

Classifications

EN ISO 17632-A	EN ISO 17632-B	AWS A5.36	AWS A5.36M
T46 6 1Ni B M21 3 H5	T556T5-0M21A-N2-UH5	E80T5-M21P8-Ni1-H4	E550T5-M21P6-Ni1-H4

Characteristics and typical fields of application

Seamless Ni-alloyed copper-coated basic flux cored wire for welding with Ar-CO₂ shielding gas. It is suitable for welding fine grain steels as well as joining of wear-resistant steels. The weld metal deposit has good properties like elongation, toughness and reliability against cracking, even with post weld heat treatment.

Base materials

S355JR, S355J0, S355J2, S450J0, S355N-S460N, S355NL-S460NL, S355M-S460M, S355ML-S460ML, S460Q, S500Q, S460QL, S500QL, S460QL1, S500QL1, P355GH, P355NH, P420NH, P460NH, P355N-P460N, P355NH-P460NH, P355NL1-P460NL1, P355NL2-P460NL2, L245NB-L415NB, L245MB-L485MB, 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 of all-weld metal (wt.-%)

	Gas	C	Si	Mn	Ni
wt-%	M21	0.06	0.45	1.35	0.95

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	%	-40°C	-60°C
u	500 (≥470)	600 (550–680)	24 (≥20)	100	80 (≥47)
s	480 (≥470)	570 (550–680)	26 (≥20)		≥47

u untreated, as welded – shielding gas M21
s stress relieved 620°C / 60min – shielding gas M21

Operating data

	Polarity:	Shielding gases:	ø (mm)
	DC (+)	(EN ISO 14175) M21	1.2
			1.4
		1.6	

Welding with standard GMAW power source possible

Approvals

CE