

# EIS 309Mo

Coated Electrode for Stainless Steels -

### Standards

AWS/ASME SFA - 5.4	E309Mo-16
EN ISO 3581 - A	E Z 23 12 2 LR 53
TS EN ISO 3581 - A	E Z 23 12 2 LR 53
EN 1600	E Z 23 12 2 LR 53

### Approvals & Certificates

TSE

### Properties and Applications

Rutile type, high recovery (160%) stainless steel electrode for welding dissimilar steels ferritic to austenitic steels and depositing austenitic stainless claddings. The austenitic weld metal has a delta-ferrite content of approx. 15 %. Claddings on unalloyed steels are already corrosion resistant in the first layer, due to Mo (molybdenum) content. Highest operating temperature for dissimilar steel joints is +300°C. 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, easy slag removal. High current carrying capacity, since core wire is not made of stainless steel.

### Typical Chemical Values of Weld Metal

Type of Analysis	C	Si	Mn	Cr	Ni	Mo
Weld Deposit	0.07	0.80	1.60	22.50	12.50	2.40

### 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	440	580	33	20°C → 50

### Application Information

#### Welding Positions



PA PB

#### Polarity:



#### Welding Parameters & Efficiency

Diameter x Length (mm)	Current (A)
2.50x350	80-115
3.25x350	110-160
4.00x350	150-200
5.00x350	160-225

### 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
13012HDEM2	2.50x350	84 AD	2.64	3	8.10	Plastic Box
13012HJEM1	2.50x350	60 AD	1.86	9	16.90	VAC Box
13012HJEM2	2.50x350	67 AD	2.04	9	18.60	VAC Box
13012NJEM1	3.25x350	40 AD	2.17	9	19.80	VAC Box
13012NJEM2	3.25x350	38 AD	2.04	9	18.60	VAC Box
13012QJEM1	4.00x350	25 AD	1.99	9	18.20	VAC Box
13012QJEM2	4.00x350	26 AD	2.04	9	18.60	VAC Box
13012TJEM1	5.00x350	15 AD	1.87	9	17.00	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.