



CLASSIFICATIONS: E71T-1C, E71T-1M, E71T-9C, E71T-9M, E71T-12C, E71T-12M per AWS A5.20, ASME SFA 5.20

APPROVALS: CWB E491T-9M-H8 (75% Ar/25% CO₂)

ALLOY MIC 1100 ENCORE is a flux cored, gas-shielded electrode intended for single and multiple pass welding of carbon steels in all positions. This exceptional general purpose wire is a superb choice for welding where a minimum tensile strength of 70,000 psi is required.

APPLICATIONS: The combination of strength and toughness make **ALLOY MIC 1100 ENCORE** ideal for applications such as structural steel, farm machinery, construction equipment and railcar fabrication where the following steels may be employed; ASTM A131, A285, A515 Gr 70 and A516 Gr 70.

DIAMETERS: .045", .052", 1/16"

SHIELDING GAS: 100% CO₂, 75-80% Ar/balance CO₂, 35-50 cfh

WELDING POSITIONS: All Positions

CHARACTERISTICS:

- Provides consistent arc starting.
- Delivers a positive arc transfer that is smooth, stable and deeply penetrating.
- Fast freezing slag assures excellent out-of-position weldability.
- Unlike most E71T-1 electrodes, produces smooth, even and well washed horizontal fillets with a shiny surface and straight toe lines.

TYPICAL MECHANICAL PROPERTIES		
	CO ₂	75% Ar/ 25% CO ₂
Ultimate Tensile Strength (psi)	75,000	82,000
Yield Strength (psi)	65,000	70,000
Percent Elongation	31	32
CVN (ft-lb f) @ -20° F	69	72

TYPICAL DEPOSIT COMPOSITION					
Wt%	C	Mn	P	S	Si
CO ₂	.05	1.20	.010	.010	.35
75Ar/25CO ₂	.05	1.45	.010	.010	.45



TYPICAL WELDING PARAMETERS -- 75Ar-25CO₂*:

Operating Range				Optimum		
Diam.	Position	Amps	Volts	Amps	WFS	Volts
.045"	Flat	130-260	24-31	235	385	27
	Overhead	130-220	23-28	190	265	26
	Vertical Up	130-220	23-27	190	265	25
.052"	Flat	150-330	23-31	275	375	28
	Overhead	150-250	22-30	195	230	26
	Vertical Up	150-250	22-29	195	230	25
1/16"	Flat	185-360	22-29	315	260	27
	Overhead	170-240	22-27	210	165	24
	Vertical Up	170-240	22-26	210	165	23

³/₄-1" electrode stickout is recommended.

* For CO₂ shielding gas raise the voltage by 1 to 1.5 volts.

Notice: The results reported are based upon testing of the product under controlled laboratory conditions in accordance with American Welding Society Standards. Actual use of the product may produce different results due to varying conditions. An example of such conditions would be electrode size, plate chemistry, environment, weldment design, fabrication methods, welding procedure and service requirements. Thus the results are not guarantees for use in the field. The manufacturer disclaims any warranty of merchantability or fitness for any particular purpose with respect to its products.