

Electrode for Overlaying on Various Kinds of Molds (TIG Welding)

M H - 1 1 T

■ Tip Color Brown

■ Application

Overlaying on blanking mold, press mold, forming roll, punch and so on.

■ Features

1. MH-11T is TIG welding electrode for hardfacing. MH-11T consists of same components as alloyed tool steel, SKD11. It shows excellent corrosion, wear and impact resistance. These characteristics are suitable for hardfacing on the mold from which durability is required.
2. Machining is possible as welded. Also, it has excellent quench hardening property.

■ Welding Procedures

1. In general, preheating at more than 300°C is necessary.
2. More than 500°C preheating, 550~650°C post heating and slow cooling are necessary for welding of similar composition metals and welding on hardenable base metal.
3. Careful heat treatment after welding is necessary for preventing crack.
4. In general, hardenable metals such as high-carbon steel and low alloy steel are used for making mold. Hence underlaying by welding consumables for mild steel is effective to preventing crack.
5. For quench hardening, start air cooling from 1,000~1,050°C For tempering treatment, start quenching from 150~250°C or 500~530°C depending upon the purpose.

■ Typical Chemical Components of the Electrode (%)

C	Si	Mn	Ni	Cr	Mo	V
1.40~1.60	≤0.40	≤0.60	≤0.50	11.00~13.00	0.80~1.20	0.20~0.50

■ Typical Hardness of the Deposited Metal

Conditions	HV	HRC	HS
Preheating, Interpass Temp. 300°C	370~470	38~47	51~63
Quenching, Tempering	655~740	58~62	78~84

■ Dimensions

Diameter (mm)	Length (mm)	Minimum Quantity (Kg)
1.2 1.6 2.0	1,000	5
2.4 3.2 4.0		