### Hishiko Corporation

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## Solid Wire for Direct Hardfacing on Cast Iron (MAG Welding)

# $M \, H \, - \, 2 \, 0 \, 0 \, C \, S$

#### Application

Direct overlaying on various kinds of cast irons mold.

#### ■ Features

- 1. MH-200CS is MAG welding solid wire for hardfacing. MH-200CS achieves direct overlaying on cast irons molds. The hardness of the deposited metal is lower than MH-400S or MH-100CS.
- 2. The deposited metal forms austenite which has good notch toughness. Hence the deposited metal shows good crack resistance.
- 3. The hardness of the deposited metal is less than HRC30. Also the deposited metal is austenite, which is easy to become work hardening. Hence the deposited metal is hardened by impact.

#### ■ Welding Procedures

- 1. Preheating is not required but preheating and keeping interpass temperature at 100~150°C for dewatering and degreasing are effective in preventing crack. Too high preheating temperature and interpass temperature increase the risk of crack because over penetration.
- 2. Keep bead length between 80~120mm and do peening just after each bead.
- 3. To prevent over dilution of the base metal, use appropriate electric current and keep the arc length as short as possible. Also, weld by stringer bead.
- Typical Chemical Component of the Wire (%)

C, Si, Mn, Cr, Ni, Special Elements

Typical Hardness of the Deposited Metal as welded

HV	HRC	HS
240~300	20~30	34~42

■ Appropriate Welding Conditions (DC Wire+ with Pulse)

Diameter (mm)	Welding Current (A)	Welding Voltage (V)	Gas Flow (l/min.)
1.2	70 <b>~</b> 110	20~30	Ar+20%CO <sub>2</sub> 15~25

\*Minimum Quantity: 12.5Kg

Equivalent to electrode for shielded metal arc welding: MH-200C Equivalent to electrode for TIG welding: MH-200CT