

MIDALLOY NI-MAX 182 COATED ELECTRODE

CLASSIFICATION

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

DESCRIPTION

- Midalloy NI-MAX182 coated electrode is an all-position, coated electrode used for joining alloys listed under the UNS number N06600 to themselves.
- UNS# W86182
- NI-MAX 182 can also be used for dissimilar welds between most nickel-based alloys such as UNS number N04400, stainless steel, and low alloy or carbon steels, without need to preheat. (Stress-relief may follow if called for.)
- ISO 14172 comparison classification ENi6182

APPLICATION

- Because of the excellent high-temperature strength, NI-MAX 182 coated electrodes are used in petrochemical and power generation plants for long-term service at elevated temperatures.
- Other high temperature applications are in furnace equipment up to 1800° F under most conditions.
- Low temperature applications are in 3% to 5% nickel steels used for cryogenic vessels and pipe work in service down to -150° F.

TYPICAL CHEMISTRY

C	Mn	Fe	P	S	Si	Cu	Ni	Ti	Cr	Cb+Ta	Others
.045	6.43	7.52	.006	.004	.38	.06	68.5	.30	14.75	1.56	<0.5

TYPICAL MECHANICAL PROPERTIES

Tensile Strength	84,500 PSI
Yield Strength	53,000 PSI
Elongation	35%

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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