FOR HARDFACING

KM-13CrM

Typical applications

Hardfacing of hot roller dies, tong punch and hot cutting knife, etc.

Coating

Lime titania type.

Characteristics on Usage

- ① The deposited weld metal has the microstructure of a fine carbide precipitation in austenite matrix.
- ② The high temperature hardness over 600℃ is high, so it has excellent abrasion-resistance.
- ③ Machining is possible in general.
- ④ Good bead appearance and restriking properties, preheating is not necessary in general, but preheat at 150°C and over only for high carbon steels and low alloy steels.

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

| С | Si | Mn | Cr | W | Мо |
|------|------|------|------|-----|-----|
| 0.30 | 0.48 | 12.4 | 11.8 | 1.8 | 1.5 |

Typical mechanical properties of all-weld-metal

| Conditions | As welded | |
|------------|-----------|--|
| HV | 310 | |
| HRC | 31 | |
| HS | 43 | |

Sizes available and recommended currents (AC or DC ⊕)

| Dia. | (mm) | 4.0 | 5.0 |
|--------|------|---------|---------|
| Length | (mm) | 400 | 400 |
| Amp. | F | 140~180 | 180~230 |

Welding positions



Approved by