# Select 720 Mil

Carbon Steel / Gas Shielded / Flux Cored

#### **PRODUCT DATA SHEET**

ΕE	ΔΤ	3E	S

•	Intended for single and multiple pass welding of
	carbon steels, such as ASTM A36, A131, and A285

- Designed for shielding with blends of both 100% CO2 and 75-80% Ar/balance CO2
- Developed primarily for Naval shipbuilding applications

# DIAMETERS (in (mm))

0.035 (0.9), 0.045 (1.2), 0.052 (1.3), 1/16 (1.6)

#### POSITIONS



#### SHIELDING GAS

100% CO2, 75% Ar / 25% CO2 Flow Rate: 40 - 50 CFH

### POLARITY

Direct (	Current	Electrode	Positive	(DCFP)	
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#### CONFORMANCES

MILITARY MIL-DTL-24403/1F MIL-71T-1-HYC ASME SFA 5.20 E71T-12C-H8 E71T-12M-H8 E71T-1C-H8 E71T-1C-H8 E71T-1M-H8 E71T-9C-H8 E71T-9M-H8

E71T-12C-H8 E71T-12M-H8 E71T-1C-H8 E71T-1M-H8 E71T-9C-H8 E71T-9M-H8

E71T1-C1A2-CS2-H8 E71T1-C1P2-CS2-H8 E71T1-M21A2-CS2-H8 E71T1-M21P2-CS2-H8

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

Shielding Gas	С	Cr	Cu	Mn	Мо	Ni	Р	S	Si	V
100%CO2	0.04	0.05	0.03	1.22	0.00	0.43	0.011	0.007	0.26	0.02
75%Ar / 25%CO2	0.05	0.05	0.03	1.37	0.00	0.44	0.011	0.007	0.36	0.02

**AWS A5.36** 

# **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%CO2	79 (545)	68 (469)	31	As-Welded	-	68 (92)	47 (64)
100%CO2	82 (566)	68 (469)	32	PWHT	1150°F for 2 hrs	87 (118)	77 (104)
75%Ar / 25%CO2	84 (579)	71 (490)	30	As-Welded	-	83 (113)	33 (45)
75%Ar / 25%CO2	83 (572)	70 (483)	30	PWHT	1150°F for 2 hrs	41 (56)	27 (37)



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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Diameter in (mm)	Shielding Gas	Position	WFS* in/min (m/min)	Amps	Volts	CTWD* in (mm)
		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)
0.035 (0.9 mm)	100% CO2	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)
		All Positions	200 (5.1)	145	24	1/2 - 5/8 (13 - 16)
		All Positions	235 (6.0)	160	25	1/2 - 5/8 (13 - 16)
0.045 (1.2 mm)	100% CO2	All Positions	300 (7.6)	185	27	1/2 - 5/8 (13 - 16)
		Flat & Horizontal	375 (9.5)	215	28	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	440 (11.2)	235	30	5/8 - 3/4 (16 - 19)
	100% CO2	All Positions	170 (4.3)	155	24	5/8 - 3/4 (16 - 19)
		All Positions	200 (5.1)	175	25	5/8 - 3/4 (16 - 19)
0.052 (1.3 mm)		All Positions	250 (6.4)	225	27	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	310 (7.9)	250	28	3/4 - 1 (19 - 25)
		Flat & Horizontal	395 (10.0)	280	30	3/4 - 1 (19 - 25)
	100% CO2	All Positions	125 (3.2)	165	24	5/8 - 3/4 (16 - 19)
		All Positions	150 (3.8)	195	25	5/8 - 3/4 (16 - 19)
1/16 (1.6 mm)		All Positions	185 (4.7)	225	27	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	265 (6.7)	280	28	3/4 - 1 (19 - 25)
		Flat & Horizontal	325 (8.3)	320	30	3/4 - 1 (19 - 25)

#### **RECOMMENDED WELDING PARAMETERS \*\***

\* 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.

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 \*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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