KS-309

Type of coating: Lime titania type

Classification

AWS A 5.4	E309-16
JIS Z3221	ES309-16
EN 3581-A	E 22 12 R
GB T 983	E309-16

Applications and Features

(1) Weld metal is 23.5%Cr-13%Ni.

(2) The proper ferrite contents in the weld metal can prevent crack at high temperature.

(3) It is suitable for welding AISI 309S and dissimilar metals (mild steel and stainless steel).

(4) It is used as the buttering layer when welding dissimilar metals, which provides excellent performance for corrosion resistant surface between mild steel and hard-to-weld steel.

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
0.070	0.34	1.60	0.013	0.011	24.12	13.50

Typical Mechanical Properties of Weld Metal

Tensile Strength N/mm^2 (kgf/mm^2)	Yield Strength N/mm^2 (kgf/mm^2)	Elongation %
580(59.1)	410(41.8)	42

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	—