K-309LT

Austenitic Stainless welding wire (Low C, dissimilar joints)

Classifications

EN ISO 17633-A:2008	: T 23 12 L P C(M) 1	KS D 3612	: YF-309LC
EN ISO 17633-B:2008	: TS309L-FB1	JIS Z 3323	: TS309L-FB1

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.
- Weld metal contains comparatively much more ferrite in their austenitic structure, therefore they provide better weldability together with superior heat resistance, and corrosion resistance.
- It is easy to use and operate with a powerful penentrating spray arc transfer, minumum spatter formation and self releasing slag.

Welding positions

Polarity & shielding gas

- CO_2: 100% CO_2,
  Mix: Ar+20% CO_2 (15~25ℓ/min)
- DCEP (DC+)

Typical chemical composition of all-weld metal (%)

Shielding gas	C	Si	Mn	Cr	Ni	FN
CO_2	0.03	0.60	1.12	23.70	13.20	5~12 & 11~16
Mix	0.03	0.75	1.20	23.90	13.20	

Typical mechanical properties of all-weld metal

	Y.S (MPa)	T.S (MPa)	El. (%)	IV (J) -30℃	Remarks
AWS A5.22		min. 550	min. 30		
EN ISO 17633-B		min. 550	min. 25		
Example	430	560	37	45	CO_2
	440	570	37	48	Mix

Notes on usage and welding condition

- Refer to page 303 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

Shielding gas	ABS	BV	DNV	LR	NK	KR	RINA	RS	CCS
CO_2	E309LT1-1	UP	309L MS	BF SS(CMn S CHE	KW 309LG(C)	RW 309LG(C)	309LS	A-9sp	309L