

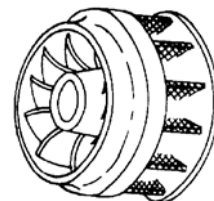
# TH-50N-4

## Characteristics and Applications:

TH-50N-4 deposits the weld metal of 12%Cr martensite structure which contains the elements such as Ni, Mo. The weld metal provides stable hardness, better corrosion resistance, heat resistance and crack resistance than TH-50 at high temperature. It is suitable for the welding of dies, blades, seat rings and agitator propellers.

## Notes on usage:

1. Be sure to clean up the contaminations on the base metal to avoid porosity and crack.
2. Dry the electrodes at 250-300°C for 60 minutes before using.
3. Preheat the plates at 150°C
4. Use back-step method to prevent arc starting from blowholes and stay for 3-5 seconds before every end-up.
5. Maintain short arc length. Moving range should be controlled within 2.5 times of the wire's dia when you are welding with weave method.



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

C	Mn	Si	Cr	Ni	Mo
0.15	0.25	0.65	11.00	3.5	0.75

## Typical hardness of weld metal:

Testing Condition	Vicker's Hardness (HV)	Rockwell's Hardness (HRC)	Shore's Hardness (HS)
Interpass temp. 150°C (As Welded)	510	50	66

## 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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