

# K-309T

Austenitic Stainless welding wire (Dissimilar joints)

## Classifications

EN ISO 17633-B:2008	: TS309-FB0	KS D 3612	: YF-309C
AWS A5.22-15	: E309T0-1/4	JIS Z 3323	: TS309-FB0

## Description

- K-309T is formulated for MAG welding of 22%Cr-12%Ni stainless steels and typical applications is for welding of dissimilar steels, such as 304 to mild steel or low alloy steels.
- K-309T is a titania type of flux cored wire for cladding and dissimilar joint welds.
- Weld metals contain comparatively much more ferrite in their austenitic, therefore they provide better weldability together with superior heat resistance, and corrosion resistance.
- It is designed for operation in the flat position and for wedging horizontal fillet welds.

## 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>	0.05	0.58	1.45	23.50	13.00	14
Mix	0.05	0.70	1.63	23.70	13.20	15

## Typical mechanical properties of all-weld metal

	Y.S (MPa)	T.S (MPa)	El. (%)	IV (J) -40°C	Remarks
AWS A5.22		min. 550	min. 30		
EN ISO 17633-B		min. 550	min. 25		
Example	450	590	35	40	CO <sub>2</sub>
	460	610	34	44	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		