

# CH-90

For welding of 13%Mn steel

JIS Z3251 DFMA-200-B  
DIN E7-250K

## Applications

Hard-surfacing of crusher hammers, rail crossings and crusher jaws.

## Characteristics

CH-90 is an electrode designed for abrasion resistance against heavy impact.

The weld metal becomes austenitic by water cooling during welding, which has excellent toughness and high work-hardening property.

It is suitable for fill-up cavities of high manganese cast iron because of its high toughness and crack resistance.

## Notes on usage

- (1) Water cool the weld metal during welding.
- (2) Austenite type stainless steel electrodes should be used for under-laying on the base metal other than 13%Mn steel.
- (3) When the base metal of 13%Mn steel is hardened, cut-off the hardened zone before welding.
- (4) Dry the electrodes at 300~350°C for 30~60 minutes before use.

## Typical chemical composition of weld metal (%)

C	Mn	Si
0.82	13.40	0.52

## Typical hardness of weld metal

Vickers hardness (Hv)	
As Welded	After work-hardening
220	510

## Size & recommended current range (AC or DC +)

Dia. (mm)	3.2	4.0	5.0	6.0	
L (mm)	350	400	400	450	
Amp.	F	90-130	140-180	190-240	220-300

• Tip Color : Yellow