BÖHLER FOX DMV 83 Kb

Basic stick electrode, low-alloyed, creep resistant

Classifications

EN ISO 3580-A	AWS A5.5	AWS A5.5M
E MoV B 4 2 H5	E8018-G	E5518-G

Characteristics and typical fields of application

Basic core wire alloyed stick electrode with special suitability for 14MoV6-3 (1/2 Cr 1 Mo) steels. Approved in long-term condition up to +580 °C service temperature.

Crack resistant and ductile deposit, low hydrogen content. Good weld ability in all positions except vertical down. Metal recovery approx. 115 %.

Base materials

Similar alloyed creep resistant steels and cast steels

1.7715 14MoV6-3;

Typical analysis of all-weld metal (wt.-%)

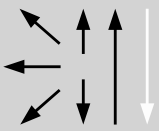
	C	Si	Mn	Cr	Mo	V
wt.-%	0.065	0.35	1.2	0.4	1.0	0.5

Mechanical properties of all-weld metal

Condition	Yield strength $R_{p0,2}$	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact work ISO-V KV J
	MPa	MPa	%	+20 °C
a	**510** (≥ 460)	**660** (≥ 550)	**22** (≥ 18)	**200** (≥ 47)
v	**410**	**580**	**26**	**150**

a annealed, 720 °C/2h / furnace down to 300 °C / air
v quenched/tempered 940 °C/0.5 h / oil 730 °C/0.5 h / furnace down to 300 °C / air

Operating data



Polarity:	Redrying if necessary:	Electrode identification:	ø (mm)	L mm	Amps A
DC (+)	300 – 350 °C, min. 2 h	FOX DMV 83 Kb 9018-G E MoV B	2.5	250	70 – 100
			3.2	350	110 – 140
			4.0	350	140 – 180

Preheating and interpass temperatures 200 – 300 °C. Post weld heat treatment at 700 – 720 °C for at least 2 hours followed by cooling in furnace down to 300 °C and still air.

Approvals

TÜV (1094.), SEPROZ, CE