

## MIDALLOY MASTERCOR™ E410NiMoT1-1/4 AP FLUX-CORED WIRE

### CLASSIFICATION

- AWS 5.22 Class E410NiMoT1-1 and E410NiMoT1-4 / ASME SFA 5.22 Class E410NiMoT1-1 and E410NiMoT1-4 flux-cored wire.
- UNS# W41036

### DESCRIPTION

- MIDALLOY MASTERCOR™ E410NiMoT1-1/4 AP is a gas-shielded, flux-cored, stainless steel electrode designed for single or multipass welding in all positions. It has a nominal weld metal composition of 12% Cr. It deposits an air hardenable martensitic stainless steel that is normally heat treated after welding. Arc characteristics include welds with very little spatter, easy slag removal, and excellent out of position operating characteristics.

### APPLICATIONS

- MIDALLOY MASTERCOR™ E410NiMoT1-1/4 AP is used in a wide variety of welding and overlay applications for hydro power generation and some high pressure compressors. It is often used to weld ASTM CA6NM castings as well as 410 and 410NiMo stainless steels. Deposited welds have excellent erosion corrosion performance for vanes and blades that need to resist cavitation.

### TYPICAL CHEMISTRY

C	Mn	Si	Cr	Ni	Mo	Cu	S	P
0.05	0.72	.55	12.3	4.50	0.52	0.3	.015	.015

### TYPICAL MECHANICAL PROPERTIES (with 100% CO<sub>2</sub>\*)

TENSILE STRENGTH	128,000 PSI
YIELD STRENGTH	105,000 PSI
ELONGATION IN 2"	16%

\*PWHT @ 1125°F. NOTE: Double tempering can improve impact strength and reduce hardness.

### TYPICAL WELDING PARAMETERS (with 100% CO<sub>2</sub>\*\*)

DIAMETER	VOLTAGE	AMPERAGE (wire feed speed IPM)	
		FLAT	VERTICAL & OVERHEAD
.045"	24-28	130-300 (250 TO 425)	120-260 (225 TO 300)
1/16"	25-30	150-400 (130 TO 500)	150-280 (150 TO 200)

\*\*NOTE: If using mixed gas, voltage can be increased by 1 to 2 volts.

### STANDARD PACKAGING

- .045" 33 lb. Spool
- 1/16" 33 lb. Spool

8-16-13

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