

Classifications

EN ISO 2560-A	EN ISO 2560-B	AWS A5.5M	AWS A5.5 / SFA-5.5
E 50 4 Z1NiMo B 4 2 H5	E 6218-GA	E6218-G	E9018-G

Characteristics and typical fields of application

Basic coated NiMo alloyed electrode with a weld metal of special metallurgical purity for nuclear reactor construction. Very low hydrogen content < 5 ml/100 g; NDT-tested. Used preferably for the welding of steels in the construction of nuclear reactors, boiler and pressure vessels; for fine grained structural steels up to S500Q.

Base materials

20MnMoNi55, 22NiMoCr37, ASTM A 508 Cl 2, ASTM A 533 Cl 1 Gr. B, 15NiCuMoNb5 S 1 (WB 36), GS-18NiMoCr37, 11NiMoV53, 12MnNiMo55, S420N - S500Q, P460NH; ASTM A302 Gr. A-D; A517 Gr. A, B, C, E, F, H, J, K, M, P; A225 Gr. C; A572 Gr. 65

Typical analysis

	C	Si	Mn	Ni	Mo	S	P	Cu
wt.-%	0.06	0.3	1.4	0.95	0.5	≤ 0.01	≤ 0.01	≤ 0.08

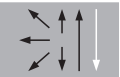
Mechanical properties of all-weld metal - typical values (min. values)

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	-40°C
u	540 (≥ 530)	620	20 (≥ 18)	140	60 (≥ 47)
s	500	590	21	140	47

u untreated, as welded

s stress released 620°C / 1 h

Operating data

	Polarity	DC+ / AC	Dimension mm	Current A	
	Electrode identification	FOX EV 64 / E 50 4 Z1NiMo B / E9018-G		2.5 × 350	70 – 110
				3.2 × 350	100 – 150
	Redrying		300-350°C/2h	4.0 × 350	140 – 200
				5.0 × 450	170 – 250

Approvals

TÜV (00512), KTA (08100), CE