TWE-811Ni2

Characteristics and Applications:

TWE-811Ni2 is a titania type flux-cored wire for all-position MAG welding. It provides good weldability with smooth bead appearance, less spatter and stable arc as well as good impact properties down to -40 $^{\circ}$ C.

It is suitable for welding of 590 N/mm² high tensile strength steel on construction machinery, structures, bridges, storage tanks and piping.

Notes on usage:

- 1. Must pre-heating at 50~150 $^\circ\!\!\mathbb{C}$ varied on steels, plate thickness and restraint.
- 2. Mechanical properties might fall when heat input is over 35J/cm. Therefore, perform welding with lower welding current and heat input.
- 3. Maintain inter-pass temperature under 150° C in multi-pass welding to keep excellent mechanical properties. Use 99.8% or higher purity of CO₂ Gas.
- 4. Use DC(+) polarity.
- 5. Keep dry during storage and delivery.

Typical chemical composition of weld metal (wt%) :

С	Mn	Si	Р	S	Ni
0.04	1.10	0.35	0.012	0.008	2.45

Typical mechanical properties of weld metal:

Yield strength MPa(ksi)	Tensile strength MPa(ksi)	Elongation %	Charpy V-Notch J (ft-lbf) -40°C (-40)
540(78)	630(91)	26	50(37)

Welding position:



Sizes and recommended parameter range (DC +): Stick out:15-25(mm), flow rate:20-25(I/min):

Diameter(mm) Position	1.2	1.6
F HF	180-300A / 26V-36V	200-350A / 24V-38V
VU OH	150-220A / 24V-28V	160-220A / 24V-28V

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