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.

Specifications	
Classifications	EN 14700 : E Fe9

Welding Current	AC, DC+
Alloy Type	Austenitic Mn steel
Coating Type	Lime Basic

Typical Tensile Properties			
Condition	**Yield Strength**	**Tensile Strength**	**Elongation**
ISO			
As Welded	480 MPa	780 MPa	20 %

Typical Charpy V-Notch Properties		
Condition	**Testing Temperature**	**Impact Value**
ISO		
As Welded	-20 °C	45 J
As Welded	20 °C	70 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**	**Efficiency (%)**	**Number of electrodes/kg weld metal**	**Fusion time per electrode at 90% I max**	**Deposition Rate**
3.2 x 450.0 mm	95-135 A	23 V	60 %	36	95 sec	1.1 kg/h
4.0 x 450.0 mm	130-180 A	23 V	60 %	24	109 sec	1.4 kg/h
5.0 x 450.0 mm	170-230 A	25 V	60 %	15	132 sec	1.8 kg/h