Carbon Steel / Gas Shielded / Flux Cored

FEATURES

- Oxide-free wire surface promotes clean, shiny weld beads and good feeding characteristics
- Intended for welding single and multiple pass fillets and grooves in all positions
- Can be used with both 100% CO2 and 75-80% Ar/balance CO2 shielding gases
- Arc transfer is a small droplet spray transfer in both shielding modes
- Ideal for welding carbon steels in structural steel and general fabrication applications
- Typical applications are shipbuilding, railcar fabrication, and earthmoving machinery

CONFORMANCES

AWS A5.20	E71T-1C
	E71T-1M
	E71T-9C
	E71T-9M

ASME SFA 5.20 E71T-1C E71T-1M

E71T-9C E71T-9M

AWS A5.36 E71T1-C1A2-CS2 E71T1-M21A2-CS2

DIAMETERS (in (mm))

0.045 (1.2), 0.052 (1.3), 1/16 (1.6)

POSITIONS



SHIELDING GAS

Ar + 20-25% CO2, 100% CO2 Flow Rate: 40 - 50 CFM

POLARITY

Direct Current Electrode Positive (DCEP)

CLARIII

TYPICAL WELD DEPOSIT CHEMISTRY (WT%)

Shielding Gas	С	Cr	Cu	Mn	Мо	Ni	P	S	Si	V
100%CO2	0.05	0.03	0.04	1.20	0.01	0.02	0.010	0.010	0.35	0.02
75%Ar / 25%CO2	0.05	0.03	0.04	1.45	0.01	0.03	0.010	0.010	0.45	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)	CVN @ -40°F (-40°C) ft-lb (J)
100%CO2	79 (545)	68 (469)	29	As-Welded	-	40 (54)	30 (41)
75%Ar / 25%CO2	87 (600)	77 (531)	28	As-Welded	-	45 (61)	32 (43)



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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)		All Positions	240 (6.1)	165	23	1/2 (13)
		Flat & Horizontal	265 (6.7)	180	24	1/2 (13)
	75% Ar/25% CO2	All Positions	310 (7.9)	190	25	5/8 (16)
	75% Af/25% CO2	All Positions	410 (10.4)	225	27	1 (25)
		Flat & Horizontal	410 (10.4)	225	26	5/8 (16)
		Flat & Horizontal	550 (14.0)	265	31	1 (25)
		All Positions	150 (3.8)	160	23	5/8 (16)
		Flat & Horizontal	190 (4.8)	200	23	5/8 (16)
0.052 (4.2 mm)	75% Ar/25% CO2	All Positions	230 (5.8)	210	25	3/4 (19)
0.052 (1.3 mm)	75% AI/25% CO2	All Positions	340 (8.6)	260	26	1 (25)
		Flat & Horizontal	360 (9.1)	280	26	3/4 (19)
		Flat & Horizontal	475 (12.1)	340	31	1 (25)
1/16 (1.6 mm)	75% Ar/25% CO2	All Positions	135 (3.4)	185	23	3/4 (19)
		All Positions	175 (4.4)	220	25	1 (25)
		Flat & Horizontal	170 (4.3)	220	23	5/8 (16)
		All Positions	240 (6.1)	275	26	1 (25)
		Flat & Horizontal	295 (7.5)	320	27	3/4 (19)
		Flat & Horizontal	420 (10.7)	380	31	1 (25)

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

For 100% CO2 shielding gas, raise the voltage by 1 to 1.5 volts.

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

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