# MIDALLOY MASTERCOR<sup>™</sup> E316LT0-1/4 F & H FLUX-CORED WIRE

### **CLASSIFICATION**

- AWS 5.22 Class E316LT0-1 and E316LT0-4 / ASME SFA 5.22 Class E316LT0-1 and E316LT0-4 flux cored wire.
- UNS# W31635 A# 8 F# 6

## DESCRIPTION

 MIDALLOY Mastercor™ E316LT0-1/4 is a gas shielded flux-cored wire designed for flat and horizontal welding and can be used with 75% Argon 25% CO₂ or 100% CO₂ shielding gas.

### APPLICATIONS

- MIDALLOY Mastercor<sup>™</sup> E316LT0-1/4 is used for welding stainless steel grades such as ASTM A743 and A744, types CF-8M and CF-3M, and is used extensively in the pulp and paper processing industry, chemical processing equipment, furnace textile parts, and certain marine environments.
- MIDALLOY Mastercor™ E316LT0-1/4 has good toughness and is used for cryogenic service.
- MIDALLOY Mastercor<sup>™</sup> E316LT0-1/4 can be used to overlay carbon steel. In this case, E316LT0-1/4 is generally used in the 2<sup>nd</sup> and 3<sup>rd</sup> layer and MIDALLOY E309LT0-1/4 is used in the 1<sup>st</sup> layer.

#### **TYPICAL CHEMISTRY (%)**

| С    | Mn  | Si  | Cr   | Ni   | Мо  | Р   | S   | Ν   |  |  |
|------|-----|-----|------|------|-----|-----|-----|-----|--|--|
| 0.03 | 1.3 | .66 | 19.2 | 12.9 | 2.5 | .03 | .02 | .05 |  |  |
|      |     |     |      |      |     |     |     |     |  |  |

Controlled Ferrite WRC 92: 5-15 FN

#### **TYPICAL MECHANICAL PROPERTIES\***

| TENSILE STRENGTH | 82,000 PSI                             |
|------------------|----------------------------------------|
| YIELD STRENGTH   | 63,000 PSI                             |
| ELONGATION IN 2" | 40%                                    |
| TOUGHNESS        | 100 ft lbs @ 72°F / 30 ft lbs @ -260°F |

Note: Mechanical properties shown using 100% CO2 shielding gas

#### **OPTIMUM TYPICAL WELDING PARAMETERS (using 100% CO<sub>2</sub> shielding gas)**

| DIAMETER | AMPERAGE | VOLTAGE | WFS (IPM) | STICK/OUT                          |
|----------|----------|---------|-----------|------------------------------------|
| .045"    | 170-200  | 27-29   | 335-440   | 5/8" / ¾"                          |
| 1/16"    | 210-270  | 28-31   | 235-345   | <sup>3</sup> ⁄ <sub>4</sub> " / 1" |

Note: Lower volts by 2 volts when using 75AR/25CO2

#### STANDARD PACKAGING

• 33 lb. spool

1/4/10

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