

OK 14MnNi

Austenitic manganese steel electrode with nickel for surfacing and building up manganese steel components exposed to severe impact and moderate abrasion. The weld metal is less prone to embrittlement and cracking compared to plain austenitic manganese steel weld metal. It workhardens under compressive stresses. Applications include: crusher plates and rolls, cones and mantels of rotary crushers, rail points. The interpass temperature should be kept as low as possible.

Specifications

Classifications	EN 14700 : E Z Fe9
Approvals	DB : 82.039.08

Approvals are based on factory location. Please contact ESAB for more information.

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

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
ISO			
As Welded	440 MPa	690 MPa	30 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
ISO		
As Welded	20 °C	100 J
As Welded	-80 °C	45 J
As Welded	-20 °C	80 J
As Welded	-120 °C	25 J

Typical Weld Metal Analysis %

C	Mn	Si	Ni
0.67	13.2	0.2	3.0

Deposition Data

Diameter	Current	Voltage	Efficiency (%)	Fusion time per electrode at 90% I max	Deposition Rate
3.2 x 450.0 mm	100-160 A	30 V	54 %	90 sec	1.5 kg/h
4.0 x 450.0 mm	130-210 A	30 V	54 %	105 sec	2.0 kg/h
5.0 x 450.0 mm	170-300 A	31 V	56 %	114 sec	2.9 kg/h