Stick Electrode for Heat Resistant Steel

KL-716A1

Type of coating: Low hydrogen type

Classification

AWS	A 5.5	E7016-A1
JIS	Z3223	E4916-1M3
EN	3580-A	E Mo B
GB	T 5118	E5016-A1

Applications and Features

(1) KL-716A1 is suitable for welding 490N/mm^2 grade steel with 0.5%Mo.

(2) Ideal for welding steel pipes, heat exchanger pipes, cast steel, rolled and forged steel.

Welding Position

All Positions

Welding Instruction

(1) Clean up the contaminations on the steel.

(2) Dry the electrodes at 350~400°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) Preheat and interpass temperature: 100~200°C, PWHT: 600~635°C.

Typical Chemical Composition of Weld Metal (wt %)

C	Si	Mn	P	S	Mo
0.070	0.50	0.70	0.013	0.012	0.54

Typical Mechanical Properties of Weld Metal (PWHT:620°Cx1Hr)

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)
570(58.1)	490(50.0)	30	0	—
			-29	—

Size and Suggested Operating Range (AC or DC+)

Diameter (mm) x Length(mm)		3.2x350	4.0x400	5.0x400
Amp	F	140~190	180~240	230~300
	V-up/OH	120~160	—	—