

Classifications

EN ISO 17632-A	EN ISO 17632-B	AWS A5.18	AWS A5.18M
T 46 6 M M 1 H5 T 42 3 M C 1 H5	T557T15-1MA-H5 T494T15-1CA-H5	E70C-6MH4 E70C-6CH4	E48C-6MH4 E48C-6CH4

Eigenschaften und Anwendungsgebiete

Union MV 70 is a high-efficiency seamless copper coated wire, with metal powder filling for all position welding with mixed gas M21, M31 and C1 according to EN ISO 14175.

Further characteristics are the stable arc, a low spatter affinity, a smooth drop transition, a secure penetration, a high deposition rate in spray arc mode, a high output of 98 % approx, a good bead appearance and a secure x-ray and porosity free weld metal. The wire is suitable for manual and mechanized single- and multilayer welding and filled welds in downward position-

Grundwerkstoffe

S185, S235JR, S275JR, S355J2G3, E295, P235GH, P265GH, P295GH, P355GH (HI, HII, 17 Mn 4, 19 Mn 6), P275N, P355N, P355NL2, S275N, S275NL, S355N, S355NL, L210, L240, L290, L360, L290NB, L360MB, L415MB, X42 – X60 / (API-5LX), GS-38 bis GS-52; shipbuilding steel grade A – E, AH32 – EH36, A40 – F40

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

	C	Si	Mn	P	S	Gas
wt-%	0.05	0.6	1.5	≤ 0.02	≤ 0.02	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	±0 °C	-20 °C	-60 °C
		MPa	MPa	%				
aw	M21	460	560	24	140	110	80	47

Operating data

	Polarity: DC (+)	Shielding gas: (EN ISO 14175) M21, M31, C1 Consumption: 12 – 20 l/min	ø (mm)	Spool	Amps A	Voltage V
			1.0	B300	90 – 280	16 – 30
			1.2	B300	120 – 350	17 – 32
			1.4	B300	150 – 400	18 – 33
			1.6	B300	200 – 450	20 – 34

Approvals

TÜV (11076), DB (42.132.33), ABS, BV, DNV, GL, LR, CE