

# EI 309L

Coated Electrode for Stainless Steels -

## Standards

AWS/ASME SFA - 5.4	E309L-16
EN ISO 3581 - A	E 23 12 L R 12
TS EN ISO 3581 - A	E 23 12 L R 12
DIN M. No.	1.4337

## Approvals & Certificates

TUV BV	CWB DB	CE DNV
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## Properties and Applications

Electrode for joining dissimilar steels (austenitic steels to ferritic steels) and for austenitic claddings on ferritic steels. Weld metal consists of austenite with approx. 15% delta-ferrite. Claddings on unalloyed and low alloy steels are already corrosion resistant in the first layer. Highest operating temperature for joints between dissimilar steels is 300°C. In case of higher temperatures use ENI 422 electrodes. Fine metal droplet transfer, good fusion of joint faces, finely rippled bead surface, easy slag removal, easy arc striking and restriking.



## Typical Chemical Values of Weld Metal

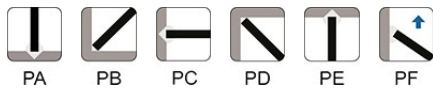
Type of Analysis	C	Si	Mn	Cr	Ni
Weld Deposit	0.03	0.90	1.10	23.00	12.50

## 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	450	570	40	20°C → 60

## Application Information

### Welding Positions



### 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(%)
3.25x350	80-120	0,58	47	1,51	110
2.50x300	50-80	0,58	94	1,05	111
3.25x300	80-120	0,59	57	1,54	111
5.00x350	140-220	0,6	20	2,98	111
2.50x250	50-80	0,56	117	0,99	111
4.00x350	100-165	0,59	30	2,07	112

## 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
13008GBEM2	2.50x300	53 kg	1.0	10	11.3	Plastic Box

13008GDEM2	2.50x300	137 kg	2.5	3	8.0	Plastic Box
13008GJEM2	2.50x300	96 kg	1.8	10	18.2	VAC Box
13008MBEM2	3.25x300	28 kg	1.0	10	11.3	Plastic Box
13008MDEM2	3.25x300	81 kg	2.5	3	8.0	Plastic Box
13008MJEM2	3.25x300	57 kg	1.8	10	18.2	VAC Box
13008NBEM2	3.25x350	28 kg	1.0	10	11.3	Plastic Box
13008NDEM2	3.25x350	67 kg	2.5	3	8.1	Plastic Box
13008NEEM2	3.25x350	134 kg	5.0	3	15.8	Plastic Box
13008NJEM2	3.25x350	54 kg	2.0	10	20.7	VAC Box
13008QBEM2	4.00x350	19 kg	1.0	10	11.3	Plastic Box
13008QEEM2	4.00x350	92 kg	5.0	3	15.8	Plastic Box
13008QJEM2	4.00x350	37 kg	2.0	10	20.7	VAC Box
13008TEFM2	5.00x350	58 kg	5.0	3	15.8	Plastic Box
13008TJEM2	5.00x350	23 kg	2.0	10	21.0	VAC Box

#### Storage & Re-Drying Information

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