

# KOSPEL-600H

FOR HARDFACING

## Typical applications

Hardfacing of metal mould, thermal cutting off machine, forging mould, dotting punch, compression tap, impact tap and axis of rotation.

## Coating

Low hydrogen type.

## Characteristics on Usage

- ① The microstructure of deposited weld metal has martensite.
- ② Preheat at 200~300°C and postheat treat at 500~600°C, if possible.
- ③ Keep up interpass temperature same as preheating temperature, if possible.
- ④ Redry the electrode at 300~350°C for 30~60 minutes prior to use.

## Typical chemical composition of all-weld-metal (%)

| C    | Si   | Mn   | Cr  | W   | V   |
|------|------|------|-----|-----|-----|
| 0.25 | 0.59 | 0.95 | 2.5 | 4.2 | 1.0 |

## Typical mechanical properties of all-weld-metal

| Conditions | As welded            |   | Heat treated (Air cooling) |               |               |               |
|------------|----------------------|---|----------------------------|---------------|---------------|---------------|
|            | Continuous surfacing | Preheat and interpass temperature 150°C | 350°C<br>×2hr              | 550°C<br>×2hr | 650°C<br>×2hr | 780°C<br>×2hr |
| HV         | 520~570              | 560~600                                 | 570~620                    | 640~690       | 530~580       | 280~320       |
| HRC        | 51~54                | 53~55                                   | 54~56                      | 57~60         | 51~54         | 27~32         |
| HS         | 67~71                | 71~74                                   | 71~75                      | 77~81         | 67~72         | 40~45         |

## Sizes available and recommended currents (AC or DC ⊕)

| Dia.   | (mm) | 2.6    | 3.2     | 4.0     | 5.0     |
|--------|------|--------|---------|---------|---------|
| Length | (mm) | 350    | 350     | 400     | 400     |
| Amp.   | F    | 90~130 | 100~150 | 120~170 | 150~200 |

## Welding positions



Approved by