

Classifications

EN ISO 18275-A	AWS A5.5 / SFA-5.5	AWS A5.5M
E 55 5 2NiMo B 4 2 H5	E10018M	E6918M

Characteristics and typical fields of application

Basic covered NiMo alloyed electrode. For cryogenic, high strength, fine grained structural steels. H₂-content < 5 ml/100 g (HD); not sensitive to cold cracking. For use in structural steel and tank construction; naval shipbuilding.

Base materials

High strength, quenched and tempered fine grained structural steels such as S550QL, HY 80, 12 MnNiMo 55, 11 NiMoV 53, ASTM A225 Gr. C, A514 and A517 Gr. A, B, C, E, F, H, J, K, M, P, A656, A678 Gr. C

Typical analysis

	C	Si	Mn	Ni	Mo
wt.-%	0.06	0.25	1.40	1.80	0.45


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	-50 °C
u	580 (≥ 550)	690 (610 - 780)	20 (≥ 18)	130	≥ 47
s	570	650	21	130	≥ 47

u untreated, as welded

s stress relieved at 550°C / 2h

Operating data

	Polarity	DC +	Dimension mm	Current A	
	Electrode identification	FOX EV 73 / E 55 5 2NiMo B / MIL10018-M1		2.5 × 350	70 – 100
				3.2 × 350	90 – 140
	Redrying	300-350°C/2h		4.0 × 450	140 – 190

Approvals

TÜV (00547), DB (10.014.57), DNV, WIWEB (HY80 acc. AWS A5.5), CE