

Flux Cored Welding Wire

K-81TK2M

For 560MPa low temperature service steel (1.5% Ni)

Classifications

EN ISO 17632-A:2015 : T50 6 1.5Ni P M21 1 H5	AWS A5.29-2010 : E81T1-K2M
EN ISO 17632-B:2015 : T55 6 T1-1M21 A-N3-U H5	AWS A5.36-2016 : E81T1-M21A8-K2
JIS Z 3313-2009 : T55 6 T1-1M A-N3-U H5	KS D 7104-2012 : YFL-A506R

Description

- It is designed for welding of 560MPa high tensile steel for low temperature service of below -60°C
- Typical applications include offshore structures, LNG and LPG carriers and storage tank
- Wire is a metal type of flux cored wire for all-position welding
- The weld metal contain about 1.5% Ni so, good impact value at low temperatures down to -60°C
- It feature good porosity resistance and easy slag removal and deposition rate is higher than a titania type

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	0.43	1.45	0.012	0.009	1.50

Typical mechanical properties of all-weld metal

	Y.S (MPa)	T.S (MPa)	El. (%)	IV (J)		Remarks
				-30°C	-60°C	
AWS A5.29	min. 470	550~690	min. 19	≥ 27		
EN ISO 17632-B	min. 460	550~740	min. 17		≥ 47	
Example	550	640	25	120	95	Mix

Notes on usage and welding condition

- Refer to page 219~221 for more information on usage
- In order to prevent crack at low temperatures, preheat and maintain interpass temperature at 100~200°C

Package

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