

Stick Electrode for Atmospheric Corrosion Resistant Steel

KAC-516G

Classification

AWS	A 5.5	E7018-W1
JIS	Z3214	E4916-NCC2
EN	2560-A	E460ZB
GB	T 5118	E5016-G

Type of coating: Iron powder low hydrogen type

Applications and Features

- (1) It is suitable for 490N/mm² grade weather resistant steel, such as bridges, constructions and vehicles.
- (2) It provides good weldability, mechanical prosperities, X-ray quality welds and crack resistance.
- (3) Weld metal has great weather resistance due to Cu, Ni and Cr contents.

Welding Position

All Positions

Welding Instruction

- (1) Clean up the contaminations on the steel before welding.
- (2) Dry the electrodes at 300~350°C for 60 minutes before welding.
- (3) Keep arc as short as possible. Take the back step method to prevent porosity at arc start and re-start. (Please refer to Appendix A).
- (4) The preheat temperature for thick plate (thickness > 25mm) or rigid joints is 90~120°C.

Typical Chemical Composition of Weld Metal (wt %)

C	Si	Mn	P	S	Cu	Ni	Cr
0.065	0.42	0.59	0.014	0.008	0.41	0.36	0.25

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)
560(57.0)	475(48.4)	31	0	157(16.0)
			-20	107

Size and Suggested Operating Range (AC or DC+)

Diameter (mm) x Length(mm)		2.6x300	3.2x350	4.0x400	5.0x400
Amp	H	70~100	100~140	140~180	180~230
	V-up/OH	60~90	90~130	120~160	—