T-14

AWS A5.1 E7014

Characteristics and Applications:

T-14 is an iron-powder rutile-type titanium oxide electrode for all-position welding of 490N/mm^2 grade high tensile steel. It is good for the welding in big groove due to the low deposited character and the weld bead is smooth and the slag is easy to remove. The product has a lot features for the application of shipbuilding, vehicles, machine structure and suitable for low alloy steels, carbon steels, structural steels, thin steel plate, ASTM A486 Gr.70、A709 Gr.36…etc.

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 130℃ for 60 minutes before use. Take out a batch of half day consumption and keep in the environment at 100~150℃ during welding process.
3. Use back-step method and hold for 3-5 seconds at every end-up to prevent arc starting from blowholes.
4. Maintaining short arc length as possible is highly recommended. While welding with weave method, moving range should be controlled within 3 times of the wire's dia.
5. Do not exceed the range of proper currents. Over heat input might decrease the impact toughness.

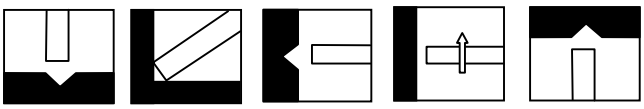
Typical chemical composition of weld metal (wt%)

C	Mn	Si	P	S
0.10	0.70	0.45	0.02	0.01

Typical mechanical properties of weld metal

YS (MPa)	TS (MPa)	EL %	CVN -20℃ J
490	560	19	44

Welding position



Sizes and recommended current range (AC or DC＜±＞)

Diameter (mm)		2.6	3.2	4.0	5.0
Length (mm)		350	350	450	450
Amps	F	55-85	90-130	130-180	180-240
	V & OH	50-80	80-120	130-160	-

COVERED ELECTRODES

TIEN TAI
AN ILLINOIS TOOL WORKS COMPANY
No.6 Kai Fa 4th Rd. Pao An Vill., Jen Teh Hsiang,
Tainan Hsien, Taiwan.
TEL:886-6-2663721 /FAX:886-6-2664301
E-mail:ttrad@mail.tientai.com.tw
http:/www.tientai.com