

# EM 175

Basic Coated Electrode - Fine Grained-High Strength Steels

### Standards

AWS/ASME SFA - 5.5	E10018-G H4
EN ISO 18275 - A	E 69 4 Mn2NiCrMo B 42 H5
TS EN ISO 18275 - A	E 69 4 Mn2NiCrMo B 42 H5

### Properties and Applications

Heavy coated basic type electrode for welding fine grained structural steels which have yield strength up to 690N/mm<sup>2</sup>. Suitable for welding high strength steels used in fabrication of cranes, earthmoving and similar heavy construction equipments. Weld deposit is of extremely high metallurgical purity and very low hydrogen content. Electrode features a stable and concentrated arc. Especially 2,50 mm and 3,25 mm diameter well suited for easy positional welding. Welds are of X-ray quality. Producing tough and crack-free welded joints. If normalizing is required after welding, EM 176 should be used.

### Approvals & Certificates

GOST

### Materials

Width	DIN
S620QL	TStE 620 V
S620Q	StE620

### Typical Chemical Values of Weld Metal

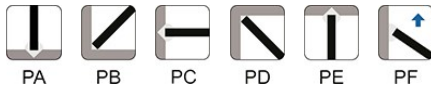
Type of Analysis	C	Si	Mn	CR	Ni	Mo
Weld Deposit	0.05	0.30	1.60	0.45	2.30	0.40

### Typical Mechanical Values of Weld Metal

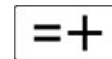
Test Condition	Yield Strength (N/mm <sup>2</sup> )	Tensile Strength (N/mm <sup>2</sup> )	Elongation A5 (%)	Charpy V-Notch Properties (J)
As welded	730	820	19	-40°C → 85

### Application Information

#### Welding Positions



#### Polarity:



#### Welding Parameters & Efficiency

Diameter x Length (mm)	Current (A)
2.50x350	60-90
3.25x350	90-140
4.00x450	130-180
5.00x450	180-240
6.00x450	260-360

### 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
12009HREM2	2.50x350	200 pcs	4.57	3	13.90	Cardboard Box
12009NKEM2	3.25x350	74 pcs	2.54	6	15.50	VAC Box
12009NREM2	3.25x350	134 pcs	4.57	3	13.90	Cardboard Box
12009SSEM2	4.00x450	97 pcs	6.58	3	19.90	Cardboard Box
12009VSEM2	5.00x450	64 pcs	6.58	3	19.90	Cardboard Box
12009XSEM2	6.00x450	47 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.