

Select 71T-HYD

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 use with 100% CO₂ shielding gas
- Developed primarily to meet the strict criteria of the classification MIL-71T-HYD per MIL-DTL-24403/1F, which includes high and low heat input properties in both the as welded and post weld heat treated conditions

CONFORMANCES

ASME SFA 5.20

E71T-1C-H8

E71T-9C-H8

AWS A5.20

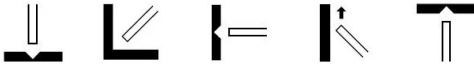
E71T-1C-H8

E71T-9C-H8

DIAMETERS (in [mm])

0.045 (1.2), 0.052 (1.3)

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	0.03	1.50	0.00	0.45	0.006	0.007	0.37	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%CO ₂	94 (650)	85 (586)	26	As-Welded	-	51 (69)	37 (50)



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	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)
0.052 (1.3 mm)	100% CO2	All Positions	150 (3.8)	120	21	5/8 - 3/4 (16 - 19)
		All Positions	200 (5.1)	175	23	5/8 - 3/4 (16 - 19)
		All Positions	250 (6.4)	225	25	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	310 (7.9)	250	27	3/4 - 1 (19 - 25)
		Flat & Horizontal	395 (10.0)	280	28	3/4 - 1 (19 - 25)

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

APPROVALS

Agency	Approval	Shielding Gas	Diameter(s) in (mm)
MILITARY MIL-DTL-24403/1F	MIL-71T-1-HYD	C1 (100%CO2)	0.045 () - 0.052 ()

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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