

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 coated electrode, suited for positional welding of root passes using DC (–) as well as for filler and cover passes of pipes, tubes and plates on DC (+), or even AC. Good gap bridging ability together with easy slag removal ensures minimum grinding. Weld-metal toughness is available down to -45°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

P235GH, P265GH, P295GH, P235T1, P275T1, P235G2TH, P255G1TH, S255N-S420N¹⁾, S255NL1-S420NL1, L290NB-L360NB, L290MB-L415MB, L450MB²⁾-L555MB²⁾
API Spec. 5L: A, B, X 42, X46, X52, X56, X60, X65-X80²⁾

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

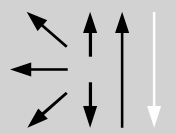
	C	Si	Mn
wt.-%	0.06	0.60	0.9

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

Condition	Yield strength R _{eH}	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact work ISO-V KV J			
				+20°C	-20°C	-40°C	-45°C
u	470 (≥ 420)	560 (500 – 640)	29 (≥ 20)	170	120	100 (≥ 47)	65 (≥ 27)

u untreated, as welded

Operating data

	Polarity: DC (+) / DC (-) AC polarity negative for root pass	Redrying if necessary: 300 – 350°C, min. 2 h	Electrode identification: FOX EV PIPE 7016-1 E 42 4 B	ø mm	L mm	Amps A
				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 (07620.), DB (10.014.77), CE, NAKS, GAZPROM