

Classifications

EN ISO 18276-A	EN ISO 18276-B	AWS A5.36	AWS A5.36M
T55 6 1NiMo M M21 1 H5	T625T15-1M21A-N2M2-UH5	E91T15-M21A8-K1-H4	E621T15-M21A6-K1-H4

Characteristics and typical fields of application

Seamless, Nickel-Molybdenum alloyed, metalcored wire for single- or multilayer welding of low alloyed and high strength steels with Ar-CO₂ shielding gas.

Features include: high yield, good weldability, excellent bead appearance, low spatter losses and exceptional mechanical properties at low temperatures. This wire is especially suitable for root pass welding in off-shore and pipeline applications.

Base materials

S420N-S460N, S420M-S460M, S460Q-S555Q, S460QL-S550QL, P460N, P460NH, L415NB, L415MB-L555MB, L415QB-L555QB, PAS 460-550, alform 500 M, 550 M, aldur 500 Q, 500 QL, aldur 550 Q, 550 QL, 20MnMoNi4-5, 15NiCuMoNb5-6-4

ASTM A 572 Gr. 65; A 633 Gr. E; A 738 Gr. A; A 852; API 5 L X60, X65, X70, X80, X60Q, X65Q, X70Q, X80Q

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

	Gas	C	Si	Mn	Ni	Mo
wt-%	M21	0.06	0.45	1.3	1.00	0.50

Mechanical properties of all-weld metal

Condition	Yield strength R _e	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact work ISO-V KV J
	MPa	MPa	%	-60°C
u	690 (≥550)	750 (640–820)	22 (≥18)	60 (≥47)

u untreated, as welded – shielding gas M21

Operating data

Polarity: DC (+)	Shielding gas: (EN ISO 14175) M21	Ø (mm)
		1.0
		1.2
		1.4
		1.6

Welding with standard GMAW power source possible

Approvals

CE