

## Classifications

EN ISO 18276-A	EN ISO 18276-B
T69 6 Mn2NiCrMo M M 1 H5	T766T15-1MA-N4C1M2-UH5
AWS A5.36	AWS A5.36M
E110T15-M21A8-K4-H4	E760T15-M21A6-K4-H4

## Characteristics and typical fields of application

Seamless, Nickel-Chromium-Molybdenum alloyed, metal cored wire for single- or multilayer welding of low alloyed and high strength steels with Ar-CO<sub>2</sub> shielding gas. Features include: high yield, good weldability, excellent bead appearance, low spatter losses and exceptional mechanical properties at low temperatures (-60°C) and also after post weld heat treatment. This wire is especially suitable for crane constructions.

## Base materials

S550Q-S690Q, S550QL-S690QL, P550Q-P690Q, P550QL-P690QL alform 550 M-700 M  
ASTM A 514 Gr. F, H, Q; A 709 Gr. 100 Type B, E, F, H, Q, HPS 100W

## Typical analysis of all-weld metal (wt.-%)

	Gas	C	Si	Mn	Cr	Ni	Mo
wt-%	M21	0.07	0.40	1.40	0.50	2.20	0.40

## Mechanical properties of all-weld metal

Condition	Yield strength R <sub>p0.2</sub>	Tensile strength R <sub>m</sub>	Elongation A (L <sub>0</sub> =5d <sub>0</sub> )	Impact work ISO-V KV J	
	MPa	MPa	%	-40°C	-60°C
u	<b>720</b> (≥690)	<b>810</b> (770–900)	<b>17</b> (≥17)	<b>80</b>	<b>70</b> (≥47)
s	<b>700</b> (≥690)	<b>790</b> (770–900)	<b>19</b> (≥17)	<b>70</b>	<b>60</b> (≥47)

u untreated, as welded – shielding gas M21  
s stress relieved 580°C/2h – shielding gas M21

## Operating data

	<b>Polarity:</b> DC ( + )	<b>Shielding gas:</b> (EN ISO 14175) M21	ø (mm)
			1.0
			1.2
			1.4
			1.6

Welding with standard GMAW-facilities possible

## Approvals

TÜV (12581), DB (42.014.50), DNV (IV Y69MS (H5)), ABS(4Y69SH5), LR, CE