

CARBON COATER (EC-32010CC)

THIN FILM CONDUCTIVE COATING FOR SEM IMAGING

JEOL's Carbon Coater is a sample preparation device that evaporates carbon to create a conductive thin film on the sample surface.

Thin film conductive coatings are effective in eliminating charging with non-conductive materials. Carbon has an advantage over heavy metal coatings (Ex. Gold or Platinum) for X-ray applications (EDS/WDS), CL or backscatter electron imaging due to its inherent low absorption characteristics.

This device is simple to use with fully automated vacuum, pre-heat and evaporation sequences. Insert your samples, turn the unit on and the chamber will automatically evacuate. Press PREHEAT to degas the carbon rod, next press EVAPORATE. The unit will automatically evaporate the carbon to create the thin film. Once the carbon evaporation is completed the system automatically vents to atmosphere.

Film thickness can be adjusted by changing the height of the sample stage.



BASIC SPECIFICATIONS:

| | Specification |
|--------------------------|---|
| Pressure | ≤ 20 Pa |
| Carbon Electrode | 1 set |
| Evaporation Source | Dedicated High Purity Carbon Rod (1mm diameter) |
| Sample Stage | 64mm (diameter) |
| Source to Stage Distance | 135mm to 165mm (adjustable) |
| Vent time | 30 seconds |
| Evacuation System | Directly-coupled rotary pump, 135L/min |
| Evacuation Time | 3 Pa in 10 minutes (no sample in chamber) |

COMPOSITION:

| | Number |
|---|--------|
| Carbon Coater | 1 |
| Rotary pump (135L/Min), includes power supply cable | 1 |
| Oil Mist Trap | 1 |
| Carbon Rod 90mm (length) x 1mm (diameter) | 5 |
| Vacuum Hose | 1 |
| Power Cable | 1 |
| Instruction Manuals for Carbon Coater and Rotary pump | 1 |

OPTION:

Rotating and Tilting Sample Stage (EC-30030RTS)

This stage is useful for samples with a significant amount of topography to aid in providing a uniform coating.

| | |
|-----------------------|---|
| Rotation Speed | 50 ± 10 rpm |
| Tilt Angle | Horizontal to 90° (manual) |
| Sample Holder | 4 stub(12.5 mm diameter) 1 stub (32 mm diameter) |

BASIC INSTALLATION REQUIREMENTS

Clean, dry, dust free environment.

Preferred footprint: 500mm (W) x 550 mm (L)

| | Room/Space Requirements |
|--------------------|---|
| Temperature | 20 ± 5°C (59-77 °F) |
| Humidity | 60% or less |
| Power | Single Phase AC 100V, 50/60 Hz, 1.4kVA |
| Ground | Grounding Terminal (one, 100Ω or less) |
| Main Unit | 350mm (w) x 420mm (d) x 440mm (h); ~18 kg |
| RP | 170mm (w) x 487.5mm (d) x 249.5mm (h); ~27 kg |