

Classifications

EN ISO 2560-A	EN ISO 2560-B	AWS A5.5	AWS A5.5M
E 50 4 B 4 2 H5	E 5718-G A H5	E8018-GH4R	E5518-GH4R

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 $+350\text{ °C}$. Very good impact strength in aged condition. Metal recovery about 115 %. Easy weld ability in all positions except vertical-down.

Very low hydrogen content (acc. AWS condition HD < 4 ml/100 g weld metal).

Base materials

Constructional steels, pipe steels, rail steels

S460N, S460M, S460NL, S460ML, S460Q-S500Q, S460QL-S500QL, P460N, P460NH, P460NL1, P460NL2, L415NB, L415MB-L485MB, L415QB-L485QB, alform 500 M, aldur 500 Q, aldur 500 QL, GE300

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

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

	C	Si	Mn
wt.-%	0.08	0.7	1.7

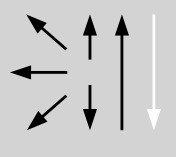
Mechanical properties of all-weld metal

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	-40 °C
u	580 (≥ 500)	630 (570 – 720)	26 (≥ 18)	170	90 (≥ 47)
s	560	610	26	130	

u untreated, as welded

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

Operating data

	Polarity:	Redrying if necessary:	Electrode identification:	\varnothing (mm)	L mm	Amps A
	DC (+)	300 – 350 °C, min. 2 h	FOX EV 63 8018-G E 50 4 B	2.5	350	80 – 110
				3.2	350	100 – 140
				4.0	450	140 – 180
				5.0	450	190 – 230

Approvals

TÜV (0730.), DB (10.014.07 / 81.014.01), RMR (3 YHH), SEPROZ, CE