

| EN ISO 2560-A:2005: | |
|---------------------|--|
| EN ISO 2560-B:2005: | |
| AWS A5.1-04: | |
| AWS A5.1M-04: | |

E 42 4 B 12 H5

E 49 16-1 A E7016-1H4R

E4916-1H4R

Böhler Fox S EV PIPE-1

SMAW basic electrode for vertical-up welding, pipe welding

Description

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; very low hydrogen content (Typical HD < 4 ml/100 g weld metal). BÖHLER FOX EV PIPE offers considerable time savings against AWS E 7018 type electrodes when welding root passes due to increased travel speeds.

Also the use of dia. 3.25 mm is possible for root passes for wall thicknesses of 8 mm and more.

Base Materials

| Dase mau | | | | | | | | | |
|----------------------------|--|-----------|-----------------------------|---------|---------------------|----------|------------|--|--|
| 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, X4 | 1 6, X52, X56, X | 60, X6 | 5-X80 ²⁾ | | | | |
| ASTM | A53 G | r. A-B, A | 106 Gr. A-C, A | 179, A | 192, A210 G | r. A-1 | | | |
| ¹⁾ stress relie | eved up | to S380 | N / S380NL1 | | | | | | |
| ²⁾ only for ro | ot pass | | | | | | | | |
| Typical Ch | nemica | l Com | position of <i>l</i> | All — N | Weld Meta | al | | | |
| | | С | Si | | Mn | | | | |
| Wt-% | | 0.06 | 0.6 | | 0.9 | | | | |
| Typical I | Mecha | nical | Properties | of | All-Weld | Metal (A | As Welded) | | |
| Yield Stren | igth | (Mpa) | | | 470 | | | | |
| Tensile str | ength | (Mpa) |) | | 560 | | | | |
| Elongation | (L = 4 | D) % | | | 29 | | | | |
| Impact Str | ength (| (J) | +20 |) °C | 170 | | | | |
| | | | -20 | °C | 100 | | | | |
| | | | -40 | °C | 60 | | | | |

Operating Data

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|---|---|
| | |
| T | |
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| | |
| | |

| Polarity : | = <u>+</u> ~ | Polarity Negative for root pass |
|------------|-----------------|--|
| | | |

-46 °C

55

Re-drying if necessary: 300 – 350 °C, min. 2h. Electrode identification : Bohler Fox S EV PIPE-1/7016-1

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.

Approval

| Size, Packaging & Electrical Operating Data | | | | | | |
|---|-----------|----------|--------------|--|--|--|
| Size mm | Kg / Pack | Kg / Box | Amperage (A) | | | |
| 2.50 x 350 | 4.6 | 18.4 | 40 - 90 | | | |
| 3.25 x 350 | 4.8 | 19.2 | 60 - 130 | | | |
| 3.25 x 450 | 6.8 | 27.2 | 60 - 130 | | | |
| 4.00 x 450 | 6.2 | 24.8 | 110 - 180 | | | |

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