BÖHLER FOX EV 70

Basic stick electrode, low-alloyed, high strength

Classifications

EN ISO 18275-A	EN ISO 18275-B	AWS A5.5	AWS A5.5M
E 55 6 1NiMo B 4 2 H5	E6218-G A H5	E9018-GH4R	E6218-GH4R
		E9018-D1H4R (mod.)	E6218-D1H4R (mod.)

Characteristics and typical fields of application

Basic Mo-Ni alloyed electrode exhibiting high ductility and crack resistant for applications on high-strength fine-grained steels. Suitable for service temperatures between –60 °C and +350 °C.

Metal recovery approx. 115 %. Easy to handle in all positions except vertical-down. Very low hydrogen content (acc. AWS condition HD < 4 ml/100 g weld metal). Preheat and interpass temperatures, as well as post weld heat treatment as required by the base metal.

Base materials

S460N, S460M, S460NL, S460ML, S460Q-S555Q, S460QL-S550QL, S460QL1-S550QL1, P460N, P460NH, P460NL1, P460NL2, L415NB, L415MB-L555MB, L415QB-L555QB, alform 500 M, 550 M, aldur 500 Q, 500 QL, 500 QL1, aldur 550 Q, 550 QL, 550 QL1, 20MnMoNi4-5, 15NiCuMoNb5-6-4, GE300

ASTM A 572 Gr. 65; A 633 Gr. E; A 738 Gr. A; A 852; API 5 L X60, X65, X70, X80, X60Q, X65Q, X70Q, X80Q

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

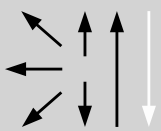
	C	Si	Mn	Ni	Mo
wt.-%	0.04	0.3	1.2	0.9	0.4

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	**650** (≥ 550)	**700** (620 – 780)	**24** (≥ 18)	**160**	**70** (≥ 47)
s	**650**	**700**	**24**	**130**	

u untreated, as welded
s stress relieved 580 °C/2h / furnace down to 300 °C / air

Operating data



Polarity:
DC (+)

Redrying if necessary:
300 – 350 °C, min. 2 h

Electrode identification:
FOX EV 70 9018-G
E 55 6 1NiMo B

ø (mm)	L mm	Amps A
2.5	350	80 – 100
3.2	350	100 – 140
4.0	450	140 – 180
5.0	450	190 – 230

Preheat and interpass temperatures, as well as post weld heat treatment as required by the base metal.

Approvals

TÜV (0112.), SEPROZ, CE