

Select 97

Carbon Steel / Gas Shielded / Flux Cored

PRODUCT DATA SHEET

FEATURES

- Can be used with 100% CO₂ or with 75-80% Ar/balance CO₂ shielding gas
- Lower fume generation rates than conventional E70T-1 electrodes
- Stable arc transfer over a wide range of welding parameters
- With both shielding gases, arc transfer is a small droplet transfer with low spatter
- Ideal for structural welds and general steel fabrications
- Limited to horizontal and flat fillets, and flat groove welds

CONFORMANCES

AWS A5.20

E70T-1C-H8
E70T-1M-H8
E70T-9C-H8
E70T-9M-H8

DIAMETERS (in [mm])

0.045 (1.2), 1/16 (1.6), 5/64 (2.0), 3/32 (2.4)

POSITIONS



SHIELDING GAS

75-80%Ar/Balance CO₂, 100% CO₂
Flow Rate: 40 - 50 CFH

POLARITY

Direct Current Electrode Positive (DCEP)

TYPICAL WELD DEPOSIT CHEMISTRY [WT%]

Shielding Gas	C	Cr	Cu	Mn	Mo	Ni	P	S	Si	V
100%CO ₂	0.03	0.06	0.04	1.55	0.00	0.32	0.010	0.010	0.50	0.01
75%Ar / 25%CO ₂	0.04	0.08	0.04	1.70	0.00	0.33	0.007	0.008	0.40	0.02

TYPICAL MECHANICAL PROPERTIES

Shielding Gas	Tensile Strength ksi (MPa)	Yield Strength ksi (MPa)	Elongation (%)	Weld Condition	PWHT Temp	CVN @ -20°F (-30°C) ft-lb (J)
100%CO ₂	82 (566)	78 (537)	25	As-Welded	-	27 (37)
75%Ar / 25%CO ₂	89 (614)	75 (519)	24.6	As-Welded	-	38 (52)



Notice: Be sure to follow all your employers safety practices, policies and procedures when using this product. Refer to CSA W117.2 and ANSI Z49.1 Safety in Welding, Cutting and Allied Processes for further information and the manufactures SDS sheet. 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.

RECOMMENDED WELDING PARAMETERS **

Diameter in (mm)	Shielding Gas	Position	WFS* in/min (m/min)	Amps	Volts	CTWD* in (mm)
0.045 (1.2 mm)	100% CO2	Flat	250 (6.4)	175	24	5/8 (16)
		Flat	340 (8.6)	205	27	5/8 - 3/4 (16 - 19)
		Flat	440 (11.2)	235	29	5/8 - 3/4 (16 - 19)
1/16 (1.6 mm)	100% CO2	Flat	235 (6.0)	245	24	3/4 (19)
		Flat	280 (7.1)	275	27	3/4 - 1 (19 - 25)
		Flat	325 (8.3)	320	29	3/4 - 1 (19 - 25)
5/64 (2.0 mm)	100% CO2	Flat	145 (3.7)	280	25	1 (25)
		Flat	190 (4.8)	320	27	1 - 1 1/4 (25 - 32)
		Flat	230 (5.8)	365	29	1 - 1 1/4 (25 - 32)
3/32 (2.4 mm)	100% CO2	Flat	120 (3.0)	275	25	1 1/4 (32)
		Flat	150 (3.8)	335	27	1 1/4 - 1 1/2 (32 - 38)
		Flat	165 (4.2)	400	29	1 1/4 - 1 1/2 (32 - 38)

* WFS = Wire Feed Speed, CTWD = Contact Tip To Work Distance

**The parameters listed are recommended starting points of operation and the ranges for amperage, wfs, and voltage could be extended based on fitness for application. For products with "all-position" capability, as determined and listed in classification, the position recommendation can be determined based on operator skill and material thickness and isn't limited to the listing.

Reduce voltage by 1 volt for 75-80% Ar/balance CO2 .

APPROVALS

Agency	Approval	Shielding Gas	Diameter(s) in (mm)
ABS	E70T-1C	C1 (100%CO2)	0.045 (1.2) - 3/32 (2.4)
CWB CSA W48-23	E490T1-C1A3-CS1-H8	C1 (100%CO2)	0.045 (1.2) - 3/32 (2.4)

PACKAGING (lbs (kgs))

33 (15) Spools, 60 (27.2) Coils, 500 (226.8) Round Drum, 800 (362.9) Hex Drum, 900 (408.2) Hex Drum

*Some packaging options may not be available depending on diameter and product. Special package options may be available upon request.

STORAGE AND HANDLING

All products should be stored in original packaging, in dry conditions and handled with care. For more information refer to our website.



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