Flux Cored Welding Wire

K-91TK2

For 620MPa low temperature service steel (1.5% Ni)

Classifications

EN ISO 18276-A:2017	: T55 4 Mn1.5Ni P C1 1 H5	AWS A5.29-2010	: E91T1-K2C H4
EN ISO 18276-B:2017	: T62 4 T1-1 C1 A-N3M1 U H5	AWS A5.36-2016	: E91T1-C1A4-K2-H4
JIS Z 3313-2009	: T62 4 T1-1C A-N3-U H5	KS D 7104-2012	: YFL-C504R

Description

- It is designed for welding of 620MPa high tensile steel for low temperature service
- 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℃
- It feature good weldability together with excellent properties for the semi-automatic and automatic welding of many higher strength steels

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	0.03	0.45	1.27	0.012	0.009	1.45

Typical mechanical properties of all-weld metal

	Y.S (MPa)	T.S (MPa)	El. (%)	IV (J) -20℃	IV (J) -40℃	Remarks
AWS A5.29	min. 540	620~760	min. 17	≥ 27		
EN ISO 17632-B	min. 530	620~820	min. 15		≥ 47	
Example	550	640	25	135	90	CO_2

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, JIS

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