

Classifications

EN ISO 17632-A	AWS A5.36
T 50 6 1Ni P M 1 H5	E81T1-M21A8-Ni1-H4

Characteristics and field of use

Rutile flux cored wire with fast freezing slag for welding low-temperature steels. Outstanding welding properties in all positions. Exceptional mechanical strength and good slag detachability, low spatter losses, smooth, finely rippled seam surface, notch-free weld toes.

Out-of-position welding can be carried out with increased welding current, and therefore very economically with increased deposition rate. For high-quality welding in shipbuilding, for offshore applications and steel structures with high strength requirements, as well as for low-temperature applications down to -60 °C.

Base materials

General structural steels, pipe and boiler steels, cryogenic fine-grained structural steels and special qualities. S355JR, S355J0, S355J2, S450J0, S355N-S460N, S355NL-S460NL, S355M-S460M, S355ML-S460ML, S460Q, S500Q, S460QL, S500QL, S460QL1, S500QL1, P355GH, P355NH, P420NH, P460NH, P355NP460N, P355NH-P460NH, P355NL1-P460NL1, P355NL2-P460NL2, L245NB-L415NB, L245MBL485MB, L360QB-L485QB, aldur 500Q, aldur 500QL, aldur 500QL1
ASTM A 350 Gr. LF2; A 516 Gr. 65, 70; A 572 Gr. 42, 50, 60, 65; A 573 Gr. 70; A 588 Gr. B, C, K; A 633 Gr. A, C, D, E; A 662 Gr. B, C; A 678 Gr. B; A 707 Gr. L2, L3; A 841 Gr. A, B, C; API 5 L X42, X52, X60, X65, X70, X52Q, X60Q, X65Q, X70Q

Typical analysis in %

C	Si	Mn	Ni
0,06	0,45	1,3	0,9

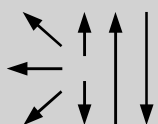
Mechanical properties of the weld metal

Welded condition	Yield strength R _{P0,2}	Tensile strength R _m	Elongation A	Impact strength K _v			
	MPa	MPa	%	J [RT]	- 20 °C	- 40 °C	- 60 °C
untreated	530	570	27	140	120	100	60

Welding instruction

Welding with conventional MAG devices. Adapt the preheating and interpass temperatures to the base material.

Welding positions



Current type DC (+)
Shielding gas: Argon + 15-25% CO₂

Recommended welding parameters

Wire diameter [mm]	Amperage [A]	Voltage [V]	Wire feed [m/min]
1,2	150-300	18-35	5-15