

# EI 309MoL

Coated Electrode for Stainless Steels -

## Standards

AWS/ASME SFA - 5.4	E309LMo-16
EN ISO 3581 - A	E 23 12 2 L R 12
TS EN ISO 3581 - A	E 23 12 2 L R 12
DIN M. No.	1.4459

## Approvals & Certificates

TSE CE	TUV UKCA-DoP	UKCA CE-DoP
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## Properties and Applications

Rutile type stainless steel for joining dissimilar steels (austenitic steels to ferritic steels) and for austenitic claddings. 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, due to Mo (molybdenum) content. Higher operating temperature for joints between dissimilar steels is 300°C. In the cases of higher temperatures, use ENI 422 electrodes. Fine metal droplet transfer, good fusion of joint faces, finely ripped bead surface, easy slag removal, easy arc striking and restriking.



## Typical Chemical Values of Weld Metal

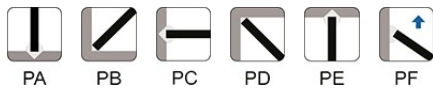
Type of Analysis	C	Si	Mn	Cr	Ni	Mo
Weld Deposit	0.02	0.90	0.95	23.50	12.50	2.50

## 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	600	720	30	20°C → 50

## 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(%)
4.00x350	100-165	0,57	34	1,75	117
2.50x300	50-80	0,56	89	0,93	118
3.25x300	80-120	0,57	46	1,48	118
2.00x300	40-60	0,56	102	0,74	118
3.25x350	80-120	0,57	46	1,48	118

## 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
13010DEM2	2.00x300	205	2.5	3	8.0	Plastic Box
13010JEM2	2.00x300	143	1.8	10	16.3	VAC Box

13010GDEM2	2.50x300	128	2.5	3	8.0	Plastic Box
13010GJEM2	2.50x300	89	1.8	10	18.1	VAC Box
13010MDEM2	3.25x300	77	2.5	3	8.0	Plastic Box
13010MJEM2	3.25x300	54	1.8	10	18.5	VAC Box
13010NDEM2	3.25x350	66	2.5	3	8.1	Plastic Box
13010NJEM2	3.25x350	53	2.0	10	21.0	VAC Box
13010QDEM2	4.00x350	44	2.5	3	8.1	VAC Box
13010QJEM2	4.00x350	35	2.0	10	22.0	VAC Box

#### Storage & Re-Drying Information

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