

EH 245

Covered Electrode for Hardfacing Applications -

Standards

AWS/ASME SFA - 5.13	EFeMn-A
EN 14700	E Fe9
TS EN 14700	E Fe9
DIN 8555	E 7-UM-200-KP

Approvals & Certificates

GOST

Properties and Applications

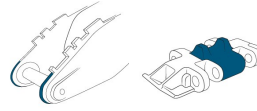
Basic covered, austenitic manganese steel electrode for wear resisting hardfacing deposits on high manganese (12-14%) steels. Weld metal will adopt high hardness by cold-working, it is therefore particularly suited for parts which are subjected mainly to wear caused by heavy impact and shock. During welding, the workpieces should not become too hot and if necessary, be allowed to cool down. When welding large workpieces made of austenitic manganese steel, such as crusher jaw plates, it is advisable to weld them in a water bath. Welding shall be done at low welding currents, with stringer and short bead lengths, to avoid the workpiece cool down. So, high welding currents and wide-weave beads must be avoided. When building up various layers, it is good practice depositing a buffer layer with EI 307 weld metal. When making joint welds on austenitic manganese steel, it is preferable to use EI 307B electrodes. Suitable for hardfacing and repair welding of wear resisting parts made of austenitic manganese steel, such as crusher jaw plates, crusher cones, rolls, pulverizing hammers, beating arms and others. Preferably used with DC, electrode in positive (+) pole and also possible to use with AC.



Dayanım Gösterdiği Aşınma Tipleri ve Mikroyapısı

Abrasion	■			
Adhesion	■	■		
Darbe	■	■	■	■
Temperature	■			
Corrosion	■	■		

Typical Applications



Typical Chemical Values of Weld Metal

Type of Analysis	C	Mn	Ni	Fe
Weld Deposit	0.60	14.00	2.70	82.70

Typical Mechanical Values of Weld Metal

Test Condition	Hardness (HB)	Wear Index
As welded	200	66.17
After Cold Working	450	

Application Information

Welding Positions



Welding Parameters & Efficiency

Diameter x Length (mm)	Current (A)	Weld Deposit(Kg)/1Kg Consumed Electrode	Number of Electrodes/1Kg Weld Deposit	Weld Metal Deposition Rate (Kg/h)
2.50x350	70-90	0,45	99	0,47
3.25x350	100-130	0,55	50	0,79

Polarity:



4.00x450	140-180	0,58	24	1,28
5.00x450	200-250	0,54	16	1,79

Packaging Information

Product Code	Diameter x Length (mm)	Quantity per Box	Box Gross Weight (kg)	Boxes per Outer Box	Outer Box Gross Weight (kg)	Packaging Type
18000HEEM2	2.50x350	226 pcs	5.21	3	15.80	Plastic Box
18000HREM2	2.50x350	226 pcs	5.07	3	15.40	Cardboard Box
18000NEEM2	3.25x350	139 pcs	5.21	3	15.80	Plastic Box
18000NREM2	3.25x350	139 pcs	5.07	3	15.40	Cardboard Box
18000SEEM2	4.00x450	93 pcs	6.74	3	20.40	Plastic Box
18000SSEM2	4.00x450	93 pcs	6.58	3	19.90	Cardboard Box
18000VEEM2	5.00x450	60 pcs	6.74	3	20.40	Plastic Box
18000VSEM2	5.00x450	60 pcs	6.58	3	19.90	Cardboard Box

Storage & Re-Drying Information

It can be dried maximum 5 times.
 It should be stored in a dry room (relative humidity < 50%, room temperature > 20°C) on wooden pallets.
 It has to be dried at 350°C for 2 hours.