BÖHLER FOX ASN 5

Basic stick electrode, high-alloyed, high corrosion resistant

Classifications

EN ISO 3581-A	AWS A5.4
E 18 16 5 N L B 2 2	E317L-15 (mod.)

Characteristics and typical fields of application

Basic (with rutile contents) electrode, core wire alloyed, for corrosion resistant CrNi steels with increased Mo-contents like 1.4439 / 317L. Suited for difficult corrosion conditions encountered e.g. in the chemical industry, flue gas de-sulphurisation plants, sea water desalinisation plants and particularly in the paper, pulp and textile industries.

It is characterised by an increased Mo content (4.5 %) to compensate for segregation in high molybdenum alloyed weld metals to meet equivalent corrosion properties as the relevant base metals with 3 – 4 % Mo guarantee.

The weld metal features excellent chemical resistance to stress corrosion cracking as well as high pitting resistance. Intergranular corrosion resistance at operating temperatures up to +300 °C. Excellent cryogenic toughness down to –269 °C. The electrode provides easy slag removal with smooth and clean bead surfaces as well as good positional weldability.

Base materials

1.4436 X3CrNiMo17-13-3, 1.4439 X2CrNiMoN17-13-5, 1.4429 X2CrNiMoN17-13-3, 1.4438 X2CrNiMo18-15-4, 1.4583 X10CrNiMoNb18-12

AISI 316Cb, 316L, 316LN, 317LN, 317L, UNS S31726

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

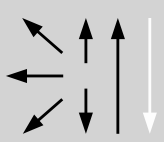
	C	Si	Mn	Cr	Ni	Mo	N		PRE_N	FN
wt-%	≤ 0.04	0.5	2.5	18.5	17.0	4.3	0.17		~ 36	≤ 0.5

Mechanical properties of all-weld metal

Condition	Yield strength R_e	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact work ISO-V KV J	
	MPa	MPa	%	+20 °C	–296 °C
u	**460** (≥ 300)	**660** (≥ 520)	**35** (≥ 30)	**100**	**42** (≥ 32)

u untreated, as welded

Operating data



Polarity:	Redrying if necessary:	Electrode identification:	ø (mm)	L mm	Amps A
DC (+)	-	FOX ASN 5 E 18 16 5 N L B	2.5	300	50 – 80
			3.2	350	80 – 110
			4.0	350	110 – 140

Approvals

TÜV (00016.), DNV (317), GL (4439), SEPROZ, CE