K-309MoLF

Austenitic Stainless welding wire (Dissimilar joints)

Classifications

EN ISO 17633-A:2008	: T 23 12 2 L R C(M) 3	KS D 3612	: YF-309MoLC
EN ISO 17633-B:2008	: TS309LMo-FB0	JIS Z 3323	: TS309LMo-FB0
AWS A5.22-15	: E309LMoT0-1/4		

Description

- Dissimilar joint welds ; of and between high-strength, mild steels and low-alloyed 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 welding and for Mo-alloyed claddings the product is necessary for the 1st layer.
- Weld metals contain comparatively much more ferrite in their austenitic, therefore they provide better weldability together with superior heat resistance, and corrosion resistance.

Welding positions

Polarity & shielding gas

- CO_2: 100% CO_2
  Mix: Ar+2% O_2 (15~25ℓ/min)
- DCEP (DC+)

Typical chemical composition of all-weld metal (%)

Shielding gas	C	Si	Mn	Cr	Ni	Mo	FN
CO_2	0.03	0.65	1.32	23.45	13.01	2.50	5~12 & 19~26
Mix	0.03	0.67	1.35	23.45	13.01	2.50	

Typical mechanical properties of all-weld metal

	Y.S (MPa)	T.S (MPa)	El. (%)	IV (J) -60℃	Remarks
AWS A5.22		min. 520	min. 25		
EN ISO 17633-B	min. 350	min. 550	min. 25		
Example	635	740	30	30	CO_2
	625	737	32	31	Mix

Notes on usage and welding condition

- Refer to 303 page 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)	1.2	1.6
Spool (kg)	5, 12.5, 15	