

# OK 13Mn



OK 13Mn is an austenitic manganese steel electrode which work hardens under impact and compressive stresses. It is primarily used for surfacing and building up manganese steel components exposed to severe impact and moderate abrasion. Typical applications include crusher plates and rolls, cones and mantles of rotary crushers etc. The interpass temperature should be kept as low as possible.

<b>Classifications:</b>	EN 14700:E Fe9
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<b>Welding Current:</b>	AC, DC+
<b>Alloy Type:</b>	Austenitic Mn steel
<b>Coating Type:</b>	Lime Basic

## Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
<b>ISO</b>			
As welded	480 MPa	780 MPa	20 %

## Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
<b>ISO</b>		
As welded	20 °C	70 J
As welded	-20 °C	45 J
As welded	-40 °C	35 J
As welded	-60 °C	25 J

## Typical Weld Metal Analysis %

C	Mn	Si
1.08	12.2	0.7

## Deposition Data

Diameter	Current	Voltage	kg weld metal/ kg electrodes	Number of electrodes/kg weld metal	Fusion time per electrode at 90% I max	Deposition rate 90% I max
3.2 x 450 mm	95-135 A	23 V	0.60	36	95 s	1.1 kg/h
4.0 x 450 mm	130-180 A	23 V	0.60	24	109 s	1.4 kg/h
5.0 x 450 mm	170-230 A	25 V	0.60	15	132 s	1.8 kg/h