



Manufacturers of Custom Welding Lines for Resale  
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# SELECTRODE 1889

Copper Clad Tri-Metal Non-Overheating Cast Iron

## INTERNATIONAL CLASSIFICATIONS

AWS/ASME A 5.15 E NiFe-CI  
ISO 1071: E NiFe

DIN 8573: E NiFe-1 BG13  
NFA 81-342: E NiFe BG 13

## FEATURES & APPLICATIONS

The high deposition rate of this electrode creates an extremely narrow heat affected zone. This feature is suitable for all weldable cast irons that require post weld machining.

One of a kind heavily copper clad “Tri-metal” cored cast iron electrode

- Visually unique core wire creates immediate customer interest.
- High efficiency weld metal transfer totally eliminates electrode overheating.
- Proprietary copper-nickel-iron deposit chemistry yields the ultimate combination of softness, ductility and tensile strength.

## ALL WELD METAL ANALYSIS (TYPICAL WEIGHT %)

**Microstructure:** Consists of an iron-nickel-copper austenite with finely distributed graphite

**Flux Color:** Black

C	S	Mn	P	Si	Ni	Cu	Fe
1.1	.012	.9	.004	1.3	53	6.2	Bal.

## TYPICAL MECHANICAL PROPERTIES

### Undiluted Weld Metal

Tensile Strength

Yield Strength

Elongation

Hardness

### Maximum Value Up to:

77,000 psi (550 MPa)

54,000 psi (380 MPa)

11 %

Rockwell B 84-88, Brinell 176 Vickers 185

## WELDING CURRENT & INSTRUCTIONS

**Recommended Current:** DC Reverse (+) or AC

Diameter (mm) (4.0)	3/32 (2.5)	1/8 (3.25)	5/32
Minimum Amperage	50	70	100
Maximum Amperage	70	100	130

**Welding Techniques:** Guide the electrode at a steep angle keeping the arc length short. Use short staggered

**Welding Positions:** Flat, Vertical up, Horizontal, Overhead

**Deposition Rates:**

Diameter (mm)	Length (mm)	Weldmetal/ Electrode	Electrodes per lb (kg) of Weldmetal	Arc Time of Deposition min/lb (kg)	Amperage Settings
3/32 (2.5)	12" (300)	.39 oz. (11g)	42 (92)	45 (100)	60
1/8 (3.25)	14" (350)	.76 oz (21g)	21 (47)	22 (49)	90
5/32 (4.0)	14" (350)	1.07 oz (31g)	15 (32)	20 (45)	120

## APPROXIMATE ELECTRODE PACKAGING & DIMENSIONS

Diameter (mm)	3/32 (2.5)	1/8 (3.25)	5/32 (4.0)
Length (mm)	12" (300)	14" (350)	14" (350)
Electrodes / lb	29	14	10
Electrodes / kg	64	32	22