

EM 140

Basic Coated Electrode - Weathering Steels

Standards

| | |
|--------------------|----------------------|
| AWS/ASME SFA - 5.5 | E7018-G H4R |
| EN ISO 2560 - A | E 42 4 Z 1Ni B 42 H5 |
| TS EN ISO 2560 - A | E 42 4 Z 1Ni B 42 H5 |

Properties and Applications

Basic coated electrode, designed to resist to atmospheric corrosion and to provide high charpy impact energy down to -40°C. Suitable for welding steel constructions like bridge, off-shore platforms, stadium, which are made of weathering steels and thick sections of them. Especially 2,50 mm and 3,25 mm diameter well suited for positional welding. Welds are of X-ray quality.

Approvals & Certificates

| | | |
|-------------|-----|----|
| GOST TUV | TSE | CE |
|-------------|-----|----|

Materials

| Width | DIN |
|-------------------|-------------------------|
| S235J2W - S355J2W | WT St 37.3 - WT St 52.3 |

Typical Chemical Values of Weld Metal

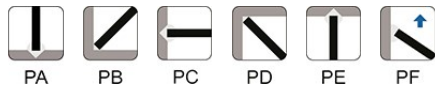
| Type of Analysis | C | Si | Mn | Ni | Cu |
|------------------|------|------|------|------|------|
| Weld Deposit | 0.05 | 0.30 | 0.90 | 1.00 | 0.60 |

Typical Mechanical Values of Weld Metal

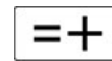
| Test Condition | Yield Strength (N/mm ²) | Tensile Strength (N/mm ²) | Elongation A5 (%) | Charpy V-Notch Properties (J) | |
|----------------|-------------------------------------|---------------------------------------|-------------------|-------------------------------|------------|
| As welded | 460 | 580 | 26 | -20°C → 120 | -40°C → 70 |

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 |

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 |
|--------------|------------------------|------------------|-----------------------|---------------------|-----------------------------|----------------|
| 12001HKEM2 | 2.50x350 | 115 pcs | 2.54 | 6 | 15.50 | VAC Box |
| 12001HREM2 | 2.50x350 | 206 pcs | 4.57 | 3 | 13.90 | Cardboard Box |
| 12001NKEM2 | 3.25x350 | 71 pcs | 2.54 | 6 | 15.50 | VAC Box |
| 12001NREM2 | 3.25x350 | 128 pcs | 4.57 | 3 | 13.90 | Cardboard Box |
| 12001SSEM2 | 4.00x450 | 95 pcs | 6.58 | 3 | 19.90 | Cardboard Box |
| 12001VSEM2 | 5.00x450 | 63 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.