Flux Cored Welding Wire

K-91TSR

For 620MPa low temperature service steel (PWHT, CTOD)

Classifications

EN ISO 18276-B:2017 :T62 5 T1-1 C1 AP-N4M21 H5
JIS Z 3313-2009 : T62 5 T1-1C AP-N5 H5

AWS A5.29-2010 : E91T1-Ni2CJ H4
AWS A5.36-2016 : E91T1-C1A6-Ni2-H4
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
- It could be able to all-position welding, weld metal contains 2.0%Ni and has a good low temperature toughness at -60℃ after PWHT
- It provides soft welding arc, high deposition rate and low spatter generation

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	0.04	0.37	1.38	0.009	0.002	2.18

Typical mechanical properties of all-weld metal

		Y.S (MPa)	T.S (MPa)	El. (%)	IV (J) -50℃	IV (J) -60℃	Remarks
AWS A5.29		min. 540	620~760	min. 17	≥ 27		
Example	AS-weld	617	674	24	103	88	
	PWHT	567	630	27	117	90	600℃×8Hr

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		