

SPIN COATER SERIES 4000 A



A STATE OF THE ART SPIN COATER WITH HMI TOUCH SCREEN CONTROL

- Compact Table Top Model
- Real time Graphical Display
- 12000 RPM with ±1 RPM Accuracy
- Multistep Recipe Control
- Calibration facility
- Quick start mode
- All Safety Interlocks



MULTI-STEP RECIPIE PROGRAMMING



HMI QUICK START



PTFE COATED BOWL WITH MULTIPLE CHUCKS

TECHNICAL SPECIFICATIONS

- Overall Dimensions
- Operating Voltage
- Power requirement
- Bowl size
- Substrate size
- Maximum spin Speed
- Acceleration (max)
- Deceleration
- Recipes
- Safety Interlocks
- Optional

330 mm x 460 mm x 340 mm
230V mains
max. 640 W
Ø 8" Teflon coated SS / Polypropylene
Upto 4" x 4" (upto 6"^{*})
12000 RPM
5000 RPM/Sec
5000 RPM/Sec
16 steps
20 programs storage facility
Vacuum, E-stop, Bowl cover, Zero speed
Chucks, Special Recessed Chuck on request
N₂ Purging facility

Other models:



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Series 1000RS

- Digital speed indication
- User friendly timer for Spin Time control

Contact:

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1. Vacuum Switch Interlock with Electromagnetic Brake (E.M. Brake) for safety during Vacuum breakdown:

This is a specially designed assembly wherein the vacuum at the chuck is continuously monitored by a diaphragm based vacuum switch. Response time of this vacuum switch is around 10-100 milli secs.

In the normal course of application, if the vacuum at the chuck is sufficient (to hold the substrate) the vacuum switch is ON and brake to the chuck is in released condition. However, in case of lowering of vacuum of the chuck due to any leak the vacuum switch switches OFF, simultaneously operating the EM Brake, which stops the chuck instantaneously (within 100 millisecs.). This avoids flying OFF of the substrates due to lower vacuum or leakages at the chuck during the spinning.

2. Zero Speed Switch and Door Interlock for operator safety

A zero speed switch is provided to avoid release of substrate before the chuck comes to a halt. In this arrangement the speed is continuously sensed and when chuck stops spinning, the switch operates. In spin coaters with Solenoid operated vacuum release [see 4 below] this zero speed facility enables release of substrate from chuck.

3. Foot Operated Switch for Spin start

The spin start operation can be initiated by the foot switch. This is provided for ease of operation, as the operator's hands are busy in placing and flooding liquid on the substrates.

4. Solenoid Operated Vacuum Release Switch with Footswitch

Spinner is provided with a vacuum release valve on the top plate to couple and uncouple vacuum at the chuck. This operation also can be accomplished by a solenoid switch, which is electrically operated and foot switch activated.

5. Acrylic Cover with door interlock and N₂ Purge facility

For operator's safety from inhaling of the harmful vapours of liquid which is being spin coated, a nozzle is provided for nitrogen purging.

6. Vacuum pump

The Spin Coater is provided with a completely oil free diaphragm pump.

7. Hot Plate

Hotplate suitable for maximum 6" substrate is provided

8. Auto Liquid Dispenser

Auto dispensing unit for dispensing a predetermined amount of photoresist (liquid) to be spin coated can also be provided as an extra feature.