65	0.65	≤ 0.030	≤ 0.030	-	-	-	-	-	-	-

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	≥ 420	500 - 640	≥ 20	≥ 47	-

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

AC; DC-



Packaging data

Diameter (mm)	Length (mm)	Current (A)	Electrode average weight (g)	Weld metal weight per electrode (g)
2,0	300	25-60	10,5	6,3
2,5	350	60-100	20,0	11,4
3,3	350	85-140	32,4	19,2
3,3	450	85-140	42,0	24,8
4,0	350	120-190	47,4	27,5
4,0	450	120-190	62,1	35,7
5,0	450	180-240	92,9	57,0