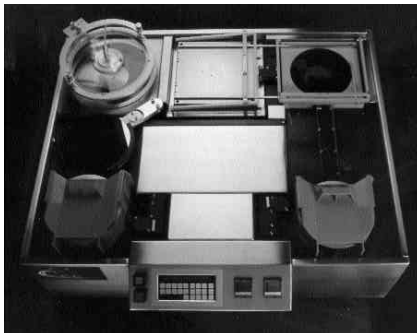


COMBINATION EQUIPMENT

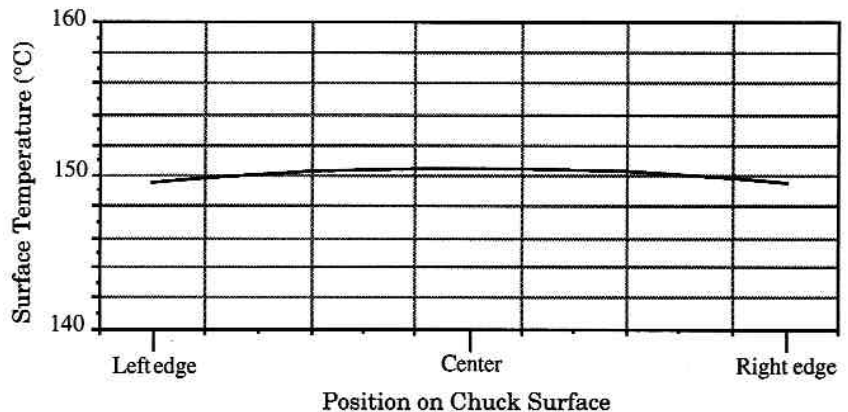
Model 4000 Spincoat/Bake/Cool System

The Cee® Model 4000 is a fully programmable automated coat/bake track system. The system offers the diversity and precision of larger track systems with cost-efficiency and a smaller footprint. The Model 4000 will handle up to 200mm wafers or 6" squares.

This mid-size unit offers multi-substrate capabilities with minimal retooling.



TEMPERATURE PROFILE




Cost Effective Equipment
A Division of Brewer Science, Inc.

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SPINCOAT FEATURES:

The Cee® Model 4000 incorporates the standard Cee® Model 100 configuration. It also features:

- Auto-Centering
- Programmable Auto Dispense of up to four chemicals
- Back Side Rinse

SPECIFICATIONS

- Closed Spin Environment for High Uniformity Film Thickness
- All Digital Motor Control System
- 1 rpm Control Resolution
- 6000 rpm Maximum Spin Speed
- Programmable Acceleration Control from 1-30,000 rpm/sec.
- Storage of 10 Recipes with up to 10 Steps/Recipe

HOTPLATE FEATURES:

Incorporating the standard Cee® hotplate configuration, the Model 4000 features a programmable bake process with up to three consecutive bake steps using any of the baking styles.

SPECIFICATIONS

- Temperature Uniformity of $\pm 0.3\%$
- 300°C Maximum Operating Temperature (400°C option)
- 1.0°C Temperature Controller Resolution (0.1°C option)
- Storage of 10 Recipes with up to 3 Steps/Recipe
- Programmable Proximity, Gravity Contact and Vacuum Contact

COOLPLATE FEATURES:

The Model 4000 also features a cool station process with programmable cool process time and method. The cooling temperature is set and controlled with the digital cool plate temperature controller and solid state refrigeration system, eliminating the need for supplemental water cooling systems.

SPECIFICATIONS

- Solid State Refrigeration (no cooling water needed)
- 15°C Minimum Temperature
- Programmable Proximity, Gravity Contact and Vacuum Contact

SPECIFICATIONS

SPINCOAT

Programming: 10 programs, 10 steps each

Maximum Wafer Size: 3" to 200mm

Repeatability: ± 5 rpm

Acceleration: 0-30,000 rpm/sec. unloaded

Spin Range: 0-6000 rpm

HOTPLATE

Temp. Uniformity: $\pm 0.3\%$

Temp. Resolution: 1°C (0.1°C option)

Temp. Range: 50-300°C (400°C optional)

Programming: 10 programs, 3 steps each

COOLPLATE

Solid State

OPTIONS

- 400°C Max. Temp.
- 0.1°C Resolution
- Multi-substrate
- Edge Bead Removal
- Bowl Rinse
- Inert Gas Purge
- Additional Auto Dispense
- Programmable Exhaust
- Develop System
- 2" Wafers
- Up to 6" squares

System Features

- Entry and Exit Indexers with belt-track; spincoat station; bake station; cool station
- Automated Processing
- Programmable from one central display/keypad
- Common power, pneumatic and vacuum input for all stations and components
- Throughput Performance: Typically 30-50 per hour
- Benchtop Design
- Full Substrate Tracking

DIMENSIONS

- Machine Weight: 300 lbs.
- Shipping Weight: 600 lbs.
- Cabinet Dimensions: 41" L x 36" W x 18" H

UTILITIES

- Power Requirements
115 Volts AC
1725 Watts
- Exhaust Port: 1" and 2" OD
- Recommended Utilities
30 psi CDA
70 psi N₂
Vacuum: 25" Hg
Exhaust: 100 cfm @ .2" wg

PROGRAMMABILITY

- Battery backed storage of
 - 10 Coat Programs (10 steps each)
 - 10 Bake Programs (3 steps each)

OPTIONS

- Multisubstrate Capabilities for up to 4 sizes, ranging from 3" to 8"
- Bake Side Rinse
- Additional Dispense Capabilities of up to 4 chemicals total (including edge bead removal)
- Option to switch to or interlace Millipore pumps for chemical dispense
- Square Substrate Processing