

## MIDALLOY Mastercor E81T1- Ni1 M/C JH4 FLUX-CORED WIRE

### CLASSIFICATION

- AWS 5.29 Class E81T1-Ni1 M/C JH4 / ASME SFA 5.29 Class E81T1-Ni1 M/C JH4

### DESCRIPTION

- MIDALLOY Mastercor E81T1-Ni1 flux-cored wire is an "out of position", 1% nickel flux-cored wire, particularly suited when strength and toughness are required.
- This wire can be used for single or multiple pass welding.
- Fast freezing slag allows excellent out of position welding.

### APPLICATIONS

- For joining applications welding for attaching wear plates like HR-400 and HR-500 to carbon and alloy steel when low temperature impact resistance is required.
- For welding of common materials include ASTM A203, A532 Grades LC1 and LC2, A575, A734 as well as other steels containing 1% to 2.5% Nickel.
- These alloys are used extensively in the mining industry, offshore platform fabrication, structural bridge supports, earthmoving equipment and the power generation industry for low temperature toughness.

### TYPICAL CHEMISTRY (as deposited)

GAS	C	Mn	Si	P	S	Ni
CO2	.03	1.15	.44	.009	.008	.91
75%AR / 25%CO2	.03	1.29	.50	.009	.008	.90

### TYPICAL MECHANICAL PROPERTIES

As Welded	TENSILE STRENGTH	YIELD STRENGTH	ELONGATION	CVN @ -40°F	CVN @ -50°F
100% Co2	86,000 PSI	74,000 PSI	27%	90 Ft-Lbs.	50 Ft-Lbs.
75% Argon / 25% Co2	74,000 PSI	80,000 PSI	24%	94 Ft-Lbs.	46 Ft-Lbs.

### RECOMMENDED WELDING PARAMETERS

DIA.	FLAT		VERTICAL-UP		OVERHEAD	
	VOLTS	AMPS	VOLTS	AMPS	VOLTS	AMPS
.045"	21-21	100-300	21-28	100-230	21-29	150-280
1/16"	28-34	290-400	22-26	150-250	23-26	90-290

- Shielding Gas 100% CO<sub>2</sub>. 35-50 CFH; For 75Ar/25CO<sub>2</sub>, decrease voltage by 1 to 1.5 volts

### STANDARD PACKAGING

- 33 Lb. Spool
- Available Sizes: .045", .052", and 1/16"

6-27-25

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