KAC-818W

Type of coating: Iron powder low hydrogen type

Classification

AWS	A 5.5	E8018-W2
JIS	Z3214	E5518-NCC1
EN	2560-A	E5518-NCC1
GB	T 5118	E5518-W

Applications and Features

(1) It is suitable for 540N/mm^2 grade weather resistant steel.

(2) It provides good weldability, mechanical properties, X-ray quality welds and crack resistance.

(3) Weld metal has great weather resistance due to Cu, Ni and Cr contents.

(4) It is ideal for welding in ASTM A588, A242, JIS G3114 SAM steel and bare steel structures.

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	Cr	Ni
0.060	0.54	0.84	0.014	0.009	0.48	0.52	0.61

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	Charpy V-Notch J (kgf -m)
630(64.2)	550(56.1)	27	-5	104(10.6)
			-18	95(9.7)

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	110~150	160~200	180~230
	V-up/OH	60~90	90~130	130~170	140~180