BÖHLER FOX EV 60

Basic stick electrode, low-alloyed, high strength

Classifications

EN ISO 2560-A	EN ISO 2560-B	AWS A5.5	AWS A5.5M
E 46 6 1Ni B 4 2 H5	E 5518-N2 A U H5	E8018-C3H4R	E5518-C3H4R

Characteristics and typical fields of application

Basic Ni- alloyed electrode with excellent mechanical properties, particularly high toughness and crack resistance. For higher strength fine- grained constructional steels.

Suitable for service temperatures at -60°C to +350°C. Very good impact strength in aged condition. Metal recovery about 115 %. Easily weld ability in all positions except vertical-down.

Very low hydrogen content (acc. AWS condition HD < 4 ml/100 g weld metal). Test values for SSC-test are available.

Base materials

Constructional steels, pipe- and vessel steels, cryogenic fine-grained steels and special grades

S275N-S460N, S275NL-S460NL, S275M-S460M, S275ML-S460ML, P355N, P355NH, P460N, P460NH, P275NL1-P460NL1, P275NL2-P460NL2, L360NB, L415NB, L360MB-L450MB, L360QB-L450QB

ASTM A 203 Gr. D, E; A 350 Gr. LF1, LF2, LF3; A 420 Gr. WPL3, WPL6; A 516 Gr. 60, 65, 70; A 572 Gr. 42, 50, 55, 60, 65; A 633 Gr. A, D, E; A 662 Gr. A, B, C; A 707 Gr. L1, L2, L3; A 738 Gr. A; A 841 A, B, C; API 5 L X52, X60, X65, X52Q, X60Q, X65Q

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

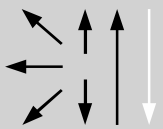
	C	Si	Mn	Ni
wt.-%	0.07	0.4	1.15	0.9

Mechanical properties of all-weld metal

Condition	Yield strength $R_{p0,2}$	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact work ISO-V KV J	
	MPa	MPa	%	+20°C	-60°C
u	**510** (≥ 460)	**610** (580 – 740)	**27** (≥ 20)	**180**	**110** (≥ 47)
s	**480**	**580**	**27**	**160**	

u untreated, as welded
s stress relieved 580°C/2h / furnace down to 300°C / air

Operating data



Polarity:	Redrying if necessary:	Electrode identification:	ø (mm)	L mm	Amps A
DC (+)	300 – 350°C, min. 2 h	FOX EV 60 8018-C3 E 46 6 1Ni B	2.5	350	80 – 100
			3.2	350	110 – 140
			4.0	450	140 – 180
			5.0	450	190 – 230

Approvals

TÜV (1524.), DNV (3 YHH), RMR (3 YHH), Statoil, LTSS, SEPROZ, CRS (3YH5), VG 95132, CE, ABS