

EI 312

Coated Electrode for Stainless Steels -

Standards	
AWS/ASME SFA - 5.4	E312-16
EN ISO 3581 - A	E 29 9 R 12
TS EN ISO 3581 - A	E 29 9 R 12
DIN M. No.	1.4337

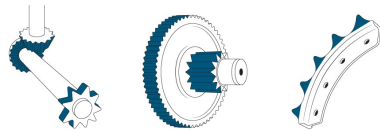
Approvals & Certificates		
TUV	CE	TSE

Properties and Applications

Rutile type stainless steel electrode for joining dissimilar steels and depositing claddings on ferritic steels. The ferritic-austenitic Cr-Ni weld metal contains approximately 50% of delta-ferrite and is non-scaling up to 1100°C. It features high resistance to cracking and is therefore suited for joining difficult to weld steels and depositing stress-relaxing buffer layers on crack sensitive base metals. Especially used in crack repair and build-up of tool and die steels, rebuilding of worn or cracked gear teeth, buffer layer on cutting blades. Suitable for welding galvanized steel plates. Possible to use equally well both AC and DC. Easy arc striking and re-striking. Fine metal droplet transfer, good fusion of joints faces, finely rippled bead surface, easy slag removal.



Typical Applications



Typical Chemical Values of Weld Metal

Type of Analysis	C	Si	Mn	Cr	Ni
Weld Deposit	0.10	0.60	1.00	29.50	9.00

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	660	760	20	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(%)
5.00x350	160-220	0,54	23	2,41	101
4.00x350	110-160	0,53	36	1,73	102
3.25x300	80-120	0,54	63	1,29	106
3.25x350	80-110	0,54	57	1,29	107
2.00x300	30-60	0,54	127	0,65	108
2.50x300	50-80	0,54	103	0,88	108

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
13015DJEM2	2.00x300	140 kg	1.8	10	18.5	VAC Box
13015GBEM2	2.50x300	56 kg	1.0	10	11.3	Plastic Box
13015GDEM2	2.50x300	140 kg	2.5	3	8.0	Plastic Box
13015GJEM2	2.50x300	98 kg	1.8	10	18.5	VAC Box
13015MBEM2	3.25x300	34 kg	1.0	10	11.3	Plastic Box
13015MDEM2	3.25x300	85 kg	2.5	3	8.0	Plastic Box
13015MJEM2	3.25x300	60 kg	1.8	10	18.2	VAC Box
13015NJEM2	3.25x350	59 kg	2.0	10	18.6	VAC Box
13015QBEM2	4.00x350	20 kg	1.0	10	11.3	Plastic Box
13015QDEM2	4.00x350	50 kg	2.5	3	8.0	Plastic Box
13015QJEM2	4.00x350	40 kg	2.0	10	18.6	VAC Box
13015TJEM2	5.00x350	25 kg	2.0	10	20.7	VAC Box

Storage & Re-Drying Information

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