# **TWE-711Ni**

AWS A5.20 E71T- 1CJ/ E71T-9CJ EN ISO 17632-A-T 42 4 P C1 1 H10 JIS Z 3313 T 49 4 T1-1 C A-U

#### **Characteristics and Applications:**

TWE-711Ni is a gas-shielded flux cored wire designed for mild steel and 490N/mm² high tensile steel. It is suitable for all position welding. It provides stable arc, less spatter, easy slag removable, and excellent X-Ray inspection. It provides good low-temperature impact value due to 0.4%Ni in weld metal. The typical applications include shipbuilding, vessels, piping etc.

#### Notes on usage:

- 1. Use (DC+) polarity.
- 2. Use CO<sub>2</sub> as shielding gas.
- 3. To get desired impact value, your must control welding heat imput, as excessive heat input would decrease notch toughness.
- 4. Keep the product dry, while it is stored or delivered.

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

	С	Mn	Si	Р	S	Ni
AWS	≦0.12	≦1.75	≦0.90	≦0.03	≦0.03	≦0.50
EN ISO	-	≦2.0	-	-	-	≦0.5
Typical value	0.04	1.30	0.33	0.015	0.009	0.42

#### Typical mechanical properties of weld metal:

	Yield strength MPa(ksi)	Tensile strength MPa(ksi)	Elongation %	Charpy V-Notch J (ft-lbf) -40°C(-40°F)
AWS	≥390(58)	490-670(70-95)	≧22	≥27(20)
EN ISO	<b>≥420(61)</b>	500-640(73-93)	≧20	≥47(35)
Typical value	490(71)	560(81)	31	80(59)

### Welding position:













## Sizes and recommended operating range (DC<+>): Stick out: 15-25 (mm), flow rate: 20-25 (l/min):

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Position	Diameter (mm)	1.2	1.6
F, HF		160A~280A / 24V~33V	180A~300A / 24V~36V
VU, OH		150A~220A / 24V~28V	160A~230A / 24V~28V
VD		230A~280A / 28V~33V	250A~300A / 24V~30V
Н		200A~260A / 26V~30V	220A~280A / 23V~29V

<sup>\*</sup> 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.

