K-110TK3M

For 760MPa high tensile steel

Classifications

EN ISO 18276-A:2006	: T69 2 Mn2NiMo P M 1 H5	AWS A5.29-10	: E111T1-K3M
EN ISO 18276-B:2006	: T76 2 T1-1MA-N3M2 H5	AWS A5.36-12	: E111T1-M21A4-K3-H4
JIS Z 3313	: T76 2 T1-1MA-N3M2 H5		

Description

- It is designed for welding of 760MPa high tensile steel with outstanding mechanical properties
- Typical applications include high tensile steels that will be used a low temperature environment (ASTM A514; A517; A710, JIS G 3128 SHY, HY-80, Q690 Grade)
- Wire is a titania type of flux cored wire for all-position welding
- The weld metal contains about 2.0%Ni and has good impact value at low temperatures
- It is compared to a low alloy E11018M electrode, higher deposition rates

Welding positions

Polarity & shielding gas

- Mix: Ar+20% CO_2 (15~25ℓ/min)
- DCEP (DC+)

Typical chemical composition of all-weld metal (%)

Shielding gas	C	Si	Mn	P	S	Ni	Mo
Mix	0.04	0.48	1.65	0.010	0.008	2.00	0.45

Typical mechanical properties of all-weld metal

	Y.S (MPa)	T.S (MPa)	El. (%)	IV (J) 0℃	IV (J) -20℃	Remarks
AWS A5.29	min. 680	760~900	min. 15		≥ 27	
EN ISO 18276-B	min. 680	760~960	min. 13		≥ 27	
Example	740	785	19	100	80	Mix

Notes on usage and welding condition

- Refer to page 211~213 for more information on usage
- In case of heavy plate welding, preheat and maintain interpass temperature at 100~200℃ in order to prevent crack at low temperatures

Package

Dia. (mm)	1.2	1.4	1.6
Spool (kg)	5, 12.5, 15, 20		
Pailpack (kg)	100 ~ 300		