BÖHLER FOX EV 55

Stick electrode, unalloyed, basic coated

Classifications

EN ISO 2560-A	EN ISO 2560-B	AWS A5.1 / SFA-5.1	AWS A5.1M
E 46 5 B 4 2 H5	E 4918-1 A U H5	E7018-1 H4R	E4918-1 H4R

Characteristics and typical fields of application

Basic electrode for high-quality joint welds with high strength and toughness properties. Low-temperature ductility down to –50° C. Very low hydrogen content in the weld deposit (acc. AWS condition HD < 4 ml/100g weld metal) with a moisture resistant coating.
Excellent weld ability in all positions except vertical-down. Suitable for welding in steel construction, boiler, tank, container and vehicle construction, shipbuilding and mechanical engineering. Also suited for buffer layers on build ups on high-carbon steels.

Base materials

Steels up to a yield strength of 460 MPa (67 ksi)
S235J2G3 - S355J2G3, S235JR - S355J0, P235T1-P355T1, P235T2 -P355T2, L210 - L415NB, L290MB, P235G1TH, P255G1TH, P235GH, P265GH, P295GH, S235JRS1 - S235J4S, S355G1S - S355G3S, S255N - S460N, P255NH-P355NH, S255NL - S460NL1, GE200-GE300
ASTM A27 a. A36 Gr. all; A214; A 242 Gr.1-5; A266 Gr. 1, 2, 4; A283 Gr. A, B, C, D; A285 Gr. A, B, C; A299 Gr. A, B; A328; A366; A515 Gr. 60, 65, 70; A516 Gr. 55; A570 Gr. 30, 33, 36, 40, 45; A 572 Gr. 42, 50; A606 Gr. all; A607 Gr. 45; A656 Gr. 50, 60; A668 Gr. A, B; A907 Gr. 30, 33, 36, 40; A841; A851 Gr. 1, 2; A935 Gr.45; A936 Gr. 50; API 5 L Gr. B, X42- X60

Typical analysis

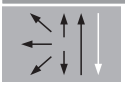
	C	Si	Mn
wt.-%	0.07	0.35	1.4

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

Condition	Yield strength R_e	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact energy ISO-V KV J		
	MPa	MPa	%	20 °C	-20 °C	-50 °C
u	500 (≥ 460)	550 (530 – 680)	30 (≥ 20)	220	170	90 (≥ 47)
s	470	530	30	200		

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

Operating data



Polarity	DC +
Electrode identification	FOX EV 55 7018 E 46 5 B
Redrying	300 – 350 °C, min. 2 h

Dimension mm	Current A
2.5 × 250	70 – 110
2.5 × 350	70 – 110
3.2 × 350	100 – 140
4.0 × 450	130 – 180
5.0 × 450	180 – 230

Approvals

TÜV (03654), CE