

Stick Electrode for Nickel and Nickel-Based Alloy

KNi-60-7

Classification

AWS A5.11	ENiCrMo-7
JIS Z3224	E Ni 6455
EN 14172	E Ni 6455
GB T 13814	E Ni 6455

Type of coating: Low hydrogen

Applications and Features

- (1) KNi-60-7 is designed for welding in DC with good weldability.
- (2) The weld metal has superior corrosion resistance to salt water, sulfuric acid, acetic acid and caustic soda.
- (3) It is ideal for welding valves, pumps accessories and pro-chemical facilities.

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	Ti	Fe	Cu
0.040	0.68	3.18	0.009	0.008	66.50	0.18	0.51	Rem.

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)
500(51.0)	310(31.6)	43	-196	100(10.2)

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	—