OE-KV3HR

OERLIKON

MMA Electrodes
Chromium-Molybdenum steels

All-positional MMA electrode with a basic coating for the welding of creep resisting steels alloyed with 2.25%Cr 1.0%Mo. The chemical composition of the weld metal ensures a low sensitivity to solidification cracking. Preheat and interpass temperatures 200÷250°C are recommended. Efficiency 120%, X Factor <15ppm and J Factor <150ppm.

Classification	
AWS	A5.5: E 9018-B3 H4R
EN	1599: E CrMo2 B 3 2 H5
GOST	9467-75:Э09Х2М1

Approvals	Grades
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
0.07	0.68	0.28	≤ 0.010	≤ 0.010	2.19	-	0.90	-	-	-	-

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength N/mm^2	Tensile Strength N/mm^2	Elongation A5 (%)	Impact Energy ISO - V (J) - 30 °C	Hardness
PWHT 700°C x 1h	≥ 530	630-720	≥ 18	≥ 47	-
PWHT 690 °C x 17 h/air	≥ 400	550-650	≥ 22	≥ 100	-
PWHT 690 °C x 17 h/air +STC	≥ 400	550-650	≥ 22	≥ 70	-

Materials

10CrMo9-10, 12CrMo9-10; A 387 Gr.22, Cl 1and 2, A 182 Gr.F 22, A 336 Gr.F22

Storage and redrying

Keep dry and avoid condensation.
HD ≤ 5: Re-dry at 400-420 °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	19,7	11,5
3,2	350	90-130	37,5	21,5
4,0	350	125-165	53,0	31,0
5,0	450	170-220	109,7	70,0