BÖHLER FOX EV 70 Mo

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 55 3 MnMo B T 4 2 H10	E6218-G A H10	E9018-G	E6218-G
		E9018-D1 (mod.)	E6218-D1 (mod.)

Characteristics and typical fields of application

Basic Mn-Mo alloyed electrode especially suited for high-strength fine-grained constructional steels and high-temperature steels, e.g. 15NiCuMoNb5S. Crack resistant, tough and ageing resistant.
Excellent weld ability in all positions except vertical-down.

Base materials

High-strength fine-grained steels , rail steels up to R 200 (for cladding)
S460N, S460M, S460Q-S555Q, P460N, P460NH, 415NB, L415MB-L555MB, L415QB-L555QB, alform 500 M, 550 M, aldur 500 Q, aldur 550 Q, 20MnMoNi4-5, 15NiCuMoNb5-6-4, GE300,
ASTM A 572 Gr. 65; A 738 Gr. A; A 852; API 5 L X60, X65, X70, X80, X60Q, X65Q, X70Q, X80Q

Typical analysis

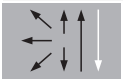
	C	Si	Mn	Mo
wt.-%	0.06	0.4	1.6	0.5

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	-30°C
u	580 (≥ 550)	680 (≥ 620 – 780)	22 (≥ 18)	150	85 (≥ 47)
s	580	650	23	160	90

u untreated, as welded
s stress relieved 650 °C/2h / furnace down to 300 °C

Operating data



Polarity	DC +
Electrode identification	FOX EV 70 Mo 9018-G E 55 3 MnMo B T
Redrying	300-350°C/2h

Dimension mm	Current A
2.5 × 250	70 – 100
3.2 × 350	110 – 140
4.0 × 350	140 – 180
4.0 × 450	140 – 180
5.0 × 450	180 – 240

Preheating and interpass temperature, as well as post welds heat treatment as required by the base metal.

Approvals

TÜV (01178), DB (10.014.91, 82.014.04), CE