

## Classification

AWS A5.1	AWS A5.1M	EN ISO 2560-A	EN ISO 2560-B
E7016-1H4R	E4916-1H4R	E 42 4 B 12 H5	E 49 16-1A

## Characteristics and typical fields of application

BÖHLER FOX S EV PIPE-1 is a basic electrode with some additions of rutile and silicates. It is excellent suited for positional welding of root passes using both D.C. negative and D.C. positive polarity as well as for filler and cover passes of pipes, tubes and structural/plates on DC or even AC polarity.

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. Very low hydrogen content (HD < 4ml / 100 g weld metal as per AWS). BÖHLER FOX S EV PIPE-1 offers considerable time savings against AWS E7018 type electrodes when welding root passes due to increased travel speeds. Also the use of dia. 3.25 mm is possible for root passes in case of wall thicknesses of 8 mm and more. Complying the corrosion testing requirements as per NACE MR 0175 standard TM 01-77-96 (SSC) and 02-84-96 (HIC).

## Base Materials

EN P235GH, P265GH, P295GH, P235T1, P275T1, P235G2TH, P255G1TH, S255N - S420N<sup>1)</sup>, S255NL1 up to S420NL1, L290NB up to L360NB, L290MB up to L415MB, L450MB<sup>2)</sup> up to L555MB<sup>2)</sup>

API Spec. 5L: A, B, X 42, X46, X52, X56, X60, X65-X80<sup>2)</sup>

ASTM A53 Gr. A-B, A106 Gr. A-C, A179, A192, A210 Gr. A-1

<sup>1)</sup> stress relieved up to S380N / S380NL1 <sup>2)</sup> only for root pass

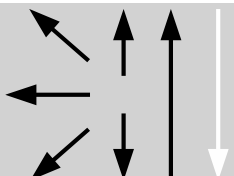
## Typical analysis of all weld metal (wt.-%)

C	Si	Mn
0.06	0.6	0.9

## Mechanical properties of all-weld metal

Heat treatment	Yield strength R <sub>e</sub> N/mm <sup>2</sup>	Tensile strength R <sub>m</sub> N/mm <sup>2</sup>	Elongation (L <sub>0</sub> =5d <sub>0</sub> )	Impact work ISO-V KV J	
				- 40 °C	- 46 °C
As Welded	480	570	30	60	50

## Operating data



### Polarity



Re-drying if necessary: 300 – 350°C, min. 2 h.

Preheated and interpass temperature 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.

## Approvals

ABS (4YH5), CE

## Size, Packaging and Electrical Operating Data

Size (mm)		Carton Pack		Vacuum Pack		Amperage (A)
Ø	Length	Kg / Pack	Kg / Box	Kg / Vac.	Kg / Box	
2.50	350	5.0	20.0	2.0	16.0	40 – 90
3.25	350	5.0	20.0	2.0	16.0	60 – 130
4.00	350 / 450	5.0	20.0	2.0	16.0	110 – 180