

# Stick Electrode for Stainless Steel

## KS-309L

### Classification

AWS	A 5.4	E309L-16
JIS	Z3221	ES309L-16
EN	3581-A	E 22 12 L R
GB	T 983	E309L-16

Type of coating: Lime titania type

### Applications and Features

- (1) Weld metal is low carbon with 24%Cr-13%Ni.
- (2) It provides excellent crack resistance due to low carbon and more ferrite.
- (3) It is suitable for welding low carbon stainless steel and low carbon cladding, AISI 309S, heat resistant steel (13Cr, 18Cr steel) or dissimilar metals.

### Welding Position

All Positions

### Welding Instruction

- (1) Please refer to Appendix H for re-drying instructions.
- (2) For welding dissimilar metals, please refer to Appendix I.
- (3) For other instructions and information, please refer to Appendix F.

### Typical Chemical Composition of Weld Metal (wt. %)

C	Si	Mn	P	S	Cr	Ni
0.030	0.37	1.52	0.015	0.008	23.52	13.86

### Typical Mechanical Properties of Weld Metal

Tensile Strength N/mm <sup>2</sup> (kgf/mm <sup>2</sup> )	Yield Strength N/mm <sup>2</sup> (kgf/mm <sup>2</sup> )	Elongation %
550(56.1)	410(41.8)	45

### Size and Suggested Operating Range (AC or DC+)

Diameter x Length (mm)	2.0x250	2.6x300	3.2x350	4.0x350	5.0x350	
Amp	F/H-Fillet	35~55	50~85	80~120	100~150	140~200
	V-up/OH	30~50	45~85	70~110	90~135	—