# LC-300U 

For vertical downward welding of $50 \mathrm{kgf} / \mathrm{mm}^{2}$ AWS A5.1 E7048 class high tensile strength steel

KS D 7006 E5016
JIS Z3211 E4948

## Applications

Vertical downward welding of ships, buildings and bridges.

## Characteristics

LC-300V is a low hydrogen type electrode for exclusively vertical downward welding Mechanical properties and crack resistibility of weld metal are good and slag is self-lifting. As higher amperage can be used, the efficiency of vertical welding is remarkably improved compared with vertical upward welding.

## Notes on usage

(1) Manipulate the electrode straight downward without weaving and press its tip against the mother plate as shown in the sketch.
(2) Dry the electrodes at $350 \sim 400^{\circ} \mathrm{C}$ for about 60 minutes before use.
(3) Adopt back step method or strike the arc on a small steel plate prepared for this particular purpose to prevent blowholes at the arc starting.

Typical chemical composition of weld metal (\%)

| C | Mn | Si | P | S |
| :---: | :---: | :---: | :---: | :---: |
| 0.08 | 1.03 | 0.55 | 0.011 | 0.009 |

## Typical mechanical properties of weld metal

| YP | EL | IV J (kgf-m) |  |
| :---: | :---: | :---: | :---: |
| $\mathrm{N} / \mathrm{mm}^{2}\left(\mathrm{kgf}^{2} \mathrm{~mm}^{2}\right)$ | $\mathrm{N} / \mathrm{mm}^{2}\left(\mathrm{kgf}^{2} / \mathrm{mm}^{2}\right)$ | $\%$ | $-30^{\circ} \mathrm{C}$ |
| $500(51)$ | $580(57)$ | 28 | $110(11)$ |

Size \& recommended current range (AC or DC + )

| Dia. (mm) |  | 3.2 | 4.0 | 4.5 | 5.0 | 5.5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{~L}(\mathrm{~mm})$ |  | 400 | 450 | 450 | 450 | 450 |
| Amp. | V-down | $100-160$ | $140-210$ | $180-240$ | $220-270$ | $260-330$ |

