

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} MPa	Tensile strength R _m MPa	Elongation A (L ₀ =5d ₀) %	Impact energy ISO-V KV J 20 °C	Impact energy ISO-V KV J -50 °C
u	580 (\geq 550)	690 (610 - 780)	20 (\geq 18)	130	\geq 47
s	570	650	21	130	\geq 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
Redrying	300-350°C/2h	3.2 × 350	90 – 140
		4.0 × 450	140 – 190

Approvals

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