BÖHLER FOX EAS 4 M (LF)

Covered electrode, high-alloyed, austenitic stainless, cryogenic

Classifications

EN ISO 3581-A	AWS A5.4 / SFA-5.4
E Z 19 12 3 L B 2 2	E316L-15

Characteristics and typical fields of application

Basic coated, core wire alloyed electrode of E 19 12 3 L B / E316L-15 type. Preferably used for 1.4404 and 1.4435 / 316L austenitic stainless steel grades. Due to the specific alloying concept and a controlled ferrite content of 3 – 8 FN (stricter on demand), the weld metal provides excellent impact toughness down to –196ºC along with lateral expansion values of > 0.38 mm, which makes it especially suitable for LNG applications. Good gap bridging ability, very good root pass and excellent X-ray safety. Easy weld pool and slag control. Easy slag removal even in narrow preparations result in clean bead surfaces with minimum post-weld cleaning. Max. service temperature 400ºC.

Base materials

1.4401 X5CrNiMo17-12-2, 1.4404 X2CrNiMo17-12-2, 1.4409 GX2CrNiMo19-11-2, 1.4429 X2CrNiMoN17-12-3, 1.4432 X2CrNiMo17-12-3, 1.4435 X2CrNiMo18-14-3, 1.4436 X3CrNiMo17-12-3, 1.4571 X6CrNiMoTi17-12-2, 1.4580 X6CrNiMoNb17-12-2, 1.4583 X10CrNiMoNb18-12
UNS S31600, S31603, S31635, S31640, S31653
AISI 316L, 316Ti, 316Cb

Typical analysis

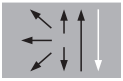
	C	Si	Mn	Cr	Ni	Mo
wt.-%	0.03	0.4	1.2	18.5	12.8	2.4

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 energy ISO-V KV J		Lateral expansion mm
	MPa	MPa	%	20°C	–196°C	–196°C
u	440 (≥ 320)	580 (≥ 510)	44 (≥ 25)	100	40 (≥ 32)	≥ 0.38

u untreated, as-welded

Operating data



Polarity	DC+
Electrode identification	FOX EAS 4 M (LF) 316L-15

Dimension mm	Current A
2.5 × 300	50 – 80
3.2 × 350	80 – 110
4.0 × 350	110 – 140

Suggested heat input is max. 1.5 kJ/mm and interpass temperature max. 150ºC.

Approvals

TÜV (20130.), CE