

## MIDALLOY NI-MAX 55 COATED ELECTRODE

### CLASSIFICATION

- AWS/SFA 5.15 Class ENiFe-CI
- UNS# W82002
- (EN) ISO 1071-ECNiFe-CI

### DESCRIPTION

- Midalloy NI-MAX 55 coated electrode is an all-position, coated electrode used for joining work pieces of various types of cast iron. Midalloy NI-MAX 55 can be run on AC or DCRP current.

### APPLICATION

- Midalloy NI-MAX 55 coated electrode is used for repair welds for various types of cast iron, including nodular Iron.
- Midalloy NI-MAX 55 coated electrode is used for joining various types of cast iron to carbon steel and some Nickel base metals.
- Midalloy NI-MAX 55 coated electrode can be used for welding castings with higher than normal Phosphorus levels (above 0.20%).
- Midalloy NI-MAX 55 coated electrode can be used on thick, highly restrained weldments, and on high strength and engineering grades of cast iron.

### TYPICAL CHEMISTRY

C	Mn	Si	Fe	P	S	Ni	Cu	Al
1.2	0.90	1.4	45	0.010	0.002	51.0	0.022	0.60

### TYPICAL MECHANICAL PROPERTIES

Tensile Strength	83,000 PSI
Yield Strength	59,000 PSI
Elongation	8%

### RECOMMENDED WELDING PARAMETERS (DC Electrode positive\*)

Diameter	3/32"	1/8"	5/32"
Process	SMAW	SMAW	SMAW
Voltage	22-25	22-25	22-25
Amperage Range Flat	50-90	70-110	100-150
Optimum Amperage Flat	75	100	135
Amperage Range Vertical Overhead	50-70	70-90	100-120

\*For AC application use 5 to 10 amps less current

### PREHEAT AND INTRPASS TEMPERATURES

Preheat depends on the type and design of the material being welded. Interpass temperature and cooling rates need to be controlled to assure proper welding. Normal preheats range from 60°F to 600°F and depends on base metal thickness and condition. Interpass is usually limited to 850°F followed by slow cooling.

### STANDARD PACKAGING

- 3/32" 8 lb. can / 48 lb. carton
- 1/8", 5/32", and 3/16" 10 lb. can / 60 lb. carton

8/5/11

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