

# LCW-400

For welding of 55kgf/mm<sup>2</sup> class high tensile strength weather proof steel

AWS A5.5 E8016-G  
KS D 7101 DA5816W  
JIS Z3214 DA5816W

## Applications

Welding of 55kgf/mm<sup>2</sup> class high tensile strength weather proof steels for pressure vessels, penstocks, bridges and rolling stock.

## Characteristics

LCW-400 is a low hydrogen type electrode for all position with satisfactory weldability and X-ray performance.

Deposited metal shows excellent crack resistance and mechanical properties. It is suitable for welding comparatively thick plates of weather proof steel.

## Notes on usage

- (1) Dry the electrodes at 350~400°C for about one hour before use.
- (2) 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.
- (3) Keep the arc as short as possible.

## Typical chemical composition of weld metal (%)

| C    | Mn   | Si   | P     | S     | Cu   | Ni   | Cr   |
|------|------|------|-------|-------|------|------|------|
| 0.07 | 0.77 | 0.47 | 0.015 | 0.008 | 0.36 | 0.46 | 0.53 |

## Typical mechanical properties of weld metal

| YP<br>N/mm <sup>2</sup> (kgf/mm <sup>2</sup> ) | TS<br>N/mm <sup>2</sup> (kgf/mm <sup>2</sup> ) | EL<br>% | IV J (kgf-m) |
|--|--|---------|--------------|
|  |  |         | -20°C        |
| 520(53)  | 620(63)  | 27      | 130(13)      |

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

| Dia. (mm) | 3.2    | 4.0    | 5.0     | 6.0      |         |
|-----------|--------|--------|---------|----------|---------|
|           | L (mm) | 350    | 400     | 400(450) | 450     |
| Amp.      | F      | 90-130 | 130-180 | 180-240  | 250-310 |
|           | V&OH   | 80-115 | 110-170 | 150-200  | -       |

• Tip Color : Green