BÖHLER FOX EV 75

Stick electrode, low-alloyed, basic coated, high-strength

Classifications

EN ISO 18275-A	EN ISO 18275-B	AWS A5.5 / SFA-5.5	AWS A5.5M
E 62 6 Mn2NiCrMo B 4 2 H5	E6918-G A H5	E10018-G H4R	E6918-G H4R
		E10018M H4R (mod.)	E6918M H4R (mod.)

Characteristics and typical fields of application

Basic coated, Mn-Ni-Cr-Mo - alloyed electrode with high ductility and crack resistance for high-strength, quenched and tempered fine-grained constructional steels. Suitable for service temperatures at –60ºC to +400ºC.
Weld metal recovery approximately 120%. Easy weldability in all positions except vertical-down.
Very low hydrogen content (acc. AWS condition HD < 4 ml/100 g weld metal) with a moisture resistant coating.

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

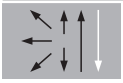
	C	Si	Mn	Cr	Ni	Mo
wt.-%	0.05	0.4	1.6	0.4	2.0	0.4

Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact energy ISO-V KV J	
	MPa	MPa	%	20°C	-60°C
u	700 (≥ 620)	760 (≥ 690 – 890)	22 (≥ 18)	130	≥ 47
s	680	730	22	110	
v	450	610	24	120	

u untreated, as welded
s stress relieved 580 °C/2h / furnace down to 300 °C
v quenched/tempered 910 °C/1h / air and 600 °C/2h / furnace down to 300 °C

Operating data



Polarity	DC+
Electrode identification	FOX EV 75 10018-G E 62 6 Mn2NiCrMo B
Redrying	if necessary 300 – 350°C, min. 2h

Dimension mm	Current A
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

CE