EI 312RS

Coated Electrode for Stainless Steels -

Standards

AWS/ASME SFA - 5.4	E312-17
EN ISO 3581 - A	E 29 9 R 12
TS EN ISO 3580 - A	E 29 9 R 12
DIN M. No.	1.4337

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. Easy arc striking and re-striking. Fine metal droplet transfer, good fusion of joints faces, finely rippled flat and smooth bead surface, especially in fillet welds. Possible to use equally well both AC and DC. Easy slag removal of slag.

Typical Chemical Values of Weld Metal

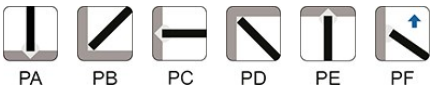
Type of Analysis	C	Si	Mn	Cr	Ni
Weld Deposit	0.10	0.60	1.00	29.50	9.00

Typical Mechanical Values of Weld Metal

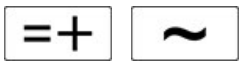
Test Condition	Yield Strength (N/mm²)	Tensile Strength (N/mm²)	Elongation A5 (%)	Charpy V-Notch Properties (J)
As welded	660	760	20	20°C → 50

Application Information

Welding Positions



Polarity:



Welding Parameters & Efficiency

Diameter x Length (mm)	Current (A)
5.00x350	160-220
3.25x300	80-120
3.25x350	80-120
4.00x350	110-160

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
13016MJEM2	3.25x300	58 kg	1.8	10	18.1	VAC Box
13016NJEM2	3.25x350	59 kg	2.0	10	0.0	VAC Box
13016QJEM2	4.00x350	39 kg	2.0	10	18.6	VAC Box

13016TJEM2	5.00x350	25 kg	2.0	10	18.6	VAC Box

Storage & Re-Drying Information

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