

Classifications

EN ISO 18276-A	EN ISO 18276-B	AWS A5.28	AWS A5.28M
T 69 6 Mn2NiCrMo M M 1 H5	T766T15-1MA-N4C1M2-H5	E110C-K4H4	E76C-K4H4

Characteristics and typical fields of application

Union MV NiMoCr is a medium alloyed seamless copper coated cored wire with metal powder filling for GMAW with mixed gas M21 acc. to EN ISO 14175. The wire is suitable for the welding in all positions of quenched and tempered or thermomechanical rolled fine grain structural steels as well as joining of wear-resistant steels. It is furthermore characterized by a porosity free weld metal, soft and stable arc and a secure penetration. It is excellent suitable for manual and mechanized welding of single and multilayers.

The weld metal deposit offers excellent toughness properties at low temperatures.

Base materials

Fine grain steels S620Q - S690QL1 (StE620V - EStE690V)
(N-A-XTRA 63, N-A-XTRA 70), S700MC (PAS 700; Weldox 700)
wear-resistant steels 20MnCr6-5, 21MnCr6-5, 20MnCr4-3, 28MnCr4-3

Mechanical properties of all-weld metal

	C	Si	Mn	P	S	Cr	Mo	Ni	Gas
wt-%	0.07	0.55	1.60	≤ 0.015	≤ 0.015	0.30	0.50	2.0	M21

Mechanical properties of all-weld metal

Heat-treatment	Shielding gas	Yield strength R _{p0.2}	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact work ISO-V KV J			
					+20 °C	-20 °C	-40 °C	-60 °C
aw	M21	MPa 690	MPa 770	% 18	90	70	60	47

Operating data

	Polarity: DC (+)	Shielding gas: (EN ISO 14175) M21	∅ (mm) 1.2	Spool B300	Amps A 120 – 350	Voltage V 17 – 32
	Consumption: 15 – 20 l/min					

Approvals

ABS, DNV, LR