



exocor™

Nickel FLUX CORED WIRE DATA SHEET

executive 57/15/16

DESCRIPTION

Executive 57/15/16 is a nickel-chromium-molybdenum gas shielded FCAW wire that can be used for welding in all positions using 100% CO₂ or Argon/CO₂ mixtures. It is the flux cored equivalent to Executive C-276 and has a complimentary chemistry to Alloy C-276 (NiCrMo-4), yet provides the ease of welding and increased deposition rates associated with flux cored wire.

The high alloy content of 57/15/16 enables it to withstand highly corrosive environments. The combination of nickel and chromium provides the resistance to oxidizing conditions and the combination of nickel and molybdenum provides resistance to reducing conditions. The increased level of molybdenum offers excellent resistance to stress corrosion cracking, pitting, and crevice corrosion in most applications.

Executive 57/15/16 is a versatile filler metal that is used for welding of dissimilar joints between nickel-chrome-molybdenum alloys and stainless, carbon or low alloy steels including ASTM B574, B575, B19, B622, and B628 having UNS number N10276.

PROCEDURE

Keep preheat and post-heat to a minimum or according to base material. All best practices employed for the successful welding of high nickel alloys are to be followed.

TYPICAL CHEMICAL VALUES

| C | MN | FE | P | S | SI | CU | NI | CR | CO | MO | V | W | TOE |
|------|-----|-----|-------|-------|-----|------|-----|------|-----|------|------|-----|------|
| 0.02 | 0.4 | 5.0 | 0.010 | 0.001 | 0.2 | 0.50 | Bal | 15.4 | 2.5 | 15.6 | 0.35 | 3.8 | 0.50 |

WELDING PARAMETERS

| SIZE | VOLTS | AMPS | STICK OUT | WIRE FEED SPEED | SHIELDING GAS |
|------|-------|---------|-----------|-----------------|--|
| .045 | 25-26 | 140-210 | 1/2" | 290-400 IPM | *100% CO ₂ or 75%Argon-25%CO ₂ |
| .062 | 26-27 | 180-250 | 1/2" | 190-275 IPM | *100% CO ₂ or 75%Argon-25%CO ₂ |

MECHANICAL PROPERTIES

Tensile Strength: 106,000 PSI (705 MPa)
Yield Strength: 68,000 PSI (452 MPa)
Elongation: 42 %
Charpy Impact: 31 ft-lb at -320°F (-196°C)
Lateral Expansion: 30 Mils

CLASSIFICATION

The all weld metal deposit chemistry of this wire has been optimized for best performance and conforms to **AWS/SFA A5.34, Class ENiCrMo4T1-1/4**.

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