

K-110TK3

For 760MPa high tensile steel

Classifications

EN ISO 18276-A:2006	: T69 2 Mn2NiMo P C 1 H5	AWS A5.29-10	: E111T1-K3C
EN ISO 18276-B:2006	: T76 2 T1-1CA-N3M2 H5	AWS A5.36-12	: E111T1/T9-C1A4-K3-H4
JIS Z 3313	: T76 2 T1-1CA-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

- CO₂: 100% CO₂ (15~25ℓ/min)
- DCEP (DC+)

Typical chemical composition of all-weld metal (%)

Shielding gas	C	Si	Mn	P	S	Ni	Mo
CO ₂	0.04	0.51	1.72	0.011	0.009	2.04	0.42

Typical mechanical properties of all-weld metal

	Y.S (MPa)	T.S (MPa)	El. (%)	IV (J)		Remarks
				-20°C	-40°C	
AWS A5.29	min. 680	760~900	min. 15	≥ 27		
EN ISO 18276-B	min. 680	760~960	min. 13	≥ 27		
Example	751	834	21	100	75	CO ₂

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°C 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		

Approvals

Shielding gas	ABS	BV	DNV
CO ₂	E110T1-K3	S4Y69H5	VY69MSH5