

Classifications

EN ISO 17632-A	EN ISO 17632-B	AWS A5.29 / SFA-5.29
T 46 6 1Ni B M21 3 H5	T 55 6 T5-0M21A-N2-UH5	E80T5-Ni1M-JH4

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

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

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 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)		60 (≥ 47)

u - untreated, as welded – shielding gas M21

s - stress relieved 620°C / 60min – shielding gas M21

Operating data

	Polarity	DC+	Dimension mm
	Shielding gas (EN ISO 14175)	M21, C1	1.2
			1.6

Welding with conventional or pulsed power sources using DC+

Approvals

CE