

# EI 316L

*Coated Electrode for Stainless Steels -*

Standards	
AWS/ASME SFA - 5.4	E316L-16
EN ISO 3581 - A	E 19 12 3 L R 32
TS EN ISO 3581 - A	E 19 12 3 L R 32
DIN M. No.	1.4430

Approvals & Certificates		
DNV TUV	CE CWB	TSE BV

Materials		
EN	Material	ASTM
X3CrNiMo17-13-3	1.4436	316
X5CrNiMo17-12-2	1.4401	316
GX2CrNiMo19-11-2	1.4409	
X2CrNiMo17-12-2	1.4404	316L
GX5CrNiMo19-11-2	1.4408	CF-8M
X2CrNiMo18-14-3	1.4435	316L
X6CrNiMoTi17-12-2	1.4571	316 Ti
X6CrNiMoNb17-12-2	1.4580	316 Cb
G-X5CrNiMoNb19-11-2	1.4581	
X10CrNiMo18-12	1.4583	318

## Properties and Applications

Rutile type stainless steel electrode for welding austenitic stainless Cr-Ni-Mo steels or cast steels, having an extra low carbon content. For operating temperatures of up to 400°C. Especially suitable for welding of stainless steel chemical tanks and pipes in chemical, textile, paint, paper industries. Possible to use equally well both with AC and DC. Easy arc striking and re-striking. Fine metal droplet transfer, good fusion of joint faces, finely rippled bead surface, easily removable slag.



## Typical Chemical Values of Weld Metal

Type of Analysis	C	Si	Mn	Cr	Ni	Mo
Weld Deposit	0.03	0.80	0.90	19.00	12.00	2.80

## Typical Mechanical Values of Weld Metal

Test Condition	Yield Strength (N/mm <sup>2</sup> )	Tensile Strength (N/mm <sup>2</sup> )	Elongation A5 (%)	Charpy V-Notch Properties (J)
As welded	460	560	40	20°C → 70

### Application Information

**Welding Positions**

PA PB PC PD PE PF

**Polarity:**

**Welding Parameters & Efficiency**

Diameter x Length (mm)	Current (A)	Weld Deposit(Kg)/1Kg Consumed Electrode	Number of Electrodes/1Kg Weld Deposit	Weld Metal Deposition Rate (Kg/h)	Efficiency(%)
2.00x300	40-60	0,55	159	0,45	106
3.25x350	80-120	0,56	50	1,44	106
2.50x300	50-80	0,56	100	0,99	106
4.00x350	100-165	0,57	33	1,97	106
5.00x350	140-220	0,57	24	2,57	106
2.50x250	50-80	0,54	126	0,95	105
3.25x300	80-120	0,54	60	1,36	106
2.00x250	50-70	0,55	175	0,45	106

### Packaging Information

Product Code	Diameter X Length (mm)	Pieces per Box (-)	Weight Of The Box (kg)	Boxes Per Package	Weight Of The Package	Packaging Type
13017CIEM2	2.00x250	152 kg	1.5	10	14.1	VAC Box
13017DBEM2	2.00x300	88 kg	1.0	12	0.0	Plastic Box
13017DDEM2	2.00x300	221 kg	2.5	3	8.0	Plastic Box
13017DJEM2	2.00x300	154 kg	1.8	10	18.1	VAC Box
13017FIEM2	2.50x250	100 kg	1.5	9	14.1	VAC Box
13017GBEM2	2.50x300	54 kg	1.0	12	0.0	Plastic Box
13017GDEM2	2.50x300	135 kg	2.5	3	8.0	Plastic Box
13017GJEM2	2.50x300	95 kg	1.8	10	18.2	VAC Box
13017MDEM2	3.25x300	82 kg	2.5	3	8.0	Plastic Box
13017MEEM2	3.25x300	132 kg	4.0	3	12.8	Plastic Box
13017MJEM2	3.25x300	58 kg	1.8	10	18.5	VAC Box
13017NBEM2	3.25x350	28 kg	1.0	12	0.0	Plastic Box
13017NDEM2	3.25x350	70 kg	2.5	3	8.1	Plastic Box
13017NEEM2	3.25x350	113 kg	4.0	3	12.8	Plastic Box
13017NJEM2	3.25x350	56 kg	2.0	10	20.7	VAC Box
13017QBEM2	4.00x350	19 kg	1.0	12	0.0	Plastic Box
13017QDEM2	4.00x350	46 kg	2.5	3	8.0	Plastic Box
13017QJEM2	4.00x350	37 kg	2.0	10	18.6	VAC Box
13017TEFM2	5.00x350	60 kg	5.0	3	15.8	Plastic Box
13017TJEM2	5.00x350	24 kg	2.0	10	0.0	VAC Box

### Storage & Re-Drying Information

It can be dried maximum 5 times.  
It has to be dried at 350°C for 2 hours.