Flux Cored Welding Wire

K-81TSR

For 560MPa low temperature service steel (PWHT, CTOD)

Classifications

EN ISO 17632-A:2015	: T50 6 1.5Ni P C1 1 H5	AWS A5.29-2010	: E81T1-K2C H4
EN ISO 17632-B:2015	: T55 6 T1-1C1 AP-N3-U H5	AWS A5.36-2016	: E81T1-C1G8-K2-H4
JIS Z 3313-2009	: T55 6 T1-1C AP-N3-U H5	KS D 7104-2012	: YFL-C506R

Description

- It is designed for welding of 560MPa high tensile steel for low temperature service
- Typical applications include offshore structures, LNG and LPG carriers and storage tank
- Wire is a titania type of flux cored wire for all-position welding
- It feature easy slag removal, low spatter generation, and good impact value at low temperature down to -60℃ in the PWHT conditions

Welding positions

Polarity & shielding gas

- CO_2: 100% CO_2 (15~25ℓ/min)
- DCEP (DC+)

Typical chemical composition of all-weld metal (%)

Shielding gas	C	Si	Mn	P	S	Ni
CO_2	0.02	0.31	1.21	0.011	0.010	1.47

Typical mechanical properties of all-weld metal

		Y.S (MPa)	T.S (MPa)	El. (%)	IV (J) -30℃	IV (J) -60℃	Remarks
AWS A5.29		min. 470	550~690	min. 19	≥ 27		
EN ISO 17632-B		min. 460	550~740	min. 17		≥ 47	
Example	AS-weld	570	640	25	125	90	
	PWHT	520	600	29	85	65	620℃×2Hr

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℃

Package

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

Approvals

ABS, BV, DNV*GL, KR, LR, NK, JIS

* Please refer to our homepage(www.kiswel.com) for further detailed information regarding approvals.