

# Hardfacing and Wear Resistant SMAW Electrode

## HARDMANG 3

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### Product Features:

- Work hardening type covered electrodes for austenite manganese steel.
- High toughness weld metal to get fast hardening on high impact work condition.
- Welding of Mn steel to carbon steels.

### Applications:

- Suitable for repair welding of coned mining crusher, hammering crusher, impactor bars, rail frogs and crossings.

Typical chemical composition of all-weld metal (wt%)

C	Si	Mn	Cr	Ni	Fe
0.32	0.43	16.2	17.00	0.01	Bal.

Typical hardness of weld metal

As welded HRC	After work hardening HRC
21	46

Size (mm) & recommended welding parameters (A)

Diameter / Length	3.2/350	4.0/350	4.8/350
Flat position	100~150	150~200	170~230

### Note:

- 300~350°C x 1 hr baking prior to use.
- Inter pass temperature  $\leq$  260°C while multiple passes welding to avoid crack, not necessary for preheat and post heat.