böhlerwelding
by voestalpine

BÖHLER FOX EAS 4 M-A

Stick electrode, high-alloyed, stainless

Classifications

EN ISO 3581-A	AWS A5.4 / SFA-5.4
E 19 12 3 L R 3 2	E316L-17

Characteristics and typical fields of application

Rutile coated core wire alloyed stainless steel electrode. Preferably used for 1.4435 / 316L steel grades, suitable in all industries using similar or high carbon steels or ferritic 13 % Cr steels.

It can be used on AC or DC. High current capacity, minimum spatter formation, self-releasing slag, smooth and clean weld profi le. The fully alloyed core wire ensures the most reliable corrosion resistance.

Resistant to intergranular corrosion up to +400 °C.

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

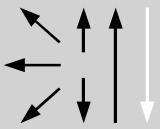
	C	Si	Mn	Cr	Ni	Mo
wt.-%	0.03	0.80	0.80	18.80	11.50	2.70

Mechanical properties of all-weld metal – typical values (min. values)

Condition	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	–120 °C
u	**450** (≥ 320)	**580** (≥ 510)	**36** (≥ 25)	**60**	≥ 32

u untreated, as welded

Operating data



Polarity:	Redrying if necessary:	Electrode identification:	ø mm	L mm	Amps A
DC (+)	120 – 200 °C, min. 2 h	FOX EAS 4	1.5	250	25 – 40
AC		M-A 316L-17	2.0	250/300	40 – 60
		E 19 12 3 L R	2.5	250/300/350	50 – 90
			3.2	300/350	80 – 120
			4.0	350/450	110 – 160
			5.0	350/450	140 – 200

Approvals

TÜV (00773.), DB (30.014.14), ABS, DNV GL, LR, Statoil, CWB, CE, NAKS (Ø 3,2 mm; Ø 4,0 mm)