

## Flux Cored Welding Wire

# K-309LF

Austenitic Stainless welding wire (Low C, Dissimilar joints)

### Classifications

EN ISO 17633-A:2010 : T 23 12 L R C1/M21 3  
EN ISO 17633-B:2010 : TS 309L-F C1/M21 0  
AWS A5.22-2012 : E309LT0-1/4

KS D 3612-2016 : YF-309LC  
JIS Z 3323-2007 : TS309L-FB0

### Description

- Dissimilar joint welds ; of and between high-strength, mild steels and low allowed QT-steels, stainless, ferritic Cr- and austenitic Cr-Ni-steels, manganese steels
- Cladding ; for the first layer of corrosion resistant weld claddings on ferritic-perlitic steels in boiler and pressure vessel parts up to fine-grained steel S500N.
- Wire is a titania type of flux cored wire for flat and horizontal position welding and it provides better weldability together with excellent corrosion resistance.
- Wire has low spatter, easy slag removal and good weld soundness.

### Welding positions



### Polarity & shielding gas

- CO<sub>2</sub>: 100% CO<sub>2</sub> (15~20ℓ/min),  
Mix: Ar+20% CO<sub>2</sub> (15~25ℓ/min)
- DCEP (DC+)

### Typical chemical composition of all-weld metal (%)

Shielding gas	C	Si	Mn	Cr	Ni	FN
CO <sub>2</sub>	0.03	0.60	1.42	23.30	13.17	
Mix	0.03	0.75	0.45	23.50	13.30	5-12 & 11-16

### Typical mechanical properties of all-weld metal

	Y.S (MPa)	T.S (MPa)	EI. (%)	IV (J) -30°C	Remarks
AWS A5.22		min. 520	min. 30		
EN ISO 17633-B	min. 320	min. 520	min. 25		
Example	420 430	560 570	37 38	43 50	CO <sub>2</sub> Mix

### Notes on usage and welding condition

- Refer to page 313 for more information on usage
- When heat input is excessive, base metal will be bended or distorted due to the bad heat conductivity. Therefore, perform welding with selecting proper heat input

### Package

Dia. (mm)	0.9	1.2	1.6
Spool (kg)		5, 12.5, 15	

### Approvals

DNV\*GL, JIS

\* Please refer to our homepage([www.kiswel.com](http://www.kiswel.com)) for further detailed information regarding approvals.