

## SMAW WELDING FOR HARD SURFACE WEAR RESISTANCE

### DESCRIPTION & APPLICATIONS :

- SH-50 belongs to titanium oxide low hydrogen electric welding rod, and the dissolved gold component is Matian loose iron structure.
- Because of its high hardness, it is suitable to preheat and relieve stress, avoid cracking, have good corrosion resistance and acid resistance, and have excellent impact wear resistance at high temperature.
- It is suitable for repairing conveyor runner, transmission steel wheel, steel nail and other workpieces.

### NOTE ON USAGE :

- The rust layer, moisture, oil stain, dust, etc. of the welded part shall be removed.
- Before welding, the weld should be dried at 300 ~ 350°C for 30 ~ 60 minutes. When in use, a small amount should be taken out and put into a drying cylinder at 100 ~ 150°C. The maximum amount of weld carried out should be the same day.
- It is recommended that the workpiece be preheated above 200°C.

### WELDING POSITION :



### TYPICAL CHEMICAL COMPOSITION OF WELD METAL (wt%) :

C	Mn	Si	Ni	Cr
0.21	0.30	0.65	0.18	14.20

### TYPICAL MECHANICAL PROPERTIES OF WELD METAL :

Condition		Vicker's (HV)		Rockwell's (HRC)		Shores's (HS)
Layer temperature 150 °C under		545		52		70
pile up welding		500		49		66
After harden		595		55		74
High temperature hardness	Temperature (°C)	200	300	400	500	-
	Vicker's (HV)	460	400	290	160	-

### SIZE AND RECOMMENDED CURRENT RANGE : AC or DC(+)

Diameter (mm)	3.2	4.0	5.0
Length (mm)	350	350	350
Current (Amp)	80-120	120-170	160-210