

# EI 310

Coated Electrode for Stainless Steels -

Standards	
AWS/ASME SFA - 5.4	E310-16
EN ISO 3581 - A	E 25 20 R 32
TS EN ISO 3581 - A	E 25 20 R 32
DIN M. No.	1.4842

Approvals & Certificates		
TUV	TSE	CE

Materials		
EN	Material	ASTM
GX40CrSi24	1.4745	
GX40CrNiSi27-4	1.4823	
GX25CrNiSi20-14	1.4832	
X12CrNi23-13	1.4833	309S
GX40CrNiSi25-12	1.4837	
GX15CrNi25-20	1.4840	
X15CrNiSi25-21	1.4841	314
	1.4842	310
X8CrNi 25-21	1.4845	310S

## Properties and Applications

Rutile type stainless steel electrode for welding heat resisting chromium and chromium-nickel steels as well as cast steels. Weld metal deposit is fully austenitic stainless steel, containing 25% chromium and 20% nickel. Suitable for welding heat treatment and industrial furnaces and equipments which are subjected to service temperatures up to 1200°C. Weld metal is non-scaling up to 1250°C. Especially it is resistant to hot crack. Exhibits high charpy impact energy at low temperatures. Weld metal is not corrosion resistant to sulphurous combustion gases. Possible to use equally well both with AC and DC.



## Typical Chemical Values of Weld Metal

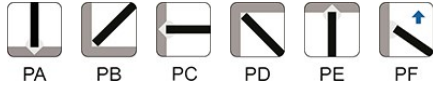
Type of Analysis	C	Si	Mn	Cr	Ni
Weld Deposit	0.10	0.60	1.65	25.50	21.00

## 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	600	30	20°C → 70

## Application Information

## Welding Positions



## Polarity:



## Welding Parameters &amp; 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(%)
3.25x300	80-120	0,54	62	1,39	106
5.00x350	160-220	0,56	23	2,09	106
4.00x350	110-160	0,56	33	1,89	106
2.50x300	50-80	0,55	98	0,96	107
2.50x250	50-80	0,55	113	0,96	107
2.00x250	50-70	0,55	167	0,78	107
2.00x300	50-70	0,55	143	0,79	107

## 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
13013DDEM2	2.00x300	208 kg	2.5	3	8.0	Plastic Box
13013DJEM2	2.00x300	146 kg	1.8	10	16.3	VAC Box
13013GDEM2	2.50x300	138 kg	2.5	3	8.1	Plastic Box
13013GJEM2	2.50x300	98 kg	1.8	10	19.0	VAC Box
13013MDEM2	3.25x300	84 kg	2.5	3	8.0	Plastic Box
13013MJEM2	3.25x300	59 kg	1.8	10	18.1	VAC Box
13013QJEM2	4.00x350	37 kg	2.0	10	21.0	VAC Box
13013TJEM2	5.00x350	25 kg	2.0	10	18.6	VAC Box

## Storage &amp; Re-Drying Information

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