

Cressington

Carbon Coater *108carbon/A*

The Cressington 108 carbon coaters use a novel evaporation supply. Current and voltage are monitored by sensor wires in the head and the evaporation source is controlled as part of a feedback loop. The supply gives the conventional rod fed source unusual stability and reproducibility. Power consumption is low and the source shows exceptional re-starting characteristics. The evaporation source can be operated in "pulse" or "continuous" modes.

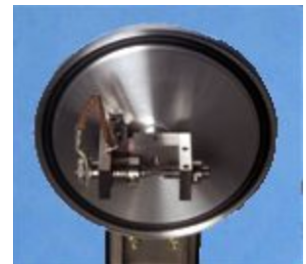


Illustrated: carbon coater 108carbon/A; thickness monitor MTM-10

The Cressington 108carbon/A offers the choice of either manual or automatic evaporation.

In automatic mode the evaporation source operates at a programmed voltage for a programmed time. The programmer is simply adjusted and displays voltage and time digitally.

In manual mode the unique Cressington supply can be operated in "pulse" or "continuous" with the output voltage set using the rotary control.



Thickness Monitors

Both 108 carbon coaters can be fitted with a high resolution thickness monitor. Resolution is better than 0.1nm for carbon. Careful use of monitor and evaporation controller gives better than 5% reproducibility of coating thickness in the useful 15nm - 25nm range.

Automatic carbon coater

Chamber size	120mm Ø x 120mm high
Evaporation source	Bradley type (6.15mm Ø rods) Heavy duty stainless steel construction

Evaporation supply	Microprocessor based Feedback loop controlled with remote current/voltage sensing Safety interlocked Variable, 135A max. with over-current protection
Sputter supply	Microprocessor based Safety interlocked Current control independent of vacuum Digitally selectable current (20, 40, 60 or 80mA)
Sample table	Holds 12 SEM ½" stubs Height adjustment through 60mm
Analogue metering	Vacuum, Atm - 0.001mb Current, 0 - 200mA
Control method	Automatic evaporation control using programmed voltage and timer Full manual override with pulsed or continuous operation Digital timer, 1 - 30 seconds Digital voltage setting, 0.1 - 5.5V Automatic vent
Thickness monitoring	Optional, MTM-10 only
Dimension	Width 420mm (16.5"), Depth 295mm (11.6"), Height 287mm (11.3")
Weight	14 kg
Power	800 VA max (excluding rotary pump)

Pumping system

Rotary Pump	High speed, direct drive 2-stage
Pumping speed	3.0/3.6 m ³ /hr (50/60Hz) Pumpdown time to 0.1mb is 20/25 sec.
Desktop system	Vacuum pump is mounted on desktop compatible anti-vibration table All metal vacuum coupling system
Weight	15kg
Power	130VA

Service required

Supply	100 - 120 or 200 - 240 VAC, 50/60Hz (specify on order)
Power	930 VA max.