

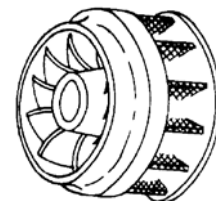
# TH-50N-4

## 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
Typical value	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

\* The information contained or otherwise referenced herein is presented only as "typical" without guarantee or warranty, and TienTai Electrode Co., Ltd. expressly disclaims any liability incurred from any reliance thereon. Typical data is obtained when welded and tested in accordance with AWS specification. Other tests and procedures may produce different results. No data is to be construed as recommendation for any welding condition or technique not controlled by TienTai Electrode Co., Ltd.