

# 108 Manual Sputter Coater

ideal for sample preparation for scanning electron microscopy



*108 Manual Sputter Coater*

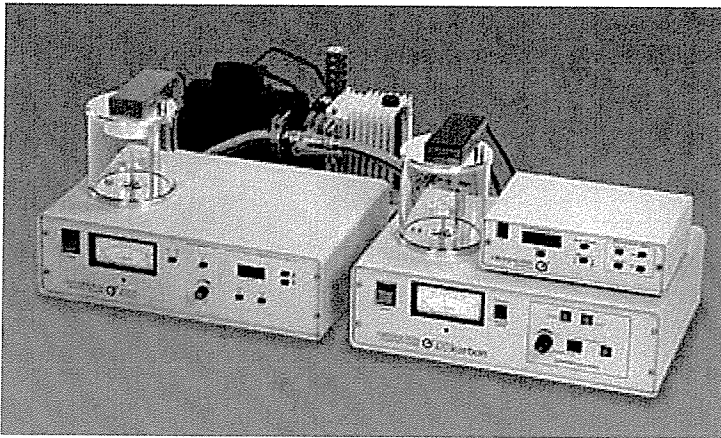
The 108 Manual Sputter Coater is an ideal system for sample coating with Au of non-conducting samples for standard SEM imaging. The economical desktop unit is simple operate, offers rapid pumpdown times, fine grain coatings and negligible sample heat safety interlocked sputtering supply is fully variable and the sputter current setting is influenced by the vacuum level. Cool, fine-grain sputtering is achieved with a very efficient low voltage DC magnetron head.

Although it is our simplest coater, this model has an excellent specification:

- This coater is ideal for routine SEM sample preparation. It is compact, economical and simple to operate. It offers rapid pumpdown times, fine-grain coatings and negligible sample heating.
- The standard manual coater has fully variable current control, digital process time "pause", variable height specimen table, hinged top plate and O-ring sealed vacuum chamber.

chamber.

- Sputtering is achieved with an efficient DC magnetron. A quick-change target at a range of metals to be used. (Au, Au:Pd). Au target is included as standard.
- The current controller allows independent choice of sputter current and argon pressure. Coverage and grain size are optimized for any specimen.
- The safety interlocked sputtering supply is fully variable; setting the sputter current not influenced by vacuum level. The optional thickness monitor is recommended for accurate measurements of depositions.
- The 108 Manual Sputter Coater can be factory fitted or retrofitted at any time with Prod. No. 93004, MTM-10 High Resolution Thickness Monitor (optional).



*Dual-Vacset used to connect two coaters to one pump*

### **Desktop Dual-Vacset**

The 108 Manual Sputter Coater combined with the 108C Auto Carbon Coater using one pumping system has the advantage of using 2 desktop units for sputtering and carbon coating without any cross contamination.

Vacuum Systems for 108 Series Coaters



*The 108 Manual Sputter Coater can be factory fitted or retrofitted with an MTM-10 High Resolution Thickness Monitor*

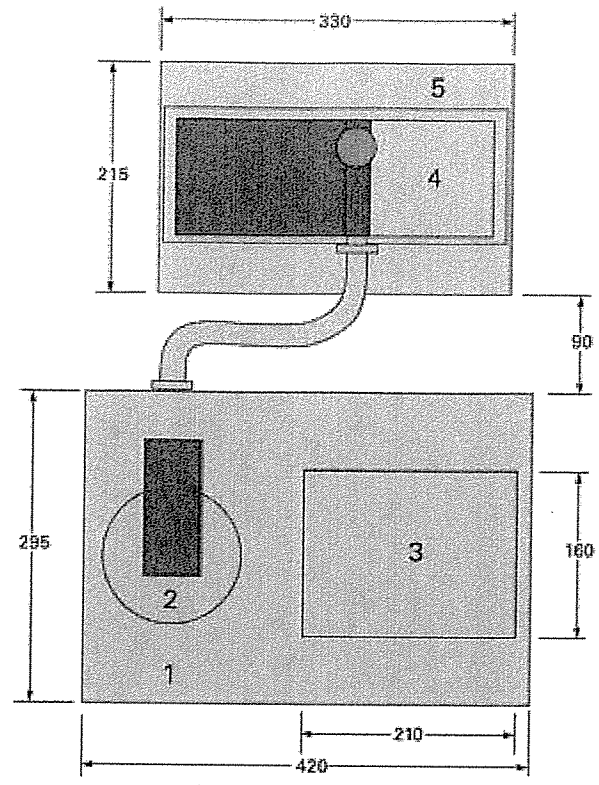


*Head tilted back showing stage*

## Specifications for the 108 Manual Sputter Coater

<b>Specifications</b>	
<b>Chamber size:</b>	120mm OD x 120mm high (4.75 x 4.75")
<b>Target:</b>	Au fitted as standard, Au:Pd, Pt, Pt:Pd optional. 57mm dia. x 0.1mm thick
<b>Sample table:</b>	Holds 12 SEM pin mounts Height adjustable through 60mm
<b>Sputter supply:</b>	Microprocessor based, safety interlock, variable, 40mA maximum
<b>Sputter head:</b>	Low voltage planar magnetron. Quick target change Wrap-around dark-space shield
<b>Analog metering:</b>	Vacuum Atm - 0.001mb
<b>Thickness monitoring:</b>	Model MTM-10 (optional)
<b>Control method:</b>	Manual gas and current control Digital timer (0-300 seconds) with pause Manual vent
<b>Desktop system:</b>	Vacuum pump is mounted on desktop compatible anti-vibration table All metal integrated coupling system
<b>Requirements</b>	
<b>Electrical:</b>	100-120 or 200-240 VAC, 50/60Hz (specify on order)
<b>Power:</b>	300VA (coater and pumping system #7010 together)
<b>Argon gas:</b>	Purity, min. 99.99% Working pressure 5-6 psi (0.4 bar) Hose connection, 6.0mm (1/4")

### Footprint



*Dimensions (mm)*

- |                      |                        |
|----------------------|------------------------|
| 1. Control unit      | 4. Rotary pump         |
| 2. Vacuum chamber    | 5. Anti-vibration base |
| 3. Thickness monitor |                        |