

## Stick Electrode for Low Temperature Resistant Steel

# KN-718G

### Classification

AWS	A 5.5	E7018-G
JIS	Z3211	E4918-G
EN	2560-A	E 42 4 Z B
GB	T 5118	E5018-G

Type of coating: Iron powder low hydrogen type

### Applications and Features

- (1) A low hydrogen coated electrode for 490N/mm<sup>2</sup> grade steel for low temperature resistance.
- (2) Weld metal contains 1.5%Ni with good conditions of CVN obtained at -45°C.
- (3) It is suitable for Flat and H-Fillet welding.
- ( 4 ) It is ideal for welding in low temperature resistant steel of LPG storage tanks.( ASTM A537C1, JIS G3126 and SLA325A).

### Welding Position

All Positions

### Welding Instruction

- (1) Clean up the contaminations on the steel. Keep arc as short as possible.
- (2) Dry the electrodes 350~400°C in 60 minutes before welding.
- (3) Excellent strike and re-strike capabilities with the back step method. (Please refer to Appendix A)
- (4) Please note that over welding heat input causes the poor conditions in CVN.

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

C	Si	Mn	P	S	Ni
0.080	0.18	1.14	0.012	0.010	1.60

### Typical Mechanical Properties of Weld Metal (PWHT:745°Cx1Hr)

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 %	Charpy V-Notch	
			°C	J (kgf -m)
550(56.1)	460(46.9)	34	0 -45	— 98(10.0)

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

Diameter (mm) x Length(mm)		3.2x350	4.0x400	5.0x400
Amp	F	100~140	140~180	180~230
	V-up/OH	90~130	120~160	—