

## Classification

**AWS A5.4**

E317L-17

## Characteristics and typical fields of application

Rutile electrode, core wire alloyed, suited for corrosion resistant, CrNiMo(N)-steels. It satisfies the high demands of offshore fabricators, shipyards building chemical tankers as well as the chemical / petrochemical, pulp and paper industries. Suitable for service temperatures from -60 to +300°C. The weld metal exhibits resistance against pitting corrosion and intergranular corrosion resistance up to 300°C (ASTM A 262 / Practice E). Good operating characteristics on AC and DC, minimum spatter formation, self-releasing slag with smooth and clean bead surface. BÖHLER FOX E 317 L is recommended for wall thicknesses up to 30 mm.

## Base materials

CrNiMo-steels with higher Mo-content like grade AISI 317L or corrosion resistant claddings on mild steels

1.4435 X2CrNiMo18-14-3, 1.4429 X2CrNiMoN17-13-3, 1.4438 X2CrNiMoN 18-15-4  
AISI 316L, 316LN, 317L, 317LN

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

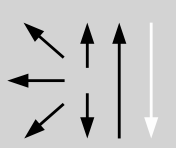
	C	Si	Mn	Cr	Ni	Mo	N		FN
wt.-%	0.03	0.8	0.9	19.0	13.0	3.6	+		4-12

## Mechanical properties of all-weld metal

Condition	Yield strength R <sub>p0,2</sub>	Tensile strength R <sub>m</sub>	Elongation A (L <sub>0</sub> =5d <sub>0</sub> )	Impact work ISO-V KV J		
	MPa	MPa	%	+20°C	-20°C	-60°C
u	<b>460</b>	<b>610</b> (≥520)	<b>35</b> (≥30)	<b>65</b>	<b>55</b>	<b>47</b> (≥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 E317	2.5	300/350	55 – 85
	AC		L 317L-17	3.2	350	80 – 115
				4.0	350	110 – 155

Preheating and post weld heat treatment is not required by the weld deposit. The interpass temperature should be kept below 150 °C.

## Approvals

BV (317L), LR (317L)