

MMA Electrodes Stainless and Heat resistant steels

Rutile coated MMA electrode for welding austenitic stainless Cr-Ni-Mo steels or cast steels, having an extra low carbon content. For operating temperatures of up to +400 °C. Fine metal droplet transfer, good fusion of joint faces, finely rippled bead surface, easy slag removal, easy arc striking and restriking.

Classification	
AWS	A 5.4: E316L-17
EN	1600: E 19 12 3 L R 12

Approvals	Grades
DB	
GL	
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	Cu	N	Ferrite
≤ 0.03	0.80	0.90	≤ 0.025	≤ 0.020	18.50	12	2.70	-	-	-	5-10

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	≥ 400	≥ 520	≥ 30	≥ 50	-

Materials

1.4401 (X4CrNiMo17-12-2), 1.4435 (X2CrNiMo18-14-3)

1.4571 (X6CrNiMoTi17-12-2), 1.4583 (X10CrNiMoNb18-12)

AISI 316L

Storage and redrying

Keep dry and avoid condensation.

Re-drying not generally required

If necessary: 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)
1,6	250	20-40	6,3	3,8
2,0	300	35-60	11,3	6,8
2,5	350	45-80	18,0	10,8
3,2	350	70-120	35,8	21,5
4,0	350	100-150	53,4	32,1
5,0	450	130-230	108,3	65,0