

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	80,000 PSI	74,000 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% CO₂. 35-50 CFH; For 75Ar/25CO₂, decrease voltage by 1 to 1.5 volts

STANDARD PACKAGING

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

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