# S-11016.G

*TYPE : Basic*

**AWS A5.5 / ASME SFA5.5 E11016-G**
**EN 757 - E62 2 Mn2NiMo B 1 2**

## Applications

S-11016.G can be used for welding of high tensile steel, such as pressure vessels, penstock and bridges.

## Characteristics on Usage

① Good X-ray performance.
② High crack resistance and good mechanical properties. Extremely reliable for welding of 780MPa(116,000lbs/in²) class high tensile steel.

## Notes on Usage

① Dry the electrodes at 350~400℃(662~752℉) for 60 minutes before use.
② Adopt back step method or strike the arc on a small steel plate prepared for this particular purpose.
③ Preheat at 150~200℃(302~392℉). The temperature varies in accordance with plate thickness and kind of steel.
④ If each pass welds becomes thicker than acceptable level by high amperage or low speed ratio application, the impact values and yield points will decrease.

## Welding Position

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

## Current

AC or DC +

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

| C | Si | Mn | P | S | Cr | Ni | Mo |
|---|---|---|---|---|---|---|---|
| 0.07 | 0.45 | 1.56 | 0.017 | 0.013 | 0.20 | 2.25 | 0.40 |

## Typical Mechanical Properties of All-Weld Metal

| YS MPa(lbs/in²) | TS MPa(lbs/in²) | EL (%) | Temp. ℃ (℉) | CVN-Impact Value J (ft · lbs) |
|---|---|---|---|---|
| 760 (110,300) | 790 (114,600) | 24.0 | -20 (-4) | 130 (96) |

## Approval

ABS

## I Packing

Packet 5 ㎏ (11 lbs)
Carton 5 ㎏ (11 lbs) × 4 : 20㎏(44 lbs)

## Sizes Available and Recommended Currents (Amp.)

| Size mm (in) | 2.6 (3/32) | 3.2 (1/8) | 4.0 (5/32) | 5.0 (3/16) | 6.0 (15/64) |
|---|---|---|---|---|---|
| Length mm(in) | 350 (14) | 350 (14) | 400 (16) | 400 (16) | 450 (18) |
| F | 60~90 | 90~130 | 130~180 | 180~240 | 250~310 |
| V-up, OH | 50~80 | 85~120 | 110~170 | 150~200 | - |