

Stick Electrode for Hardfacing

KH-13M

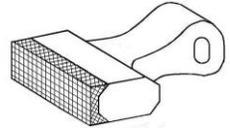
Classification

AWS	A5.13	—
JIS	Z3251	DFMA-450-B
EN	14700	—
GB	T 984	EDMo-A-16

Type of coating: Low hydrogen type

Applications and Features

- (1) Weld metal remains a stable austenite structure even with air or water cooling after welding.
- (2) It provides good resistance to abrasion accompanied by heavy impact and good toughness. However, it is not resistant to abrasive wear.
- (3) It is suitable for repairing constructions, mining, railroads and steel mills.
- (4) It is ideal for melt-in fusion and welding of high manganese steel.



Crusher hammers

Welding Instruction

- (1) Dry the electrodes at 300-350°C for 30-60 minutes before use.
- (2) Take skip welding method to prevent the embrittlement because the local overheat (above 260°C) causes the carbides to precipitate. The weld bead should not exceed 20mm (W) × 5mm (T) × 100mm (L).
- (3) The old hardfacing layer should be gouged first. Cracks are beveled by carbon cutting electrode and repaired by KS-309 before welding with KH-13M.

Typical Chemical Composition of Weld Metal (wt. %)

C	Si	Mn
0.650	0.35	12.00

Typical Hardness of Weld Metal

Condition	Hardness	Vicker's hardness (HV)	Rockwell's hardness (HRC)	Shore's hardness (HS)
Interpass temp. ≤150°C		195	10	28
Work-hardened		510	50	66

Size and Suggested Operating Range (AC or DC+)

Diameter x Length(mm)	3.2x350	4.0x350	5.0x350
Amp	90~140	140~190	190~250