

EH 380

Covered Electrode for Hardfacing Applications -

Standards

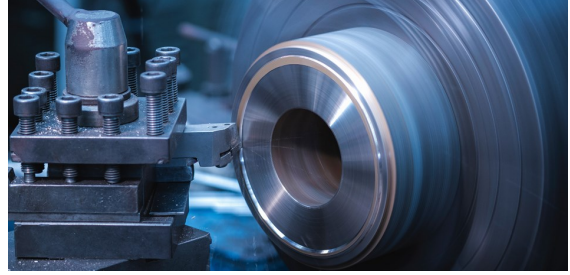
AWS/ASME SFA - 5.13	EFe6
EN 14700	E Fe4
TS EN 14700	E Fe4
DIN 8555	E 4-UM-60-ST

Approvals & Certificates

GOST

Properties and Applications

Hardfacing electrode for manufacturing and repair welding of turning and planing chisels, reaming and shear blades, special spiral drills. Also suitable for manufacturing tools from unalloyed and low alloy steels and hardfacing the edges of cutting tools made of tool steel. Unalloyed and low alloy steels shall be preheated to 250-400°C before welding and postweld heat treatment at 400°C and then welded parts shall be cooled slowly. If buffer layer is needed, can be performed by E1 312 or E1 307B electrodes (max. 2,5 mm) and then hardfacing can be performed by EH 380 (max. 5 mm in height). Possible to use with DC, electrode in positive (+) pole and with AC.



Dayanım Gösterdiği Aşınma Tipleri ve Mikroyapısı

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

Typical Chemical Values of Weld Metal

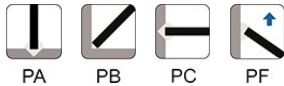
Type of Analysis	C	Si	Mn	Cr	Mo	V	W	Fe
Weld Deposit	1.10	1.40	1.30	3.50	9.00	2.20	1.90	79.60

Typical Mechanical Values of Weld Metal

Test Condition	Hardness (HRc)	Wear Index
As welded	60	45.11
After Heat Treatment	64	

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	50-85	0,57	66	0,60
3.25x350	90-130	0,59	39	0,82
4.00x350	125-170	0,60	25	1,15
5.00x350	190-220			

Polarity:



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
18009H9EM1	2.50x350	10 pcs	0.30	40	12.10	Blister
18009HDEM2	2.50x350	77 pcs	2.14	3	6.60	Plastic Box
18009HQEM2	2.50x350	77 pcs	2.05	9	18.60	Cardboard Box
18009N9EM1	3.25x350	8 pcs	0.38	30	11.50	Blister
18009NQEM2	3.25x350	47 pcs	2.05	9	18.60	Cardboard Box
18009QQEM2	4.00x350	32 pcs	2.05	9	18.60	Cardboard Box
18009TQEM2	5.00x350	19 pcs	2.05	9	18.60	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.