Hishiko Corporation
Welding Consumables Sales Department
TEL: +81-49-222-2000 FAX: +81-49-223-1444
weldtech@hishiko.co.jp

Electrode for Direct Hardfacing on Cast Iron (TIG Welding)

M H － 4 0 0 T

■ Tip Color Black

■ Application

Overlaying on die face of cast irons mold and bead part.

■ Features

1. MH-400T is TIG welding electrode which makes direct overlaying on the cast iron mold possible.
2. The first layer of the weld metal is austenitized by absorbing carbon from base metal and shows good ductility and notch toughness. The weld metal is formed by mixture of austenite and martensite in the second layer. As a result, the second layer has excellent abrasion resistance.
3. MH-400T is suitable for overlaying on the place which abrades vigorously and is subjected to intense contact pressure, such as a die face of drawing die and bead part.

■ Welding Procedures

1. Preheating is not required but preheating and keeping interpass temperature at 100～150℃ 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.

■ Typical Chemical Components of the Electrode (%)

C	Si	Mn	Ni	Cr	Special Elements
≦0.03	0.5～0.6	1.2～1.3	5.8～6.1	4.4～4.6	1.0～2.0

■ Typical Hardness of the Weld Metal as welded (Base Metal: FC300)

	HV	HRC	HS
1st Layer	370～390	38～40	51～53
2nd Layer	440～470	45～47	59～63
3rd Layer	390～430	40～43	53～58

■ Dimensions

Diameter (mm)	Length (mm)	Minimum Quantity(Kg)
1.2 1.6 2.0	1,000	5

Equivalent to electrode for shielded metal arc welding: MH-100S,MH-100M
Equivalent to wire for MAG welding: MH-400S