



BÖHLER FOX EV 50

Unalloyed basic coated stick electrode

Main benefit:

Basic coated stick electrode for high quality welds for unalloyed steels up to 420 MPa yield strength.

Product features	Product benefits	User benefits
» Basic coated	» Pure, cryogenic weld metal	» Big field of applications for higher demands » Suitable for service temperatures up to -50 °C
» Moisture resistant coating » Low hydrogen content	» Very low hydrogen content in the all weld metal » Avoids hydrogen induced cracking	» Electrodes can be used up to 9h after opening a Dry System packaging or a hermetical tin without re-drying
» NACE TM-02-84 approved	» Suitable for sour gas applications	» Safer welding, CTOD tested
» Designed for high demand welds	» Many 3 rd party approvals	» Welding for high demanding industries with required approvals
» Available in Dry System vacuum packs	» Welding directly out of the package without re-drying	» Less time for preparation, always safe packed, fresh stick electrodes



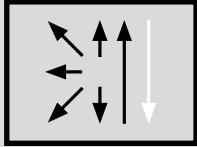
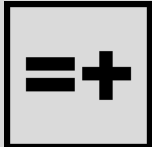
Typical applications

- » Steel constructions
- » Ship building
- » Pressure vessels
- » Offshore industry

BÖHLER FOX EV 50 is one of our most popular electrodes. It's in our portfolio for more than 70 years and covers a large part of all welded joints in unalloyed steels. Constant improvements and adjustments to the recipe keep the electrode up to date.

Low hydrogen content, a moisture-resistant coating, paired with our Dry System packaging provides the most possible convenience during welding. Constant tests and approvals ensure constant, high quality, and permanent optimization enables the highest possible mechanical values.

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Classifications		Operating data	
EN ISO 2560-A	AWS A5.1 / SFA-5.1	Welding positions	Polarity
E 42 5 B 4 2 H5	E7018-1 H4R		

Typical analysis of all weld metal, wt. %			
C	Si	Mn	
0.08	0.4	1.2	

Mechanical properties, all weld metal (single values typical)						
Condition	Yield strength R _{p0.2%} MPa	Tensile strength R _m MPa	Elongation A (L ₀ =5d ₀) %	CVN Impact toughness ISO-V KV J		
				20 °C	-20 °C	-50 °C
Untreated, as welded	460 (>= 420)	570 (500 – 640)	30 (≥ 20)	190	160	70 (≥ 47)

Steels to be welded	
EN	ASTM
S235JRG2 - S355J2, E295, E335, C 35; boiler steels P235GH, P265GH, P295GH, P355GH; fine grained structural steels up to S420N; shipbuilding steels A, B, D, E; offshore steels; pipe steels P265, P295, L290NB - L415NB, L290MB - L415MB; X 42 - X 60; cast steel E200, GE240, GE260;	ASTM A27 and A36 Gr. all, A214, A242 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, A572 Gr. 42, 50, A606 Gr. alle, 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

Approvals
TÜV (00426), DB (10.014.02), ABS, BV, DNV, LR, RMR, RINA, CWB (Ø 3,2-6,0 mm), CE

Carton Packaging	Dry System Vacuum Packaging
 <p>Weight: ~ 4,1 kg</p> <p>Diameter: 2.0 x 250 mm 2.5 x 250 mm 2.5 x 350 mm 3.2 x 350 mm 3.2 x 450 mm 4.0 x 350 mm 4.0 x 450 mm 5.0 x 450 mm 6.0 x 450 mm</p>	 <p>Weight: DrySys 20: ~1.2 kg DrySys 30: ~ 2.1 kg</p> <p>Diameter: 2.0 x 250 mm 2.5 x 350 mm 3.2 x 350 mm 3.2 x 450 mm 4.0 x 350 mm 4.0 x 450 mm 5.0 x 450 mm</p>