

MMA Electrodes Stainless and Heat resistant steels

Low hydrogen MMA electrode suitable for the welding of 11-13,5% Cr steels (AISI 410). These steel are air hardening and therefore pre-heating and stress relieving treatments are required in order to obtain a suitable ductility to allow mechanical working.

Efficiency 115%.

Classification	
AWS	A5.4: E 410-15
EN	1600: E 13 B 32
GOST	10052-75: Э12X13 similar

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

C	Mn	Si	P	S	Cr	Ni	Mo	Nb	Cu	N	Ferrite
0.04	0.30	0.30	≤ 0.030	≤ 0.025	13	-	-	-	-	-	-

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
PWHT 760°C x 1h	≥ 250	≥ 450	≥ 20	≥ 47	-

Materials

1.4000 (X6Cr13); 1.4006 (X12Cr13)

AISI 410

Storage and redrying

Keep dry and avoid condensation.

Re-dry at 280-300 °C for 1 hour, 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	300	65-95	18,2	10,9
3,2	350	85-140	38,8	23,2
4,0	350	120-190	55,0	33,8
5,0	350	190-240	87,2	52,9