

Classifications

EN ISO 18275-A	AWS A5.5M	EN ISO 18275-M	AWS A5.5 / SFA-5.5
E 55 6 1NiMo B 4 2 H5	E5518-G H4R	E6218-G A H5	E8018-G H4R
	E5518-D1 H4R		E8018-D1 H4R

Characteristics and typical fields of application

Basic coated electrode with high ductility and crack resistance, for high-strength fine-grained steels.

Ductile down to -60°C. Resistant to ageing. Easy to handle in all positions, except vertical-down.

Very low hydrogen content (acc. to AWS condition HD <4 ml/100 g weld metal) with a moisture resistant coating.

BÖHLER FOX EV 65 can be used in sour gas applications (HIC-Test acc. NACE TM-02-84). Test values for SSC-test are available too.

Base materials

Constructional steels, pipe- and vessel steels, cryogenic fine-grained steels and special grades
S460N, S460M, S460NL, S460ML, S460Q-S550Q, S460QL-S550QL, S460QL1-S550QL1, P460N,
P460NH, P460NL1, P460NL2, L415NB, L415MB-L555MB, L415QB-L555QB,
alform 500 M, 550 M, aldur 500 Q, 500 QL, 500 QL1, aldur 550 Q, 550 QL, 550 QL1, GE300,
20MnMoNi4-5, 15NiCuMoNb5-6-4

ASTM A 572 Gr. 65; A 633 Gr. E; A 738 Gr. A; A 852; API 5 L X60, X65, X70, X80, X60Q, X65Q,
X70Q, X80Q

Typical analysis

	C	Si	Mn	Ni	Mo
wt.-%	0.06	0.3	1.2	0.8	0.35

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

Condition	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A ($L_0=5d_0$)	Impact energy ISO-V KV J	
	MPa	MPa	%	20°C	-60°C
u	590 (≥ 550)	650 (610 – 780)	25 (≥ 18)	190	90 (≥ 47)
s	580	630	25	160	

u untreated, as welded

s stress relieved 580 °C/2h / furnace down to 300 °C

Operating data

	Polarity	DC+	Dimension mm	Current A
	Electrode identification	FOX EV 65 8018-G E 55 6 1NiMo B	2.5 × 350	80 – 100
			3.2 × 350	100 – 140
	Redrying	if necessary 300 – 350°C, min. 2h	4.0 × 350	140 – 180
			4.0 × 450	140 – 180
			5.0 × 450	190 – 230

Preheating and interpass temperature, as well as post-welds heat treatment as required by the base metal.

Approvals

TÜV (01802), VG 95132, BV, ABS, CE

