

Classifications

AWS A5.29 / SFA-5.29	AWS A5.36 / SFA-5.36	EN ISO 18276-A	EN ISO 18276-B
E91T1-K2M-JH4	E91T1-M21A6-K2-H4	T 55 5 Mn1.5Ni P M21 1 H5	T 62 5 T1-1M21A-N3M1-UH5

Characteristics and typical fields of application

Seamless rutile, Nickel-manganese alloyed, flux-cored wire for single or multipass welding of carbon, carbon-manganese, and high strength steels with Ar-CO₂ shielding gas. Main features: excellent weldability in all positions, excellent bead appearance, very low spatter, fast freezing and easy to remove slag. The exceptional mechanical properties of this wire even at low temperatures combined with low diffusible hydrogen content make it particularly suited for pipeline applications.

Base materials

API 5L: X70, X80
EN 3183: L485, L555

Typical analysis

	Gas	C	Si	Mn	Ni
wt.-%	M21	0.06	0.40	1.45	1.45

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

Condition	Yield strength R _e	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact energy (ft.lbf)	
	ksi	ksi	%	-40°F	-60°F
u	91 (80)	102 (93–110)	22 (18)	52	44 (35)

u untreated, as welded - shielding gas M21 (Ar + 15 – 25 % CO₂)

Operating data

Dimension

0.045"

Welding with standard GMAW power sources

Approvals

TÜV (19765), CE