

# S-316LT.16

TYPE : Rutile

AWS A5.4 / ASME SFA5.4 E316L-16  
JIS Z3221 ES316L-16  
EN 1600 - E 19 12 3 L R

## Applications

Welding of extra-low carbon 18%Cr-12%Ni-2%Mo stainless steel for cryogenic applications.

## Characteristics on Usage

S-316LT.16 is a lime-titania type electrode for cryogenic applications, low carbon 316L austenitic steel (18%Cr-8%Ni-2%Mo) with good usability and weldability.

It has an excellent resistibility inter-crystalline corrosion in the as-welded condition since carbon content is less, and as it contains Mo., resistance to heat is also good.

## Notes on Usage

- ① Dry the electrodes at 350°C(662°F) for 60 minutes before use.
- ② Keep the current as low as possible and length as short as possible.
- ③ Remove rust, water, oil and paint from the groove.

## Welding Position



1G 2F 3G 4G  
(PA) (PB) (PF) (PE)

## Current

AC or DC +

## Typical Chemical Composition of All-Weld Metal (%)

| C     | Si   | Mn   | P     | S     | Cr   | Ni   | Mo  |
|-------|------|------|-------|-------|------|------|-----|
| 0.035 | 0.55 | 1.59 | 0.021 | 0.016 | 18.5 | 13.5 | 2.5 |

## Typical Mechanical Properties of All-Weld Metal

| TS<br>MPa(lbs/in <sup>2</sup> ) | EL<br>(%) | Temp.<br>°C (°F) | CVN-Impact Value<br>J (ft · lbs) |
|---------------------------------|-----------|------------------|----------------------------------|
| 538 (78,000)                    | 34.4      | -196 (-321)      | 40 (30)                          |

## Approval

ABS

## Packing

Packet 2.5 kg (5.5 lbs)  
Carton 2.5 kg (5.5 lbs) × 4 : 10kg(22 lbs)

## Sizes Available and Recommended Currents (Amp.)

| Size mm (in)  | 2.0 (5/64) | 2.6 (3/32) | 3.2 (1/8) | 4.0 (5/32) | 5.0 (3/16) |
|---------------|------------|------------|-----------|------------|------------|
| Length mm(in) | 300 (12)   | 300 (12)   | 350 (14)  | 350 (14)   | 350 (14)   |
| F             | 25 - 55    | 50 - 85    | 70 - 115  | 95 - 150   | 135 - 180  |
| V-up, OH      | 20 - 50    | 45 - 80    | 65 - 110  | 85 - 135   | -          |