

KST-309L

For stainless steel (Dissimilar joint welding)

Classifications

EN ISO 3581-A:2012	: E 23 12 L R 12
EN ISO 3581-B:2012	: ES309L-16
AWS A5.4-06	: E309L-16
KS D 7014	: E309L-16
JIS Z 3221	: ES309L-16

Approvals

ABS	: E309L-16
Other	: CWB, CE

Description

- Covering is lime titania type for welding of 22%Cr-12%Ni stainless steel and heat-resisting castings, clad side of type 304 clad steels
- Welding of dissimilar steels such as Cr-Mo steel or carbon steel to stainless steel
- As its deposited weld metal has an austenitic structure, with suitable ferrite, crack resistance is good and intergranular corrosion resistance is superior to that of E309 type
- Redry the electrode at 250 - 350 °C for 30 – 60 minutes prior to use

Welding positions



Typical chemical composition of all-weld metal (%)

C	Si	Mn	P	S	Ni	Cr	Mo	Cu	FN
0.03	0.84	0.76	0.027	0.013	12.97	23.04	0.08	0.09	11.1

*FN: WRC 1992

Typical mechanical properties of all-weld metal

	Yield Strength (0.2%OS)	Tensile Strength	Elongation	Remarks
	(MPa)	(MPa)	(%)	
AWS A5.4		Min. 520	Min. 30	
EN ISO 3581-A	Min. 320	Min. 510	Min. 25	
Example	480	600	40	AW

*AW: As-welded

Sizes available and recommended currents (AC or DC +)

Diameter	(mm)	2.0	2.6	3.2	4.0	5.0
Length	(mm)	250	300	350	350	350
Amperage	F	30-50	50-80	80-110	110-150	140-180
	V . OH	25-45	45-60	70-90	90-130	-