# **TNM-17**

## **Characteristics and Applications:**

TNM-17 is a nickel based low hydrogen type covered electrode (for DC) containing less C and Si for reducing carbide precipitation in grain boundary. The excellent heat resistance and corrosion resistance are suitable for chemical plant and FGD equipments. It is also suitable for HASTELLOY C-276 and dissimilar metal and Ni-Cr-Mo corrosion-resistant alloy welding. Proper base metals include ASTM B574/575/619/622/626 and available for flat position only.

### Notes on usage:

- 1. Be sure to clean up the contaminations on the base metal, groove and pass to pass with stainless steel brush.
- 2. Dry the electrodes at 350~400°C for 60 minutes before using. Take out a batch of half day consumption and keep at 100~150°C during welding process.
- 3. Use back-step method to prevent arc starting from blowholes and hold for 3-5 seconds at every end-up.
- 4. Maintain short arc length to prevent porosity problem
- 5. Do not exceed the range of recommended current. Over heat input might decrease the impact value.
- 6. It is hard to proceed by overhead or vertical position, flat position in stead is recommended.

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

С	Mn	Si	Р	S	Cr	Ni	W	Fe	Мо
0.02	0.4	0.15	0.015	0.01	16.40	57	3.50	5.50	16.00

## Typical mechanical properties of weld metal:

Tensile strength	Elongation	
MPa(ksi)	%	
735(107)	39	

#### Welding position:



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

Diameter (mm)		3.2	4.0	
Length (mm)		350	350	
Amps	F	80-110	100-140	

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