

K-81TM

For 560MPa high tensile steel

Classifications

EN ISO 17632-A:2008	: T50 4 1Ni P M 1 H5	AWS A5.29-10	: E81T1-Ni1M
EN ISO 17632-B:2008	: T55 4 T1-1MA-N2 H5	AWS A5.36-12	: E81T1/T9-M21A4-Ni1-H4
JIS Z 3313	: T57 4 T1-1MA-N2-U H5	KS D 7104	: YFW-A604R

Description

- It is designed for welding of 560MPa high tensile steel with outstanding mechanical properties
- Typical applications include machineries, shipbuilding, offshore structures, bridges and general fabrications
- Wire is a titania type of flux cored wire for all-position welding with 1.0% Ni component
- It provide good wet-in capabilities along with high impact values at low temperatures (-40°C)

Welding positions



Polarity & shielding gas

- Mix: Ar+20% CO₂ (15~25ℓ/min)
- DCEP (DC+)

Typical chemical composition of all-weld metal (%)

Shielding gas	C	Si	Mn	P	S	Ni
Mix	0.03	0.35	1.17	0.013	0.010	0.92

Typical mechanical properties of all-weld metal

	Y.S (MPa)	T.S (MPa)	El. (%)	IV (J)		Remarks
				-30°C	-40°C	
AWS A5.29	min. 470	550~690	min. 19	≥ 27		
EN ISO 17632-B	min. 460	550~740	min. 17		≥ 27	
Example	590	650	28	120	100	Mix

Notes on usage and welding condition

- Refer to page 211~213 for more information on usage
- When you use to Ar+CO₂ mixture gas, you should be lower 1~2 voltage than 100% CO₂ gas

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	LR
CO ₂	4YSAH5	4YSH5	NY46MS(H5)	4YSH5