

MMA Electrodes C-Mn and low-alloy steels

Rutile electrode with a good bead aspect, used for a wide variety of applications. Suitable for all positional welding, except vertical down. Efficiency 100%.

Classification	
AWS	A5.1: E6013
EN	499: E 42 0 RR 12
EN ISO	2560-A: E 42 0 RR 12

Approvals	Grades

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

C	Mn	Si	P	S	Cr	Ni	Mo	Nb	V	N	Cu
0.10	0.60	0.50	≤ 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) 0°C	Hardness
As Welded	≥ 420	500-640	≥ 24	≥ 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

DC-



Packaging data

Diameter (mm)	Length (mm)	Current (A)	Electrode average weight (g)	Weld metal weight per electrode (g)
2,0	350	50-70	12,7	6,6
2,5	350	60-90	19,5	10,6
3,2	350	100-140	31,1	16,6
3,2	450	100-140	39,6	22,4
4,0	350	150-190	49,9	27,0
4,0	450	150-190	64,8	36,5
5,0	450	190-240	103,5	57,5