

MIDALLOY MASTERCOR™ E410T1-1/4 AP FLUX-CORED WIRE

CLASSIFICATION

- AWS 5.22 Class E410T1-1 and E410T1-4 / ASME SFA 5.22 Class E410T1-1 and E410T1-4 flux-cored wire. It is designed for use with 100% CO₂ or 75% Ar – 25% CO₂.
- UNS# W41031

DESCRIPTION

- MIDALLOY MASTERCOR™ E410T1-1/4 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™ E410T1-1/4 AP is used in a wide variety of welding and overlay applications for power generation equipment, refinery and steel making. It is often used to weld ASTM CA6NM castings as well as 410 and 410S and 405 stainless steels.

TYPICAL CHEMISTRY

C	Mn	Si	Cr	Ni	Mo	Cu	S	P
0.08	0.72	.55	12.3	0.10	0.02	0.3	.015	.015

TYPICAL MECHANICAL PROPERTIES

SHIELDING GAS	75% Ar 25% CO ₂ *	100% CO ₂ **
TENSILE STRENGTH	92,000 PSI	96,000 PSI
YIELD STRENGTH	73,000 PSI	79,000 PSI
ELONGATION IN 2"	20%	20%
HARDNESS (AS DEPOSITED)	34Rc (38-45 Rc)	34Rc (38-46 Rc)

*PWHT @ 1125°F for 1 hour

TYPICAL WELDING PARAMETERS (with 100% CO₂ **)

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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