SelectAlloy 347

Stainless Steel / Gas Shielded / Flux Cored

PRODUCT DATA SHEET

FEATURES

- The added carbon (C) provides higher tensile and creep strength at elevated temperatures.
- The addition of noibium (Nb) reduces the possibility of intergranular chromium carbide precipitation and thus susceptibility to intergranular corrosion.
- Designed for welding in either the flat or horizontal position in both 100% CO2 or 75-80% Ar/balance CO2 shielding gas.
- Smooth arc transfer and self-releasing slag that peels freely to ensure that clean up time is minimized.
- Applications includes welding chromium-nickel stainless steel base metals of similar composition stabilized with either Nb or titanium (Ti).

CONFORMANCES

AWS A5.22 E347HT0-1
E347HT0-4
E347T0-4

ASME SFA 5.22 E347HT0-1 E347HT0-4

E347T0-1 E347T0-4

DIAMETERS (in (mm))

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

POSITIONS



SHIELDING GAS

75-80% Ar + Balance CO2, 100% CO2 Flow Rate: 40 - 50 CFH

POLARITY

Direct Current Electrode Positive (DCEP)

CLARITI

TYPICAL WELD DEPOSIT CHEMISTRY (WT%)

| Shielding Gas | С | Cr | Cu | Mn | Мо | Nb + Ta | Ni | Р | S | Si | WRC- 1992 Ferrite |
|----------------|------|-------|------|------|------|---------|------|------|------|------|-------------------------|
| 100%CO2 | 0.06 | 19.10 | 0.14 | 1.10 | 0.07 | 0.61 | 9.60 | 0.02 | 0.01 | 0.71 | 7 |
| 75%Ar / 25%CO2 | 0.06 | 19.30 | 0.13 | 1.15 | 0.06 | 0.63 | 9.62 | 0.02 | 0.01 | 0.79 | 7 |

Bismuth is not intentionally added and levels are not known to be greater than 0.002 (WT%)

TYPICAL MECHANICAL PROPERTIES

| Shielding Gas | Shielding Gas | Tensile Strength ksi (MPa) | Yield Strength ksi (MPa) | Elongation (%) | Weld Condition | PWHT Temp |
|---------------|----------------|----------------------------------|--------------------------------|----------------|-------------------|--------------|
| | 100%CO2 | 96 (662) | 66 (455) | 34 | As-Welded | - |
| | 75%Ar / 25%CO2 | 99 (683) | 71 (490) | 33 | As-Welded | - |



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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) |
|------------------|----------------|-------------------|------------------------|------|-------|------------------|
| | 75% Ar/25% CO2 | Flat & Horizontal | 375 (9.5) | 120 | 25 | 1/2 (13) |
| 0.035 (0.9 mm) | | Flat & Horizontal | 590 (15.0) | 150 | 28 | 1/2 (13) |
| | | Flat & Horizontal | 690 (17.5) | 165 | 30 | 5/8 (16) |
| | 75% Ar/25% CO2 | Flat & Horizontal | 210 (5.3) | 145 | 24 | 1/2 (13) |
| 0.045 (1.2 mm) | | Flat & Horizontal | 390 (9.9) | 185 | 28 | 5/8 (16) |
| | | Flat & Horizontal | 550 (14.0) | 235 | 32 | 3/4 (19) |
| | 75% Ar/25% CO2 | Flat & Horizontal | 155 (3.9) | 180 | 24 | 5/8 (16) |
| 1/16 (1.6 mm) | | Flat & Horizontal | 235 (6.0) | 220 | 27 | 3/4 (19) |
| | | Flat & Horizontal | 300 (7.6) | 265 | 31 | 1 (25) |

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

Parameters were established in 75% Ar/25% CO2. Raise by 1-1.5 volts when using 100% CO2.

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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**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 "allposition" 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.

^{*}Some packaging options may not be available depending on diameter and product. Special package options may be available upon request.