# Hishiko Corporation

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# Covered Electrode for Direct Hardfacing on Cast Iron

# M H — 1

■ Standard

■ Covering Low Hydrogen Type

■ Tip Color Yellow

Application

Hardfacing and edge preparation on various kinds of cast iron mold.

#### Feature

- 1. MH-1 is the covered electrode which makes direct hardfacing on the various kinds of cast iron possible.
- 2. The first layer of deposited metal is austenitized by absorbing carbon from base metal and shows good ductility and notch toughness. The deposited metal is formed by mixture of austenite and martensite in the second layer. As a result, the second layer has excellent abrasion resistance.
- 3. In case of direct hardfacing on the cutting edge, use lower electric current to minimize penetration. It stabilizes hardness and prevents crack.

#### ■ Welding Procedure

- 1. To keep heat input low, please observe appropriate welding current depending upon the core diameter strictly.
- 2. Please do preheat base metal and keep interpass temperature between 100~150°C.
- Please keep bead length between 80~120mm and do peening just after each bead is finished.
- 4. Please keep arc length as short as possible and weld by stringer bead.
- 5. Please apply back step welding or start welding from outside of target area to avoid blowhole at starting part.
- 6. The electrode should be re-dried 30~60 minutes at over 300°C before use.

### ■ Typical Hardness of the Deposited Metal as welded(direct hardfacing on cast iron)

	HV	HRC	HS
1 <sup>st</sup> Layer	600~630	55 <b>~</b> 57	74 <b>~</b> 76
2 <sup>nd</sup> Layer	630~670	57 <b>~</b> 59	76 <b>~</b> 80
3 <sup>rd</sup> Layer	580 <b>~</b> 630	53 <b>~</b> 56	72~76

## Appropriate Welding Current (AC or DCEP)

Diameter (mm)	2.6	3.2	4.0
Length (mm)	300	350	400
Current (A)	50 <b>~</b> 70	80~110	100~130
Minimum Quantity (Kg)	3.0	5.0	5.0