P9000 Cluster System

The Solution to Reliable Coating and Developing

Benefits

- Stacked modules offer wide range of flexibility
- Small footprint
- High-performance brushless motors for improved uniformity and reliability
- Precise edge bead removal

Features

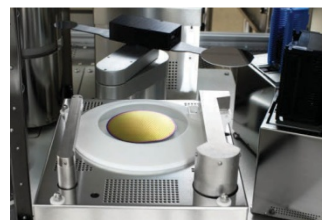
- Ability to process 50 mm - 300 mm substrates
- A central atmospheric robot with dual-end effector
- PC Windows-based operating system with smartPro GUI
- CE Mark
- HEPA
- SEMI S2, S6, S8, and S10

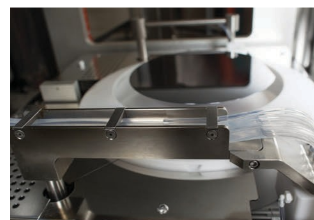
Options

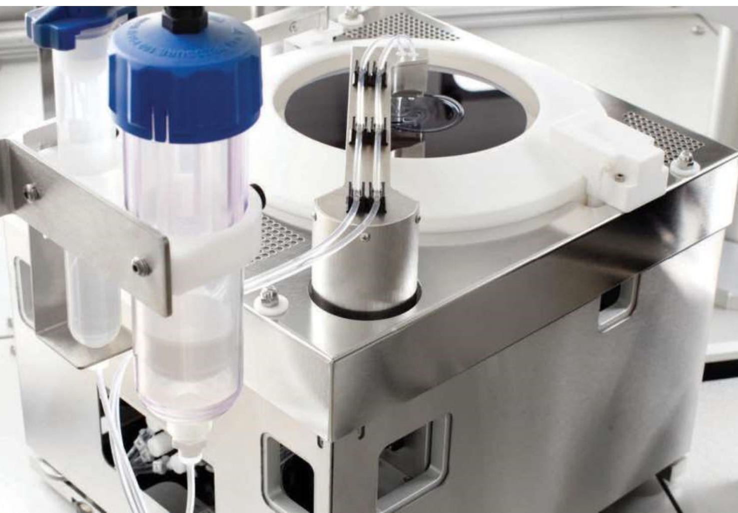
- Chemical cabinets
- Syringe dispense
- Remote chiller
- Environmental controls
- Exhaust controllers
- Fire suppression
- SECS/GEM compliance
- Contact C&D for more options
- Run Three wafer sizes without hardware change
- Barcode and recipe download capable

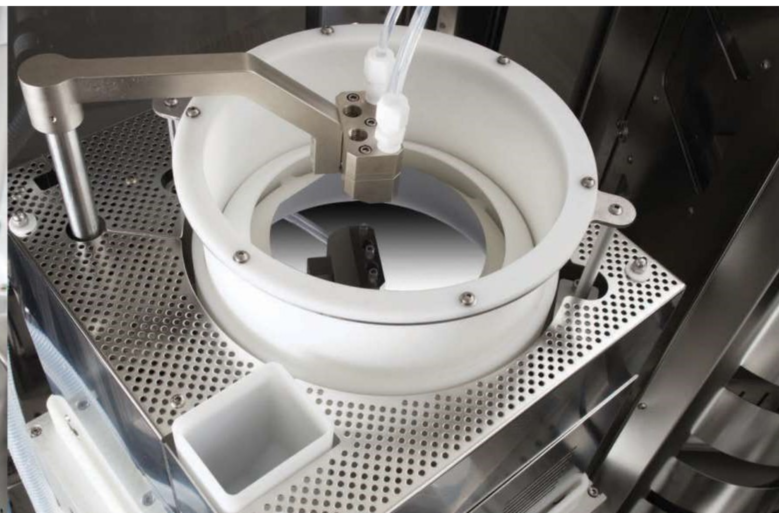
Description

The P9000 Cluster System is a high-throughput, versatile wafer processing system that can be configured as a Coater, Developer, Vapor Prime, HPO, Chill Plate, etc. It can process a wide range of photoresist and photosensitive polymer applications. Its sophisticated system software, along with state-of-the-art hardware, allows the user to program hotplates at various bake temperatures, and prime, coat, and develop wafers in parallel. The system is also easily expandable to keep pace with business growth or process requirements.









