**PRODUCT DATA SHEET** 

# Carbon Steel / Gas Shielded / Flux Cored

## **FEATURES**

- Intended for all position welding of carbon steels, such as ASTM A36, A285, and A515-Gr 70
- Can be used with both 100% CO2 and 75-80% Ar/balance CO2 shielding gases
- Arc transfer is small to medium droplet spray mode, with 75-80% Ar/balance CO2 providing the smaller droplet mode
- An excellent electrode for general purpose welding of structural steel and various fabrications
- Typical applications include structural welding, farm machinery, and water towers

#### CONFORMANCES

**AWS A5.20** E71T-1C

E71T-1M

**ASME SFA 5.20** E71T-1C

E71T-1M

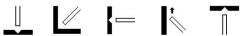
AWS A5.36 E71T1-C1A0-CS1

E71T1-M21A0-CS1

## **DIAMETERS** (in (mm))

0.035 (0.9), 0.045. .052 (), 1/16 (1.6)

### **POSITIONS**



#### **SHIELDING GAS**

75-80%Ar/Balance CO2, 100% CO2

Flow Rate: 40 - 50 CFM

## **POLARITY**

Direct Current Electrode Positive (DCEP)

# **TYPICAL WELD DEPOSIT CHEMISTRY (WT%)**

Shielding Gas	С	Cr	Cu	Mn	Мо	Ni	P	S	Si	V
100%CO2	0.05	0.04	0.06	1.00	0.01	0.02	0.008	0.010	0.74	0.01
75%Ar / 25%CO2	0.05	0.02	0.04	1.10	0.00	0.02	0.010	0.010	0.85	0.01

#### **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)
100%CO2	87 (600)	71 (490)	26	As-Welded	-	58 (79)
75%Ar / 25%CO2	88 (607)	71 (490)	26	As-Welded	-	65 (88)



Revision: 9/16/2022

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.

#### RECOMMENDED WELDING PARAMETERS

Diameter in (mm)	Shielding Gas	Position	WFS* in/min (m/min)	Amps	Volts	CTWD* in (mm)	
0.035 (0.9 mm)	100% CO2	All Positions	275 (7.0)	120	23	1/2 - 5/8 (13 - 16)	
		All Positions	320 (8.1)	135	24	1/2 - 5/8 (13 - 16)	
		All Positions	420 (10.7)	160	26	1/2 - 5/8 (13 - 16)	
		Flat & Horizontal	465 (11.8)	180	27	5/8 - 3/4 (16 - 19)	
		Flat & Horizontal	570 (14.5)	200	29	5/8 - 3/4 (16 - 19)	
0.045 (1.2 mm)	100% CO2	All Positions	200 (5.1)	145	23	1/2 - 5/8 (13 - 16)	
		All Positions	235 (6.0)	160	24	1/2 - 5/8 (13 - 16)	
		All Positions	300 (7.6)	185	26	1/2 - 5/8 (13 - 16)	
		Flat & Horizontal	375 (9.5)	215	27	5/8 - 3/4 (16 - 19)	
		Flat & Horizontal	440 (11.2)	235	29	5/8 - 3/4 (16 - 19)	
	100% CO2	All Positions	170 (4.3)	155	23	5/8 - 3/4 (16 - 19)	
0.052 (1.3 mm)		All Positions	200 (5.1)	175	24	5/8 - 3/4 (16 - 19)	
		All Positions	250 (6.4)	225	26	5/8 - 3/4 (16 - 19)	
		Flat & Horizontal	310 (7.9)	250	27	3/4 - 1 (19 - 25)	
		Flat & Horizontal	395 (10.0)	280	29	3/4 - 1 (19 - 25)	
1/16 (1.6 mm)	100% CO2	All Positions	125 (3.2)	165	23	5/8 - 3/4 (16 - 19)	
		All Positions	150 (3.8)	195	24	5/8 - 3/4 (16 - 19)	
		All Positions	185 (4.7)	225	26	5/8 - 3/4 (16 - 19)	
		Flat & Horizontal	265 (6.7)	280	27	3/4 - 1 (19 - 25)	
		Flat & Horizontal	325 (8.3)	320	29	3/4 - 1 (19 - 25)	

<sup>\*</sup> WFS = Wire Feed Speed, CTWD = Contact Tip To Work Distance

For Welding in 75-80% Ar / Balance CO2, decrease by 1 - 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.



Revision: 9/16/2022

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.

<sup>\*</sup>Some packaging options may not be available depending on diameter and product. Special package options may be available upon request.