Union MV CrMo

Metal cored wire, low-alloyed

Classifications

EN ISO 17634-A	EN ISO 17634-B	AWS A5.28
T CrMo 1 M M 2 H5	T55T15-1M-1CM-H5	E80C-B2H4

Characteristics and typical fields of application

Union MV CrMo is a chromium-molybdenum alloyed wire with metal powder filling. It is suited for welding of CrMo alloyed boiler, pressure vessel and pipe steels with high creep strength and heat resistance up to 500 °C (932 °F). It is applicable in position PA, PB, PC, PF with mixed gas M21 according to EN ISO 14175. It provides very low oxide build-up, stable and smooth arc, smooth droplet transfer and safe penetration. It is excellent suited for manual and mechanized single and multilayer welding.

Base materials

Pressure vessel and pipe steels 13 CrMo 4 5, 15 CrMo 3,
cast steel GS-17 CrMo 55, GS-22 CrMo 5, GS-22 CrMoV 32, GS-22 CrMo 54

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

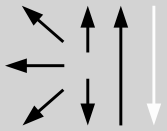
	C	Si	Mn	P	S	Cr	Mo	Gas
wt-%	0.07	0.30	0.9	≤ 0.010	≤ 0.010	1.1	0.5	M21

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		
		MPa	MPa	%	+20 °C	–10 °C	–20 °C
a	M21	470	560	22	120	60	47

a = annealed, 680 °C (1256 °F) / 1 h

Operating data



Polarity:	Shielding gas:	ø (mm)	Spool	Amps A	Voltage V
DC (+)	(EN ISO 14175) M21 Consumption: 15 – 20 l/min	1.2	B300	120 – 300	17 – 32

Approvals

TÜV (12019), CE