

TWE-81K2

AWS A5.29 E81T1-K2C
EN ISO 17632-A-T 46 6 1.5Ni P C1 1 H5

Characteristics and Applications:

TWE-81K2, a titania type flux-cored wire, is designed for welding 560 N/mm² high tensile steel for low temperatures. The weld metal contains about 1.5%-Ni and makes good notch toughness at temperatures down to -60°C under as-welded condition.

It provides excellent usability with stable arc and efficiency in all-position welding.

It is suitable for butt or fillet welding of offshore structures for low-temperature districts, LNG and LPG carriers, and storage tanks, etc.

Notes on usage:

1. When the heat input is excessive, the impact value tends to be reduced. Therefore, perform welding with selecting proper heat input depending on the required impact value.
2. Use DC(+) polarity.
3. Use 99.8% or higher purity of CO₂ gas.
4. Keep the product dry, while it is stored or delivered.

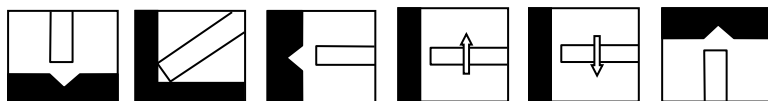
Typical chemical composition of weld metal (wt%):

C	Mn	Si	P	S	Ni
0.04	1.08	0.20	0.013	0.006	1.50

Typical mechanical properties of weld metal:

Yield strength MPa(ksi)	Tensile strength MPa(ksi)	Elongation %	Charpy V-Notch J (ft-lbf) -60°C (-76°F)
580(84)	635(92)	26	75(60)

Welding position:



Sizes and recommended parameter range (DC +):

Stick out:15-25(mm), flow rate:20-25(l/min):

Position	Diameter(mm)	1.2	1.6
	F HF		180-300A / 24V-34V
VU OH		150-220A / 23V-28V	160-220A / 22V-26V

* The information contained or otherwise referenced herein is presented only as "typical" values and does not constitute a guarantee or warranty. TTT and TTT Electrode Co., Ltd. expressly disclaims any liability.