

DESCRIPTION

Executive 316/316LP provides superior weldability, low spatter and smooth beads with easy slag removal. The typical molybdenum gives improved resistance to pitting and crevice corrosion over grades 308L and 309L, particularly in the presence of chlorides.

This wire is designed to be used for all-positional welding. Low carbon in this filler metal reduces the possibility of intergranular carbide precipitation. This increases the resistance to intergranular corrosion without the use of stabilizers such as niobium or titanium. Strength of this low-carbon alloy, however, is less than that of the niobium-stabilized alloys or Type 316H at elevated temperatures.

APPLICATIONS & FEATURES

Used for welding similar alloys (containing 2% molybdenum) such as AISI316, 316L, 316Ti and 318; also for high temperature service applications. The presence of molybdenum which resists pitting corrosion caused by sulphuric acid, chlorides and cellulose solutions also provides increased creep residence at elevated temperatures.

TYPICAL WIRE CHEMISTRY & MECHANICAL PROPERTIES

| C | Cr | Ni | Mo | Mn | Si | P | S | Cu | |
|--------------------------|-------|----------------|------|------|------|------|------|--------------------|--|
| 0.02 | 17.92 | 11.32 | 2.27 | 1.13 | 0.94 | 0.03 | 0.01 | 0.23 | |
| Tensile Strength: | | 81,800 PSI min | | | | | | Elongation: | |
| Yield Strength: | | 57,500 PSI min | | | | | | 37% | |

TYPICAL WELDING PARAMETERS

| Diameter | Voltage | Amperage | WFS (in/min) | Shielding Gas* |
|----------|---------|----------|--------------|---|
| .045" | 24 | 130 | 225 | 100% CO ₂ or Ar + 20-25% CO ₂ |
| .045" | 27 | 175 | 320 | |
| .045" | 30 | 240 | 530 | |
| .062" | 27 | 195 | 152 | 100% CO ₂ or Ar + 20-25% CO ₂ |
| .062" | 31 | 260 | 260 | |
| .062" | 34 | 320 | 360 | |

*Shielding gas flow rate 35 to 50 CFH. For 100% CO₂ use two volts higher than shown

STANDARD PACKAGING

FCAW 33-lb plastic spools 1,980-lb pallet



CLASSIFICATION

AWS/SFA 5.22, Class **E316/316LT1-1/4**