Coater module

Interface	Windows-based PC with touchscreen panel
Dispense arm action range	Static – x axis (programmable) Dynamic – x axis (programmable) Vertical – Z axis (programmable)
PR Dispense Arm Nozzle	High resolution 5-Phase stepping motor with microstepping driver.
No. of dispenses	Up to five (5) dispenses
Spindle spin method	AC brushless servo motor with digital controller, 10 – 8000 RPM, 50K Acceleration
Spin increment	1 RPM
Top EBR	Separate arm for Top EBR. Programmable (0.10 mm increments or better).
Bottom EBR	Bottom EBR built-in catchup
Spin cup Spec	Low Turbulence, Built-in Vapor curtain dunker, metered solvent Optional Self-cleaning catch cup Separate exhaust & fluids in process cup
Environment	Optional temperature, humidity and air flow control

Alloy

Temperature range	50ºC - to 500ºC
Method	Atmospheric chamber / Special chamber for gases and nitrogen

Vapor prime

Temperature range	25ºC - 190ºC
Method	Programmable and/or fixed proximity bake capability

Chill plate

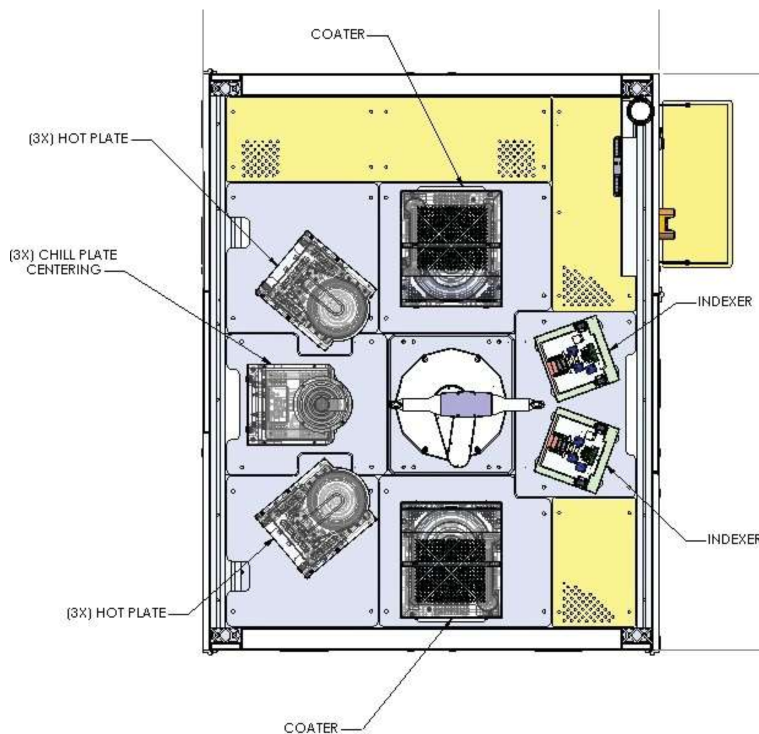
Temperature range	Controlled temp from ambient to 15ºC with optional chiller

Hot plate

Temperature range	Ambient to 300ºC
Temperature uniformity	+/-1.0% across the wafer (open hotplate) & +/-0.5% across the wafer (closed lid hot plate)
Temperature Rise/Time	From ambient to 150ºC Stable temp - 10 min maximum / From ambient to 300ºC - 20 min max
Temp display	Digital controller

Developer module

Dispense arm action range	Static – x axis (programmable) Dynamic – x axis (programmable) Vertical – Z axis (programmable)
DI Rinse	Stationary low impact stream, optional DI water spray
Developer Solutions	Up to four (4)
Spindle spin method	AC brushless servo motor with digital controller, 10 – 8000 RPM, 50K Acceleration
Spin increment	1 RPM
Environment	Optional temperature, humidity and air flow control



System Dimension Vary Depending Upon Configuration