Select 71T-HYN

Carbon Steel / Gas Shielded / Flux Cored

PRODUCT DATA SHEET

FEATURES

- Designed for ease of welding in all positions
- Mechanical properties exceed the minimum AWS requirements
- Intended for use with 75-80% Ar/balance CO2 shielding gas
- Excels in general fabrication, structural steel, and shipbuilding applications
- Developed primarily to meet the strict criteria of the classification MIL-71T-HYN 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-1M-H8

E71T-9M-H8

E71T-1M-H8 **AWS A5.20**

E71T-9M-H8

DIAMETERS (in [mm])

0.045 (1.2), 0.052 (1.3)

POSITIONS



SHIELDING GAS

75% Ar / 25% 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 |
|----------------|------|------|------|------|------|------|-------|-------|------|------|
| 75%Ar / 25%CO2 | 0.05 | 0.03 | 0.02 | 1.35 | 0.00 | 0.41 | 0.006 | 0.006 | 0.32 | 0.02 |

TYPICAL MECHANICAL PROPERTIES

| Shieldir | ig 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) |
|-----------|--------|----------------------------------|--------------------------------|----------------|-------------------|--------------|-------------------------------------|-------------------------------------|
| 75%Ar / 2 | 5%CO2 | 89 (614) | 81 (559) | 28 | As-Welded | - | 80 (108) | 39 (53) |



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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) | 75% Ar/25% CO2 | All Positions | 200 (5.1) | 145 | 22 | 1/2 - 5/8 (13 - 16) |
| | | All Positions | 235 (6.0) | 160 | 23 | 1/2 - 5/8 (13 - 16) |
| | | All Positions | 300 (7.6) | 185 | 25 | 1/2 - 5/8 (13 - 16) |
| | | Flat & Horizontal | 375 (9.5) | 215 | 26 | 5/8 - 3/4 (16 - 19) |
| | | Flat & Horizontal | 440 (11.2) | 235 | 28 | 5/8 - 3/4 (16 - 19) |
| 0.052 (1.3 mm) | 75% Ar/25% CO2 | All Positions | 150 (3.8) | 120 | 20 | 5/8 - 3/4 (16 - 19) |
| | | All Positions | 200 (5.1) | 175 | 22 | 5/8 - 3/4 (16 - 19) |
| | | All Positions | 250 (6.4) | 225 | 24 | 5/8 - 3/4 (16 - 19) |
| | | Flat & Horizontal | 310 (7.9) | 250 | 25 | 3/4 - 1 (19 - 25) |
| | | Flat & Horizontal | 395 (10.0) | 280 | 27 | 3/4 - 1 (19 - 25) |

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

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.