BÖHLER FOX EV PIPE

Basic stick electrode for vertical-up welding, pipe welding

Classifications

EN ISO 2560-A	EN ISO 2560-B	AWS A5.1	AWS A5.1M
E 42 4 B 1 2	E 4916-1 A	E7016-1	E4916-1

Characteristics and typical fields of application

BÖHLER FOX EV PIPE is a basic electrode with some additions of rutile and silicates. It is excellent suited for positional welding of root passes using D.C. negative polarity as well as for filler and cover passes of pipes, tubes and plates on D.C. positive polarity, or even AC. It is user friendly and provides a good gap bridging ability together with easy slag removal to ensure minimum grinding. Weld metal toughness is available down to -46°C. BÖHLER FOX EV PIPE offers considerable time savings against AWS E7018 type electrodes when welding root passes due to increased travel speeds. Also the use of dia. 3.2 mm is possible for root passes in case of wall thicknesses of 8 mm and more. BÖHLER FOX EV PIPE can be used in sour gas applications (HIC-Test acc. to NACE TM-02-84). Test values for SSC-test are available too.

Base materials

EN: P235GH, P265GH, P295GH, P235T1, P275T1, P235G2TH, P255G1TH, S255N - S420N[1)], S255NL1 up to S420NL1, L290NB up to L360NB, L290MB up to L415MB, L450MB[2)] up to L555MB[2)]
API Spec. 5L: A, B, X 42, X46, X52, X56, X60, X65-X80[2)]
ASTM: A53 Gr. A-B, A106 Gr. A-C, A179, A192, A210 Gr. A-1
[1)] stress relieved up to S380N / S380NL1
[2)] only for root pass

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

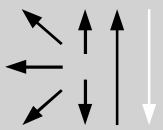
	C	Si	Mn
wt-%	0.06	0.60	0.9

Mechanical properties of all-weld metal

Condition	Yield strength R_{eH}	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact work ISO-V KV J			
	MPa	MPa	%	+20°C	-20°C	-40°C	-46°C
u	**470** (≥ 420)	**560** (500 – 640)	**29** (≥ 20)	**170** (≥ 120)	**100**	**60** (≥ 47)	**55** (≥ 27)

u untreated, as welded

Operating data



Polarity:	Redrying if necessary:	Electrode identification:	ø (mm)	L mm	Amps A
DC (+) AC DC (–) polarity negative for root pass	300 – 350°C, min. 2 h	FOX EV PIPE 7016-1 E 42 4 B	2.0	300	30 – 60
			2.5	300	40 – 90
			3.2	350	60 – 130
			4.0	350	110 – 180

Preheated and interpass temperatures as required by the base material. The optimum gap width for root passes is 2 – 3 mm, the root face should be in the range 2 – 2.5 mm. The electrodes are ready for use straight from the hermetically sealed tins.

Approvals

TÜV (7620.), DB (10.014.77), LTSS, SEPROZ, CE, NAKS (Ø 2,5 – 4,0 mm),
GAZPROM (Ø 2,5 – 4,0 mm)