

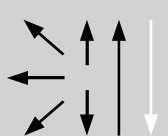
Classifications					
EN ISO 3580-A	EN ISO 3580-B	EN ISO 2560-A	EN ISO 2560-B	AWS A5.5	AWS A5.5M
E Mo B 4 2 H5	E4918-1M3 H5	E 46 5 Mo B 4 2 H5	E4918-1M3 A U H5	E7018-A1H4R	E4918-A1H4R

Characteristics and typical fields of application	
<p>Basic low-hydrogen electrode for 0.5% Mo-alloyed boiler, plates, and tube steels. Approved in long-term condition up to +550°C service temperature. For high quality welds of long term stressed components with reliable mechanical properties under high and low temperature conditions. Crack resistant, tough and ageing resistant. Very low hydrogen content (acc. to AWS condition HD < 4 ml/100 g). Metal recovery approx. 115%.</p>	

Base materials	
<p>Creep resistant steels and similar alloyed cast steels, steels resistant to caustic cracking and ageing resistant steels 16Mo3, 20MnMoNi4-5, 15NiCuMoNb5, S235JR-S355JR, S235JO-S355JO, S450JO, S235J2-S355J2, S275N-S460N, S275M-S460M, P235GH-P355GH, P355N, P285NH-P460NH, P195TR1-P265TR1, P195TR2-P265TR2, P195GH-P265GH, L245NB-L415NB, L450QB, L245MB-L450MB, GE200-GE300 ASTM A 29 Gr. 1013, 1016; A 106 Gr. C; A, B; A 182 Gr. F1; A 234 Gr. WP1; A 283 Gr. B, C, D; A 335 Gr. P1; A 501 Gr. B; A 533 Gr. B, C; A 510 Gr. 1013; A 512 Gr. 1021, 1026; A 513 Gr. 1021, 1026; A 516 Gr. 70; A 633 Gr. C; A 678 Gr. B; A 709 Gr. 36, 50; A 711 Gr. 1013; API 5 L B, X42, X52, X60, X65</p>	

Typical analysis of all-weld metal (wt.-%)				
	C	Si	Mn	Mo
wt.-%	0.08	0.35	0.8	0.45

Mechanical properties of all-weld metal					
Condition	Yield strength	Tensile strength	Elongation	Impact work	
	R _{p0,2}	R _m	A (L ₀ =5d ₀)	ISO-V KV J	
	MPa	MPa	%	+20°C	-50°C
u	510 (≥ 460)	590 (530 – 680)	24 (≥ 22)	170	60 (≥ 47)
a	520 (≥ 460)	600 (530 – 680)	25 (≥ 22)	160 (≥ 47)	
u	untreated, as welded				
a	annealed 620°C/2h / furnace down to 300°C / air				

Operating data							
	Polarity:	Redrying if necessary:	Electrode identification:	ø (mm)	L mm	Amps A	
	DC (+)				2.5	250/350	80 – 110
			300 – 350°C, min. 2 h	FOX DMO Kb	3.2	350	100 – 140
				7018-A1 E Mo B	4.0	350/450	130 – 180
					5.0	450	190 – 230

Preheating, interpass temperature, and post weld heat treatment as required by the base metal.

Approvals	
TÜV (0019.), KTA 1408.1 (8053.), DB (10.014.14), ABS (E 7018-A1), DNV (NV 0,3Mo), GL (15 Mo 3), RS (-), SEPROZ, NAKS, CE	