

Select 71

Carbon Steel / Gas Shielded / Flux Cored

PRODUCT DATA SHEET

FEATURES

- A general purpose electrode with high levels of deoxidation for welding over mill scale and other oxide contaminants
- Well suited for welding carbon steels such as ASTM A36, A285, A515, and A516
- Ideal for general fabrication and structural welding
- Typical applications are railcar fabrication, structural steel, and construction equipment

CONFORMANCES

AWS A5.20	E70T-1C-H8 E70T-9C-H8
ASME SFA 5.20	E70T-1C-H8 E70T-9C-H8
AWS D1.8	3/32 in (2.4 mm), (100% CO ₂) 5/64 in (2.0 mm), (100% CO ₂)

DIAMETERS [in (mm)]

0.045 (1.2), 1/16 (1.6), 5/64 (2.0), 3/32 (2.4), 7/64 (2.8), 1/8 (3.2)

POSITIONS



SHIELDING GAS

100% CO₂
Flow Rate: 40 - 50 CFM

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	0.06	0.05	0.06	1.56	0.01	0.02	0.006	0.010	0.58	0.02

TYPICAL MECHANICAL PROPERTIES

Shielding Gas	Tensile Strength ksi (MPa)	Yield Strength ksi (MPa)	Elongation (%)	Weld Condition	PWHT Temp	CVN @ 0°F (-20°C) ft-lb (J)	CVN @ -20°F (-30°C) ft-lb (J)
100%CO ₂	89 (611)	73 (503)	24	As-Welded	-	34 (46)	29 (39)



Revision: 9/20/2022

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.

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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 & Horizontal	250 (6.4)	175	24	5/8 (16)
		Flat & Horizontal	340 (8.6)	205	27	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	440 (11.2)	235	29	5/8 - 3/4 (16 - 19)
1/16 (1.6 mm)	100% CO2	Flat & Horizontal	235 (6.0)	245	24	3/4 (19)
		Flat & Horizontal	280 (7.1)	275	27	3/4 - 1 (19 - 25)
		Flat & Horizontal	325 (8.3)	320	29	3/4 - 1 (19 - 25)
5/64 (2.0 mm)	100% CO2	Flat & Horizontal	145 (3.7)	280	25	1 (25)
		Flat & Horizontal	190 (4.8)	320	27	1 - 1 1/4 (25 - 32)
		Flat & Horizontal	230 (5.8)	365	29	1 - 1 1/4 (25 - 32)
3/32 (2.4 mm)	100% CO2	Flat & Horizontal	120 (3.0)	275	25	1 1/4 (32)
		Flat & Horizontal	150 (3.8)	335	27	1 1/4 - 1 1/2 (32 - 38)
		Flat & Horizontal	165 (4.2)	400	29	1 1/4 - 1 1/2 (32 - 38)
7/64 (2.8 mm)	100% CO2	Flat & Horizontal	95 (2.4)	320	25	1 1/4 (32)
		Flat & Horizontal	115 (2.9)	370	27	1 1/4 - 1 1/2 (32 - 38)
		Flat & Horizontal	120 (3.0)	420	29	1 1/4 - 1 1/2 (32 - 38)
1/8 (3.2 mm)	100% CO2	Flat & Horizontal	75 (1.9)	380	25	1 1/2 (38)
		Flat & Horizontal	90 (2.3)	420	27	1 3/4 - 2 (44 - 51)
		Flat & Horizontal	95 (2.4)	460	29	1 3/4 - 2 (44 - 51)

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

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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