

Stick Electrode for Hardfacing

KH-SLC

Classification

AWS	A5.13	ECoCr-C
JIS	Z3251	DCoCrC-450-BR
EN	14700	E Co3
GB	T 984	EDCoCr-C-03

Type of coating: Lime titania type

Applications and Features

- (1) KH-SLC is a co-based hardfacing electrode (equivalent to Stellite 1). Its feature is similar with KH-SLA and KH-SLB. However, the impact and corrosion resistance might be lower.
- (2) It can be deposited on carbon steel, low alloy steel, stainless steel and Ni-based alloy.
- (3) It is suitable for anti-corrosion, anti-oxidation and anti-abrasion conditions, such as agitator bearings, high temperature sinters, molds and blades.

Welding Instruction

- (1) Preheat temperature should be 500°C and slow cooling is required to prevent cracks.
- (2) Remove the sharp angle and scale before welding. Dragging a 90-degree angle or short arc can reduce the dilution of the weld metal.
- (3) For room temperature condition, use KMS-309Mo as buffer layer; and, for high temperature condition, use KNi-70B instead.
- (4) Dry the electrodes at 200-250°C for 30-60 minutes before use.

Typical Chemical Composition of Weld Metal (wt. %)

C	Si	Mn	Cr	W	Fe	Co
2.120	0.79	0.80	32.02	11.98	2.73	bal.

Typical Hardness of Weld Metal

As-welded hardness (HRC)			High temperature hardness (HRC)		
Continuous build-up	Interpass temp. 100°C	Preheat 200°C Continuous build-up	300°C	400°C	500°C
45.5	51	43.8	51	48	44

Size and Suggested Operating Range (DC+)

Diameter x Length(mm)	3.2x350	4.0x400	5.0x400
Amp	90~120	120~150	140~170