

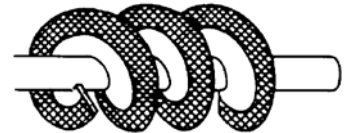
# TH-50

## Characteristics and Applications:

TH-50 is a low hydrogen type electrode. The weld metal is a 12%Cr martensitic structure and has good work-hardening property, corrosion resistance and also resistance to abrasion accompanied with impact at high temperature. It is suitable for the welding of agitator propellers and drive sprockets.

## Notes on usage:

1. Dry the electrodes at 250-300°C for 60 minutes before use.
2. Pre-heating the plates at 200°C and followed by air cooling and Stress-relieving.
3. Be sure to clean up the contaminations on the base metal to avoid porosity and crack.



## Typical chemical composition of weld metal (wt%):

	C	Mn	Si	Cr	Ni
Typical value	0.22	0.3	0.6	12.00	0.2

## Typical hardness of weld metal:

Testing Condition		Vicker's Hardness (HV)		Rockwell's Hardness (HRC)		Shore's Hardness (HS)
As Welded	Interpass temp. 150°C	360		53		50
	Cont. Build Up	350		52		49
Work Hardening		430		58		58
High Temp.	Temp. (°C)	200	300	400	500	-
	Hardness (HV)	470	410	300	170	-

## Welding position:



## Sizes and recommended current range (AC or DC <+>):

Diameter (mm)	3.2	4.0	4.8
Length (mm)	350	350	350
Amps	80-130	120-180	160-220

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