

Brewer Science® Cee® 200CBX

Precision Coat-Bake System



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The **Brewer Science® Cee® 200CBX** precision coat-bake system combines a track quality precision spin coater with a high uniformity bake plate, in an efficient space saving design.

Benefits

- ▶ Onboard Windows®-based PC control for enhanced interface capabilities and connectivity
- ▶ New compact design for minimized footprint
- ▶ Full-color, 7-inch touch screen display
- ▶ Teflon® spin bowl for maximum chemical compatibility
- ▶ Simultaneous operation and monitoring for both the coat and bake modules

Dimensions

- ▶ 28 in (71.1 cm) W × 19 in (48.3 cm) D × 12 in (30.5 cm) H
- ▶ Machine Weight: 165 lb (74.8 kg)
- ▶ Shipping Weight: 250 lb (113.4 kg)

Programmability

- ▶ Controlled by onboard Windows®-based PC
- ▶ Touch screen interface and display
- ▶ Ethernet port for network connectivity and uploading/downloading process parameters
- ▶ 250,000 process programs onboard
- ▶ Virtually unlimited steps per program
- ▶ 0.1-s resolution for step times with a range of 0 to 9,999.9 s/step
- ▶ Energy-saving capability (for predetermined temperature output control)
- ▶ Security: password protection available at no charge
- ▶ Three automated bake methods: contact, vacuum, proximity
- ▶ Bake plate auto sizing for 3-inch, 100-, 125-, 150-, and 200-mm substrates
- ▶ Temperature data recording
- ▶ Optional electronic lift pins (replace N₂ proximity for loading/unloading substrates from bake module). Program 1000 specific proximity heights above the surface in any sequence or combination. Height is programmed in 0.001-inch



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- increments with an overall range of 0.000 to 0.750 inches.
- ▶ Ramping capability optional (8 specific set points within a single bake recipe)
- ▶ Spin speed: 0 to 6,000 rpm (12,000 rpm option at no charge; 16,000 rpm option available)
- ▶ Spin speed acceleration:
 - 0 to 30,000 rpm/s unloaded
 - 0 to 23,000 rpm/s for 200-mm substrate
 - 0 to 3,000 rpm/s for 6-inch × 6-inch × 0.250-inch photomask recessed chuck
- ▶ System capable of controlling third-party host software for high-end IDI/Cybor/Mykrolis positive displacement pumps
- ▶ Simultaneous dual automated dispense capability
- ▶ Bidirectional speed control/oscillating chuck
- ▶ Iteration software (recipe looping)
- ▶ Dispense or component outputs: 50
- ▶ In-process/dynamic speed/acceleration control

Precision

- ▶ Spin speed repeatability: within < 0.2 rpm
- ▶ Spin speed resolution: within < 0.2 rpm
- ▶ Substrate sizes: < 1 cm to 200 mm round; 7 inches × 7 inches square)
- ▶ Temperature resolution: $\pm 0.1^{\circ}\text{C}$
- ▶ Temperature range: ambient to 300°C (400°C optional)
- ▶ Temperature uniformity: 0.3% across working surface

Reliability

- ▶ Indirect drive system protects the spin motor from contact with process chemicals and solvents
- ▶ Vacuum and lid interlock
- ▶ Exceptional reliability and uptime
- ▶ 1-year full warranty on parts and labor
- ▶ Free remote technical support (phone, email, fax) for the life of the product
- ▶ Application process assistance for life of the product

Bowl & Exhaust Hood Design

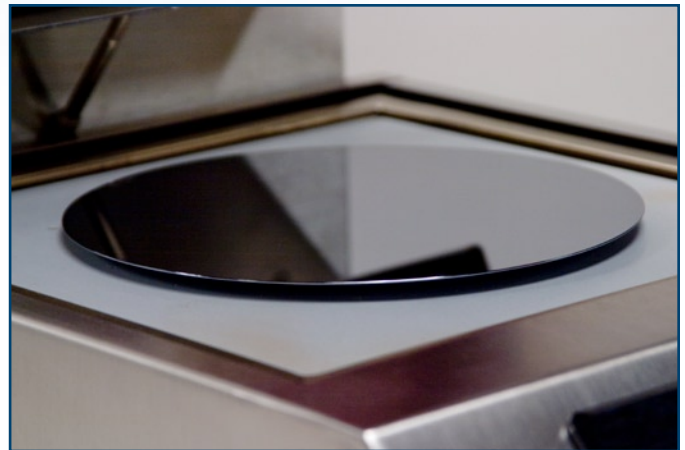
- ▶ All stainless steel construction
- ▶ Teflon® spin bowl for material compatibility
- ▶ Integrated bowl ring to eliminate material migration
- ▶ Optional stainless steel bowl (for all-stainless-steel construction)
- ▶ Optional polyethylene bowl (educational package) available
- ▶ Optional polyethylene liners available
- ▶ Optional polyethylene/Teflon® splash ring
- ▶ Closed and optional open lid designs for process flexibility
- ▶ Drain and exhaust ports located in the bottom of bowl
- ▶ Exhausted hood for removal of process chemicals
- ▶ Optional nitrogen purge for inert spin/bake environment

Utilities

- ▶ Voltage ranges: 100, 110-125, 208-240 VAC, 50/60 Hz
- ▶ Power requirements: 1793 watts (16 amps)
- ▶ Drain Port: 3/4 inch OD
- ▶ Exhaust Port: 1 inch OD
- ▶ Vacuum: 20 to 25 inches Hg
- ▶ Bowl Exhaust: 20 to 50 cfm
- ▶ Bake Plate Exhaust: 1 inch OD; 5 to 10 cfm
- ▶ Nitrogen or CDA (for automated dispenses): 70 psi



Cee® 200CBX shown with optional nitrogen diffusers on the bake plate



Optional programmable lift pins on the bake plate (shown) allow for precise process control

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