

# VENVU 15 MC

Metal cored wire – seamless, high strength



## Classifications

EN ISO 18276-A	EN ISO 18276-B	AWS A5.36	AWS A5.36M
T69 6 Mn2NiCrMo M M 1 H5	T766T15-1MA-N4C1M2-UH5	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 thermo-mechanical treated steel grades, low alloyed fine grain- and high strength steels to be used with Ar-CO<sub>2</sub> shielding gas. This metal core wire shows high efficiency, excellent bead appearance, very low spatter losses and low slag formation. The low diffusible hydrogen content of the pure weld metal (1-3ml/100g) and the outstanding mechanical properties at low temperatures (-60°C) also after post weld heat treatment make this wire perfect suitable for steel constructions, offshore applications and crane fabrication.

## Base materials

S550Q-S690Q, S550QL-S690QL, P550Q-P690Q, P550QL-P690QL 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.-%)

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

## Mechanical properties of all-weld metal – typical values (minimum values)

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	720 (≥ 690)	810 (770 - 900)	17 (≥ 17)	80	70 (≥ 47)
s	700 (≥ 690)	790 (770 - 900)	19 (≥ 17)	70	60 (≥ 47)

u: untreated, as welded – shielding gas M21

S: stress relieved 580°C/2h – shielding gas M21

## Operating data

	Ø (mm)	Shielding gas:	Polarity:
	1.0	(EN ISO 14175) M21; M20	DC (+)
	1.2		
	1.4		
	1.6		

Welding with standard GMAW power source possible

## Approvals

TÜV • DB • DNV • ABS • LR • CWB • CE