

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

**GRIDUR61T  
MH-61NT**

■ Tip Color                      Red

■ Application

Overlaying on blanking mold, press mold, forging mold, die cast mold and so on.

■ Features

1. GRIDUR61T is not plated. On the other hand, MH-61NT is nickel-plated for rust prevention.
2. GRIDUR61T and MH-61NT are TIG welding electrode for hardfacing. These consist of same components as alloyed tool steel, SKD61. It shows excellent heat, wear and impact resistance. These characteristics are suitable for hardfacing on the mold from which durability is required.
3. The deposited metal has high hardness as welded.  
MH-61NT is nickel-plated and Nickel lowers the hardness of the deposited metal. So the hardness of the deposited metal of MH-61NT is about HRC5 lower than GRIDUR61T's.

■ Welding Procedures

1. In general, preheating at more than 300°C is necessary.
2. Between 300~400°C preheating, 500~550°C post heating and slow cooling are necessary for welding of similar composition metals and welding on hardenable base metal.
3. 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.
4. For annealing treatment, start slow cooling from 820~870°C. For quench hardening, start quenching from 1,000~1,050°C Under as welded, the deposited metal is in quench hardening stage.

■ Typical Chemical Components of the Electrode (%)

C	Si	Mn	Cr	Mo	V
0.32~0.42	0.80~1.20	≤0.50	4.50~5.50	1.00~1.50	0.80~1.20

■ Typical Hardness of the Deposited Metal as welded (GRIDUR61T)

Conditions	HV	HRC	HS
Continuous Welding	530~600	51~55	68~74
Preheating, Interpass Temp. 300°C	560~635	53~57	71~77

■ Dimensions

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

Equivalent to electrode for shielded metal arc welding: GRIDUR61

Equivalent to wire for MAG welding: MH-61S