BÖHLER FOX EV 50-A

Basic stick electrode, unalloyed

Classifications

EN ISO 2560-A	EN ISO 2560-B	AWS A5.1	AWS A5.1M
E 42 3 B 12 H10	E 4916 A U H10	E7016	E4916

Characteristics and typical fields of application

Basic double coated electrode with excellent weld ability in all positions except vertical-down. Especially suited for out-of-position welding thanks to the well controlled arc. Excellent root penetration. Good suitability for welding on AC. Minimum spatter loss, very easy slag removal with uniform beads. Well suited for small transformers. Low hydrogen content in the weld deposit (HD < 10 ml/100 g deposit).

Base materials

Steels up to a yield strength of 420 MPa (60 ksi)

S235JR-S355JR, S235JO-S355JO, S235J2-S355J2, S275N-S420N, S275M-S420M, P235GH-P355GH, P355N, P285NH-P420NH, P195TR1-P265TR1, P195TR2-P265TR2, P195GH-P265GH, L245NB-L415NB, L245MB-L415MB, GE200-GE240

ASTM A 106 Gr. A, B, C; A 181 Gr. 60, 70; A 283 Gr. A, C; A 285 Gr. A, B, C; A 414 Gr. A, B, C, D, E, F, G; A 501 Gr. B; A 516 Gr. 55, 60, 65, 70; A 573 Gr. 58, 65, 70; A 588 Gr. A, B; A 633 Gr. A, C, D; A 662 Gr. A, B, C; A 678 Gr. A, B; A 711 Gr. 1013; API 5 L Gr. B, X42, X52, X56, X60

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

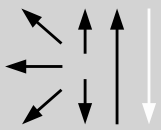
	C	Si	Mn
wt.-%	0.07	0.7	1.1

Mechanical properties of all-weld metal

Condition	Yield strength R_e	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact work ISO-V KV J	
	MPa	MPa	%	+20 °C	–30 °C
u	**440** (≥ 420)	**550** (500 – 640)	**28** (≥ 20)	**180**	≥ 47
s	**400**	**520**	**28**	**180**	

u untreated, as welded
s stress relieved 580 °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 50-A	2.5	350	60 – 90
AC		7016 E 42 3 B	3.2	350/450	100 – 150
			4.0	450	140 – 190
			5.0	450	190 – 250

Approvals

TÜV (10574.), DB (10.014.17), CE