

Classifications

EN ISO 17633-A	EN ISO 17633-B	AWS A5.9	AWS A5.22
T 19 12 3 L M M12 2	TS316L-M M12 1	EC316L	EC316L

Characteristics and typical fields of application

Böhler EAS 4 M-MC is an austenitic CrNiMo-metal cored wire for GMAW applicable for same or similar alloyed, stabilized or non-stabilized, corrosion resistant CrNiMo-steels. Suitable for service temperatures from -196 °C to $+400\text{ °C}$. This product achieves high productivity and is easy to operate. It provides excellent welding characteristics, smooth almost spatter free weld finish. The wider arc, in comparison to solid wire, will reduce the risk of lack of fusion and is less sensitive against misalignment of edges and different gap widths.

Base materials

1.4401 X5CrNiMo17-12-2, 1.4404 X2CrNiMo17-12-2, 1.4435 X2CrNiMo18-14-3,
1.4436 X3CrNiMo17-13-3, 1.4571 X6CrNiMoTi17-12-2, 1.4580 X6CrNiMoNb17-12-2,
1.4583 X10CrNiMoNb18-12, 1.4409 GX2CrNiMo 19-11-2
UNS S31603, S31653; AISI 316L, 316Ti, 316Cb

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

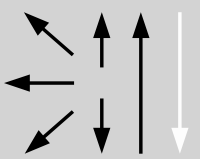
	C	Si	Mn	Cr	Ni	Mo
wt.-%	≤ 0.03	0.6	1.4	18.8	12.2	2.7

Mechanical properties of all-weld metal

Condition	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation ($L_0=5d_0$)	Impact work ISO-V KV J	
	MPa	MPa	%	+20 °C	-196 °C
u	410 (≥ 320)	560 (≥ 510)	34 (≥ 30)	75	≥ 32

u untreated, as welded – shielding gas Argon + 2.5 % CO₂

Operating data

	Polarity:	Shielding gas:	∅ (mm)	Amps A	Voltage V
	DC (+)	Argon + 2.5 % CO ₂	1.2 1.6	60 – 280 100 – 370	13 – 30 13 – 32

Welding with conventional or pulsed power sources (preferably pushing technique torch position, angle appr. 80°). Recommended stick out 15 – 20 mm and length of arc 3 – 5 mm.

Positional weldability of metal cored wires is similar to solid wires (puls arc welding is recommended).

Approvals

TÜV (09988.), CE