BOHLER FOX S EV 50-1

Stick electrode, unalloyed basic

Classification

AWS A5.1	AWS A5.1M	EN ISO 2560-B
E7018-1H4R	E4918-1H4R	E 49 18-1A U H5

Characteristics and typical fields of application

- Basic covered electrode with very good welding characteristics including out of position work.
- Particular good impact properties down to -50°C.
- CTOD tested at -10°C.
- Weld metal recovery about 115%*.
- Crack-free weld metal when welding high-carbon steels.
- Suitable for use in tank construction, boiler and pressure vessel manufacturer, apparatus engineering, vehicle manufacture, offshore applications and ship building.
- Very low hydrogen content in the weld metal (under AWS conditions HD≤4ml/100gm)
- Suitable for welding steels with low purity and high carbon content.

Base Materials

S235JRG2 – S355J2, E295, E335, C35; boiler steels P235GH, P265 GH, P295GH, P355GH; fine grained structural steels up to S420N; shipbuilding steels A, B, D, E; offshore steels; pipe steels P265, P295, L290NB – L415NB, L290MB, X42 – X60; cast steels GS-38, GS-45, GS-52; ageing resistant steels Ast35 – Ast52; SA 516 Gr 60, 65, 70; SA333 Gr 6.

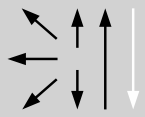
Typical analysis of all weld metal (wt.-%)

C	Si	Mn	P	S	Cr	Mo	Ni	Mn+Ni+Cr+Mo+V
0.08	0.50	1.40	0.009	0.01	< 0.05	< 0.05	< 0.05	1.4

Mechanical properties of all-weld metal

Heat treatment	Yield strength R_e N/mm^2	Tensile strength R_m N/mm^2	Elongation (L_0=5d_0)	Impact work ISO-V KV J	
	MPa	MPa	%	+ 20 °C	– 50 °C
As Welded	490	560	30	190	100

Operating data



Polarity
DCEP

Note: * metal recovery rate may vary slightly with higher diameter
Re-drying if necessary : **300 – 350°C min. 2h**
Electrode Identification : **Bohler Fox S EV 50-1/7018-1H4R**

Approvals

ABS,LR,DNV,BKI,IBR

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	12.0	80 – 110
3.25	350/450	5.0	20.0	2.0	12.0	100 – 145
4.00	450	5.0	20.0	2.0	12.0	140 – 200
5.00	450	5.0	20.0	2.0	12.0	190 – 250