

## Classifications

EN ISO 17632-A	EN ISO 17632-B	AWS A5.28 / SFA-5.28	AWS A5.36 / SFA-5.36
T 46 6 3Ni M M21 1 H5	T 55 6 T15-1M21A-N7-H5	E80C-Ni3 H4	E81T15-M21A8-Ni3-H4

## Characteristics and typical fields of application

Seamless metalcored wire, for the welding of steels Nickel alloyed up to 3.5% with Ar-CO<sub>2</sub> shielding gas. Main features: excellent mechanical properties at low temperature (-80°C), excellent efficiency, good bead appearance and no spatter. Wire with very low presence of diffusible hydrogen (<3ml/100g weld metal). This wire can be used for applications where PWHT and normalized heat treatment conditions are required.

## 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, 11MnNi5-3; 13MnNi6-3; 15NiMn6; 10Ni14; 12Ni14

## Typical analysis

	Gas	C	Si	Mn	Ni
wt.-%	M21	0.04	0.3	1.0	3.0

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

Condition	Yield strength	Yield strength	Tensile strength R <sub>m</sub>	Elongation A	Impact energy ISO-V KV J		
	R <sub>p0.2</sub>	R <sub>e</sub>	MPa	(L <sub>0</sub> =5d <sub>0</sub> )	-50°C	-60°C	-80°C
	Mpa	MPa	MPa	%			
u	480 (≥470)	530 (≥ 500)	560 (≥550 - 680)	27 (≥20)	150	90 (≥ 47)	80
s	440	500	520	28		145	100
n	420 (≥355)	360	490 (≥470 - 630)	30 (≥22)	140 (≥ 47)	130	

u untreated, as welded – shielding gas M21

s stress relieved 620°C / 2h – shielding gas M21

n normalized 920°C / 4h – shielding gas M21

## Operating data

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

Welding with standard GMAW-facilities possible.

## Approvals

CE