

Stick Electrode for Nickel and Nickel-Based Alloy

KNi-60-3

Classification

AWS	A5.11	ENiCrMo-3
JIS	Z3224	E Ni 6625
EN	14172	E Ni 6625
GB	T 13814	E Ni 6625

Type of coating: Low hydrogen

Applications and Features

- (1) KNi-60-3 is designed for welding in DC with good weldability.
- (2) It provides good heat and corrosion resistance to high temperature at 540°C.
- (3) It is ideal for welding chemical procedure equipment, such as Incon 62, high nickel alloy and dissimilar steel.

Welding Instruction

- (1) Clean the surface of the base metal before welding.
- (2) It is difficult for welding in V & O-H positions, so F welding is recommended.
- (3) Baking temperature should be between 350~400°C during 30~60 minutes before welding.
No PWHT is required for base metal.
- (4) To avoid weave arc, make a short arc in low current.
- (5) To avoid porosity, use the back step method for welding. (Please refer to Appendix A)

Typical Chemical Composition of Weld Metal (wt %)

C	Si	Mn	P	S	Ni	Cr	Nb	Fe	Mo
0.070	0.32	0.78	0.009	0.008	59.60	20.80	3.52	5.40	8.90

Typical Mechanical Properties of Weld Metal

Tensile Strength N/mm ² (kgf/mm ²)	Yield Strength N/mm ² (kgf/mm ²)	Elongation %	Charpy V-Notch	
			°C	J (Kgf-m)
770(78.5)	510(52.0)	39	-196	60(6.1)

Size and Suggested Operating Range (DC+)

Diameter (mm) x Length(mm)	2.6x300	3.2x350	4.0x350	4.8x350	
Amp	H	60~85	70~115	95~145	140~180
	V/O-H	55~85	65~110	85~135	—