



Manufacturers of Custom Welding Lines for Resale  
[www.selectrode.com](http://www.selectrode.com)

## SELECTRODE

# 1143

High Nickel Shallow  
 Penetration DC(-)  
 Cast Iron Electrode

### INTERNATIONAL CLASSIFICATIONS

AWS/ASME A 5.15 E Ni-CI  
 ISO 1071: ENi

DIN 8573: E Ni BG 12  
 NFA 81-342: E Ni BG 12

### FEATURES & APPLICATIONS

Used where ultimate machinability is a factor. Also ideal for repairing very thin or eroded sections of cast iron.

”Pulsed Arc” high nickel, shallow penetration cast iron minimizes heat affected zone hardening

- ”Low temperature” gentle globular arc transfer.
- Excellent arc control in all positions.
- Weld deposits are extremely soft and machinable due to minimal dilution.
- Also available in TIG as product code 6043.

### ALL WELD METAL ANALYSIS (TYPICAL WEIGHT %)

**Microstructure:** Austenitic nickel with finely distributed graphite flakes.

**Flux Color:** Black

C	Mn	Si	S	P	Cu	Fe	Al	Misc	Ni
1.88	2.46	<4.0	.030	--	.77	>4	.93	1 MAX	Bal

### TYPICAL MECHANICAL PROPERTIES

#### Undiluted Weld Metal

Tensile Strength

Yield Strength

Elongation

Hardness

#### Maximum Value Up to:

62,000 PSI (420 MPa)

44,000 PSI (300 MPa)

5%

Rockwell B80-82, Brinell 150

## WELDING CURRENT & INSTRUCTIONS

**Recommended Current:** DC Straight (-) or AC

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

**Welding Techniques:** The arc gap should be as short as feasible. Move in direction of travel according to the rate of alloy flow.

**Welding Positions:** Flat, Vertical up, Vertical down, 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)	.44 oz (13g)	36 (80)	50 (110)	70
1/8 (3.25)	14"(350)	.74 oz (21g)	21 (47)	24 (53)	90
5/32 (4.0)	14" (350)	1.03 oz (31g)	15 (32)	22 (48)	135

## 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	28	14	9
Electrodes / kg	62	31	20