

Select 720 MIL

Carbon Steel / Gas Shielded / Flux Cored

PRODUCT DATA SHEET

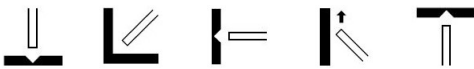
FEATURES

- 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 CFM

POLARITY

Direct Current Electrode Positive (DCEP)

CONFORMANCES

MILITARY MIL-DTL-24403

MIL-71T-1-HYC

MIL-71T-1-HYM

ASME SFA 5.20

E71T-12C-H8

E71T-12M-H8

E71T-1C-H8

E71T-1M-H8

E71T-9C-H8

E71T-9M-H8

AWS A5.20

E71T-12C-H8

E71T-12M-H8

E71T-1C-H8

E71T-1M-H8

E71T-9C-H8

E71T-9M-H8

AWS A5.36

E71T1-C1A2-CS2-H8

E71T1-C1P2-CS2-H8

E71T1-M21A2-CS2-H8

E71T1-M21P2-CS2-H8

TYPICAL WELD DEPOSIT CHEMISTRY (WT%)

Shielding Gas	C	Cr	Cu	Mn	Mo	Ni	P	S	Si	V
100%CO ₂	0.04	0.05	0.03	1.22	0.00	0.43	0.011	0.007	0.26	0.02
75%Ar / 25%CO ₂	0.05	0.05	0.03	1.37	0.00	0.44	0.011	0.007	0.36	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	79 (545)	68 (469)	31	As-Welded	-	68 (92)	47 (64)
100%CO ₂	82 (566)	68 (469)	32	PWHT	1150°F for 2 hrs	87 (118)	77 (104)
75%Ar / 25%CO ₂	84 (579)	71 (490)	30	As-Welded	-	83 (113)	33 (45)
75%Ar / 25%CO ₂	83 (572)	70 (483)	30	PWHT	1150°F for 2 hrs	41 (56)	27 (37)



Revision: 6/7/2024

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)
0.035 (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	24	1/2 - 5/8 (13 - 16)
		All Positions	235 (6.0)	160	25	1/2 - 5/8 (13 - 16)
		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)
0.052 (1.3 mm)	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)
		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)
1/16 (1.6 mm)	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)
		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)

* 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

*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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