

## Covered Electrode for Overlaying on Various Kinds of Molds

# M H - 6 5 0 R

- Standard                    JIS    DF3B-BR
- Covering                    Lime-titania Type
- Tip Color                    End Face : Green  
   Side Face : White

- Application  
Overlaying on the stamping mold, die, casting die and die-casting mold, hot and cold shear, clutch cam and so on.

- Features
  1. MH-650R is the air hardening covered electrode which has excellent toughness and crack resistance. Also its deposited metal contains similar elements with alloy tool steel SKD61.
  2. The deposited metal also shows excellent heat resistance and impact resistance. Hence MH-650R is also suitable for hardfacing on the mold which requires durability.

- Welding Procedures
  1. In general, preheating and interpass temperature at more than 200°C are required. If MH-650R is used for low alloy steel or special steel, preheating and interpass temperature at 300~400°C, post heating at 500~550°C and slow cooling are required.
  2. In case of multilayer welding or overlaying on the hardenable base metal, underlaying by low hydrogen type welding consumables for high tensile strength steel is effective in preventing crack.
  3. The electrode should be re-dried for 30 to 60 minutes at 200~ 300°C before use.

- Typical Chemical Component of the Deposited Metal (%)

C	Si	Mn	Cr	Mo	V
0.46	0.42	0.45	5.95	1.38	0.60

- Typical Hardness of the Deposited Metal as welded

Condition	HV	HRC	HS
Continuous Overlaying	580~680	54~60	72~80
Preheating, Interpass Temp. 200°C	620~720	56~61	75~83

- Appropriate Welding Current (AC or DCEP)

Diameter (mm)	2.6	3.2	4.0
Length (mm)	350	350	400
Current (A)	60~90	70~110	100~150
Min. Quantity (Kg)	3.0	5.0	5.0

Equivalent to wire for MAG welding: EDS-600  
 Equivalent to electrode for TIG welding: EDS-600T