OK 13Mn

| PA 1G | PB 2F | PC 2G | PF 3GU | PE 4G |

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.

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