

**Classifications**

EN ISO 17633-A:2008 : T 23 12 L P C(M) 1  
 EN ISO 17633-B:2008 : TS309L-FB1

KS D 3612 : YF-309LC  
 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 penetrating spray arc transfer, minimum spatter formation and self releasing slag.

**Welding positions****Polarity & shielding gas**

- CO<sub>2</sub>: 100% CO<sub>2</sub>, 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	1.12	23.70	13.20	
Mix	0.03	0.75	1.20	23.90	13.20	5~12 & 11~16

**Typical mechanical properties of all-weld metal**

	Y.S (MPa)	T.S (MPa)	El. (%)	IV (J) -30°C	Remarks
AWS A5.22		min. 550	min. 30		
EN ISO 17633-B		min. 550	min. 25		
Example	430	560	37	45	CO <sub>2</sub>
	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 <sub>2</sub>	E309LT1-1	UP	309L MS	BFSS/CMnS/CHE	KW 309LG(C)	RW 309LG(C)	309LS	A-9sp	309L