

## MIDALLOY NI-MAX 112 COATED ELECTRODE

### CLASSIFICATION

- AWS/SFA 5.11 Class ENiCrMo-3/ASME SFA 5.11 Class ENiCrMo-3 ASME SEC IX, F43

### DESCRIPTION

- Midalloy NI-MAX 112 coated electrode is an all position coated electrode for joining alloys listed under UNS numbers N06625 and N08825, and other nickel-chromium-molybdenum alloys.
- UNS# W86112
- ISO 14172 comparison classification ENi6625
- NI-MAX 112 coated electrodes are widely used to overlay steel where a similar composition is required on the clad side.
- NI-MAX 112 coated electrodes can be used for dissimilar applications involving nickel-chromium-molybdenum alloys to stainless steels, carbon steels, or low alloy steels.

### APPLICATION

- Developed to give high temperature strength and structural stability, NI-MAX 112 coated electrodes are widely used for applications requiring resistance to general corrosion, pitting, crevice and stress corrosion cracking in severe chloride media.
- For service properties ranging from cryogenic up to 1800° F.
- Applications include furnace equipment, petrochemical and power generation plants as well as pumps, valves, and shafts in offshore and marine environments.
- Other applications include welding of 9% nickel alloys for cryogenic use, and reclamation of dies where rapid work hardening and toughness are required.

### TYPICAL CHEMISTRY

C	Mn	Fe	P	S	Si	Cu	Ni	Cr	Cb+Ta	Mo	Others
.03	.20	2.0	.005	.005	.43	.02	63.2	21.53	3.42	9.07	<0.50

### TYPICAL MECHANICAL PROPERTIES

Tensile Strength	114,500 PSI
Yield Strength	88,500 PSI
Elongation	34%

### RECOMMENDED WELDING PARAMETERS

Diameter	3/32"	1/8"	5/32"	3/16"
Process	SMAW	SMAW	SMAW	SMAW
Voltage	24-28	26-30	28-32	28-32
Amperage Flat	70-85	65-100	110-140	120-160
Amperage Vertical/Overhead	65-75	65-90	100-120	110-130

### STANDARD PACKAGING

- 3/32" – 8 lb. Can, 48 lb. Carton
- 1/8", 5/32", 3/16" – 10 lb. Can, 60 lb. Carton

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