

SMAW WELDING FOR HARD SURFACE WEAR RESISTANCE

DESCRIPTION & APPLICATIONS :

- SH-90 is a low hydrogen electric welding rod, which forms a hard self-hardening Martenitic iron structure due to carbide precipitation.
- High hardness, slightly poor toughness, no heat treatment, no mechanical cutting, but can maintain the best wear property, suitable for low impact, intense wear parts.
- Suitable for civil construction machinery, dredging machinery, buckets, sand suction pumps, etc.

NOTE ON USAGE :

- Before welding, the weld shall be dried at 300 ~ 350°C for 60 minutes. When in use, a small amount shall be taken out and put into a drying cylinder at 100 ~ 150°C. The maximum amount of weld carried out shall be the same day.
- Base metal preheating and layer temperature should be controlled above 300°C.
- Low hydrogen welding material is recommended for backing welding material.

WELDING POSITION :



TYPICAL CHEMICAL COMPOSITION OF WELD METAL (wt%) :

C	Mn	Si	Cr	Mo
0.63	1.07	1.0	7.60	0.93

TYPICAL MECHANICAL PROPERTIES OF WELD METAL :

Condition	Vicker's (HV)	Rockwell's (HRC)	Shores's (HS)
Layer temperature 150°C under	665	58	78
pile up welding	620	56	75

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