BÖHLER FOX EV 75

Basic stick electrode, low-alloyed, high strength

Classifications

EN ISO 18275-A	EN ISO 18275-B	AWS A5.5	AWS A5.5M
E 62 6 Mn2NiCrMo B 4 2 H5	E6918-G A H5	E10018-GH4R	E6918-GH4R
		E10018MH4R (mod.)	E6918MH4R (mod.)

Characteristics and typical fields of application

Mn-Mo-Ni -alloyed basic electrode with high ductility and crack resistance for high-strength, quenched and tempered fine-grained constructional steels. Suitable for service temperatures at –60 °C to +400 °C.

Weld metal recovery approx. 120 %. Easy weld ability in all positions except vertical-down. Preheat, interpass temperature and post weld heat treatment as required by the base metal.

Very low hydrogen content (acc. AWS condition HD < 4 ml/100 g weld metal).

Base materials

Quenched and tempered fine-grained steels up to 620 MPa yield strength, QT-steels up to 730 MPa tensile strength

S500Q-S620Q, S500QL-S620QL, S500QL1-S620QL1, L485MB-L555MB, L485QB-L555QB, alform 500 M, 550 M, 600 M, aldur 550 Q, 550 QL, 550 QL1

ASTM A 572 Gr. 65; A 633 Gr. E; A 738 Gr. A; A 852; API 5 L X70, X80, X70Q, X80Q

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

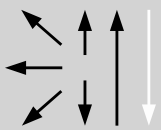
	C	Si	Mn	Cr	Ni	Mo
wt.-%	0.05	0.4	1.6	0.4	2.0	0.4

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	–60 °C
u	**700** (≥ 620)	**750** (690 – 890)	**23** (≥ 18)	**140**	≥ 47
s	**700**	**750**	**23**	**120**	
v	**500**	**615**	**24**	**120**	

u untreated, as welded
s stress relieved 580 °C/2h / furnace down to 300 °C / air
v quenched/tempered 910 °C/1h / air and 600 °C/2h / 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 EV 75 10018-G E 62 6 Mn2NiCrMo B	2.5	350	80 – 100
			3.2	350	100 – 140
			4.0	450	140 – 180
			5.0	450	190 – 230

Preheating and interpass temperature and post weld heat treatment as required by the base metal.

Approvals

SEPROZ