

Classifications			
EN ISO 18275-A	EN ISO 18275-B	AWS A5.5	AWS A5.5M
E 55 6 1NiMo B 4 2 H5	E6218-G A H5	E8018-GH4R	E5518-GH4R
		E8018-D1H4R	E5518-D1H4R

Characteristics and typical fields of application

Basic 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). 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 of all-weld metal

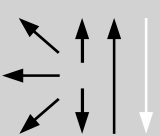
	C	Si	Mn	Ni	Mo
wt.-%	0.06	0.3	1.2	0.8	0.35

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 work ISO-V KV J	
	MPa	MPa	%	+20°C	-60°C
u	590 (≥ 550)	650 (620 – 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 / air

Operating data

	Polarity: DC (+)	Re-drying if necessary: 300 – 350°C, min. 2 h	Electrode identification: FOX EV 65 8018-G E 55 6 1NiMo B	ø mm	L mm	Amps A
				2.5	350	80 – 100
				3.2	350	100 – 140
				4.0	350/450	140 – 180
				4,8	450	180 - 220
				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.), NAKS, VG 95132, BV, RMR, ABS, CE