

# 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

TUV CE TSE	CWB BV	GOST DNV-GL
------------------	-----------	----------------

### Materials

Width	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

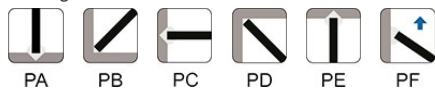
Type of Analysis	C	Si	Mn	CR	Ni	Mo
Weld Deposit	0.03	0.80	0.90	19.00	12.00	2.80

### 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



#### Polarity:



#### Welding Parameters & Efficiency

Diameter x Length (mm)	Current (A)
2.00x250	50-70
2.00x300	40-60
2.50x250	50-80
2.50x300	50-80
3.25x300	80-120

3.25x350	80-120
4.00x350	100-165
5.00x350	140-220

#### Packaging Information

Product Code	Diameter x Length (mm)	Quantity per Box	Box Gross Weight (kg)	Boxes per Outer Box	Outer Box Gross Weight (kg)	Packaging Type
13017CIEM2	2.00x250	152 pcs	1.54	9	14.10	VAC Box
13017D9EM1	2.00x300	15 pcs	0.21	30	6.40	Blister
13017DBEM2	2.00x300	88 pcs	1.11	10	0.00	
13017DDEM2	2.00x300	221 pcs	2.62	3	8.00	Plastic Box
13017DJEM2	2.00x300	154 pcs	1.79	9	16.30	VAC Box
13017FIEM2	2.50x250	100 pcs	1.54	9	14.10	VAC Box
13017G9EM1	2.50x300	10 pcs	0.22	30	6.90	Blister
13017GBEM2	2.50x300	54 pcs	1.11	10	0.00	
13017GDEM2	2.50x300	135 pcs	2.62	3	8.00	Plastic Box
13017GJEM2	2.50x300	95 pcs	1.79	9	16.30	VAC Box
13017M9EM1	3.25x300	10 pcs	0.34	30	10.50	Blister
13017MDEM2	3.25x300	82 pcs	2.62	3	8.00	Plastic Box
13017MEEM2	3.25x300	132 pcs	4.21	3	12.80	Plastic Box
13017MJEM2	3.25x300	58 pcs	1.79	9	16.30	VAC Box
13017N9EM1	3.25x350	15 pcs	0.57	30	17.10	Blister
13017NBEM2	3.25x350	28 pcs	1.11	10	11.30	
13017NDEM2	3.25x350	70 pcs	2.64	3	8.10	Plastic Box
13017NEEM2	3.25x350	113 pcs	4.21	3	12.80	Plastic Box
13017NJEM2	3.25x350	56 pcs	2.04	9	18.60	VAC Box
13017QBEM2	4.00x350	19 pcs	1.11	10	0.00	
13017QDEM2	4.00x350	46 pcs	2.62	3	8.00	Plastic Box
13017QJEM2	4.00x350	37 pcs	2.04	9	18.60	VAC Box
13017TEEM2	5.00x350	60 pcs	5.21	3	15.80	Plastic Box
13017TJEM2	5.00x350	24 pcs	2.04	10	0.00	VAC Box

#### Storage & Re-Drying Information

It can be dried maximum 5 times.  
 It should be stored in a dry room (relative humidity < 50%, room temperature > 20°C) on wooden pallets.  
 It has to be dried at 350°C for 2 hours.