

## Solid Wire for Anti Hot Impact Wear (MAG Welding)

# M H - 6 1 S

### ■ Application

Overlaying on hot dies, shear, die cast mold and forging mold

### ■ Features

- MH-61S is solid wire for MAG welding. It is corresponding to the alloy tool steel, SKD61. It has excellent crack resistant property. Also the deposited metal show high hardness, excellent heat resistance and impact wear resistance even as welded.
- Compare to flux cored wire, fume generation is few. Appearance of bead and welding performance are good.

### ■ Welding Procedures

- Please use MAG welding machine with pulse system and Ar+20%CO<sub>2</sub> for the shield gas. The appropriate gas flow rate is 15~25 ℓ/min.
- In general, the base metal should preheat to more than 150°C. Low alloy steel and special steel require over 300°C preheating.
- After welding, about 500°C slow cooling is required.
- In case of multilayer welding or overlaying on the material which has high hardenability, underlaying by welding consumables for high tensile strength steel is effective in preventing crack.

### ■ Typical Chemical Components of the Wire (%)

C	Si	Mn	Ni	Cr	Mo	V
0.32~0.42	0.80~1.20	≤0.50	≤0.25	4.50~5.50	1.00~1.50	0.80~1.20

### ■ Typical Hardness of the Deposited Metal as welded

HV	HRC	HS
560~650	53~58	71~78

### ■ Appropriate Welding Conditions (DC Wire + with Pulse)

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

\* Minimum Quantity: 12.5kg

Equivalent to electrode for shielded metal arc welding: MH-650, GRIDUR61

Equivalent to electrode for TIG welding: GRIDUR61T