

# ENI 412

Coated Electrode for Cast Irons -

## Standards

AWS/ASME SFA - 5.15	ENi-CI
EN ISO 1071	E C Ni-CI 3
TS EN ISO 1071	E C Ni-CI 3

## Materials

<b>DIN</b>
GG 10 - GG 35

## Properties and Applications

Electrode having a nickel core wire, for welding on grey cast iron with and without preheating. Suitable for welding joints as well as for surfacing of worn cast iron parts. Suitable to use in repair of machine frames, machine housings, machine parts and bearing blocks. The electrode has a very soft, regular fusion, and a quiet and steady arc. It is well suited for positional welding. Very little dilution with the parent metal takes place, resulting in good machinability of the transition area. Weld short beads, about 30 to 50 mm long. In order to reduce weld residual stresses, hammer-peen welds slightly before cooling. Preferably is used with DCEN but possible to use with also AC.



## Typical Chemical Values of Weld Metal

Type of Analysis	C	Si	Mn	Ni	Ti	Al	Fe
Weld Deposit	0.80	0.80	0.20	97.00	0.35	0.10	0.75

## Typical Mechanical Values of Weld Metal

Test Condition	Hardness (HB)
As welded	175

## Application Information

### Welding Positions



### Polarity:



### Welding Parameters & Efficiency

Diameter x Length (mm)	Current (A)
3.25x350	90-110
4.00x400	110-140
3.25x300	90-110
2.50x300	50-70

## 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
16002GJEM2	2.50x300	109 kg	1.8	9	16.3	VAC Box
16002MJEM2	3.25x300	65 kg	1.8	10	18.5	VAC Box
16002NJEM2	3.25x350	57 kg	2.0	10	0.0	VAC Box
16002RJEM2	4.00x400	42 kg	2.3	9	21.0	VAC Box

#### Storage & Re-Drying Information

It can be dried maximum 5 times.  
It has to be dried at 150°C for 1 hour.