

Classifications

EN ISO 18275-A	AWS A5.5	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 (Welmonil 35), 11 NiMoV 53 (Welmonil 43); ASTM A225 Gr. C, A514 and A517 Gr. A, B, C, E, F, H, J, K, M, P, A656, A678 Gr. C

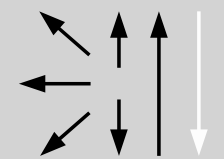
Typical analysis of all-weld metal (wt.-%)

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

Mechanical properties of all-weld metal

Heat-treatment	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	-50 °C
aw	580	690	20	130	47
sr	570	650	21	130	47

Operating data

	Polarity:	Redrying:	Ø (mm)	L mm	Amps A
	DC (+)	300 – 350 °C / 2 h (572 – 662 °F)	2.5	350	70 – 100
			3.2	350	90 – 140
			4.0	450	140 – 190
			5.0	450	180 – 250

Approvals

TÜV (00547), DB (10.132.34) GL, WWEB (für HY 80 nach AWS A5.5), CE