

Solid Wire for Hardfacing (MAG Welding)

M H - 1 3 H S

■ Application

Overlaying on the mold for corrosion resistant plastic such as PD555 and HPM38, blanking mold and press mold. Hardfacing for forming roll, valve, shear and punch.

■ Features

1. MHP-13HS is MAG welding wire for hardfacing. The deposited metal is martensite structure, which is high-carbon 13%Cr steel type. Also the deposited metal has strong self hardening property. As a result, the hardness of the deposited metal exceeds HV500 as welded.
2. The deposited metal has good heat, corrosion and wear resistance.

■ Welding Procedures

1. Preheating and interpass temperature require more than 200°C

■ Typical Chemical Components of the Wire (%)

C	Si	Mn	Ni	Cr
0.32	0.35	0.35	0.20	12.5

■ Typical Hardness of the Deposited Metal

Conditions	HV	HRC	HS
As Welded	500~560	49~53	66~70
600°Cx2h→Furnace Cooling	330~350	33~36	46~50

■ Appropriate Welding Conditions (DC Wire+ with Pulse)

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

*Minimum Quantity: 12.5Kg

Equivalent to electrode for shielded metal arc welding: KT-11CR
 Equivalent to electrode for TIG welding: MHP-13T