

## SMAW WELDING FOR HARD SURFACE WEAR RESISTANCE

### DESCRIPTION & APPLICATIONS :

- The filler metal of SH-MN is 13% Mn-4% Ni, which shows stable Vostian iron structure and excellent crack resistance.
- It has high work hardening property and good strength and toughness, and is suitable for heavy impact wear.
- It is suitable for heap welding of crusher cone body, crusher punch, etc. and nest burying repair welding of 13 Mn cast steel.

### NOTE ON USAGE :

- 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.
- The welding of 13 Mn steel does not need preheating, and low current should be used to prevent the base metal from overheating.

### WELDING POSITION :



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

C	Mn	Si	Ni
0.67	15.20	0.18	3.00

### TYPICAL MECHANICAL PROPERTIES OF WELD METAL :

Condition	Vicker's (HV)	Rockwell's (HRC)	Shores's (HS)
Layer temperature 150°C under	460	46	62

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

Diameter (mm)	3.2	4.0	5.0
Length (mm)	350	400	400
Current (Amp)	80-120	120-170	160-210