ArcStar 81K2M

AWS A5.29 E81T1-K2M
EN ISO 17632-A-T 46 6 1.5Ni P M21 1 H5

Characteristics and Applications:

ArcStar 81K2M is a titania type flux cored wire designed for welding 560 N/mm^2 high tensile steel for low temperatures. The weld metal contains about 1.5%Ni and makes good notch toughness at temperatures down to -60℃ 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 75~80%Ar+25~20%CO_2 as shielding gas.
4. Keep the product dry, while it is stored or delivered.

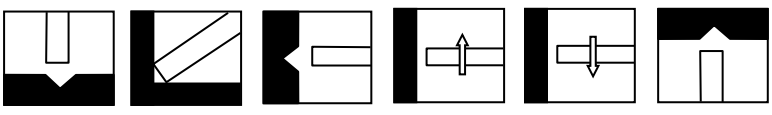
Typical chemical composition of weld metal (wt%):

C	Mn	Si	P	S	Ni
0.04	1.10	0.20	0.013	0.007	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)
545(79)	610(88)	28	95(70)

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	200-350A / 24V-34V
VU OH	150-220A / 23V-28V	160-220A / 22V-26V