

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
EN 1600	E 23 12 2 L R 12
DIN M. No.	1.4459

Approvals & Certificates

TUV	GOST	TSE
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Properties and Applications

Rutile type stainless electrode 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	0.9	0.95	23.50	12.50	2.5

Typical Mechanical Values of Weld Metal

Test Condition	Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation A5 (%)	Charpy V-Notch Properties (J)
As welded	600	720	30	20°C → 50

Application Information

Welding Positions

PA PB PC PD PE PF

Polarity:

Welding Parameters & Efficiency

Diameter x Length (mm)	Current (A)
2.00x300	40-60
2.50x300	50-80
3.25x300	80-120
3.25x350	80-120
4.00x350	100-165

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
13010DDEM2	2.00x300	205 AD	2.62	3	8.00	Plastic Box
13010DJEM1	2.00x300	145 AD	1.82	9	16.60	VAC Box
13010DJEM2	2.00x300	143 AD	1.79	9	16.30	VAC Box
13010GDEM2	2.50x300	128 AD	2.62	3	8.00	Plastic Box
13010GJEM1	2.50x300	90 AD	1.82	9	16.60	VAC Box
13010GJEM2	2.50x300	89 AD	1.79	9	16.30	VAC Box
13010MDEM2	3.25x300	77 AD	2.62	3	8.00	Plastic Box

13010MJEM1	3.25x300	55 AD	1.85	9	16.80	VAC Box
13010MJEM2	3.25x300	54 AD	1.79	9	16.30	VAC Box
13010NDEM2	3.25x350	66 AD	2.64	3	8.10	Plastic Box
13010NJEM1	3.25x350	55 AD	2.15	9	19.60	VAC Box
13010NJEM2	3.25x350	53 AD	2.04	9	18.60	VAC Box
13010QJEM1	4.00x350	35 AD	2.05	9	18.70	VAC Box
13010QJEM2	4.00x350	35 AD	2.04	9	18.60	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.