Brewer Science® Cee® 200XD

Spray & Puddle Developer

brewer science

The **Brewer Science® Cee® 200XD** spray and puddle developer delivers track-quality performance, with revolutionary interface capabilities and the utmost in chemical and process flexibility, in an efficient, space-saving design.

Benefits

- Onboard Windows®-based PC control for enhanced interface capabilities and connectivity
- Configurable for Direct Angle continuous and/or side angle spray puddle develop
- New compact design for minimized footprint
- Full-color, 7-inch touch screen display
- Teflon spin bowl for maximum chemical compatibility
- Durable wet-bench design that can be converted to a flange/deck mountable configuration
- Spray and Puddle Systems Available

Brewer Science® Cee® 200XD spray & puddle developer

Developer Options

Spray, puddle, & stream dispense options are available. These methods of dispense are normally used in conjunction with a pressure can dispense which holds the developer.

SPRAY DISPENSE (Puddle/Direct)
Utilizes two spray nozzles to apply develop solution and DI water. It uses an open UHMW lid with spray nozzles mounted either outside the wafer plane, spraying inward from the center of the wafer out (Puddle), or directly over the substrate for continuous (Direct) spray applications.

- Uses one gallon pressure cans as the reservoirs for the solutions
- Maximum of four spray nozzles
- Can be configured to accommodate up to four center puddle/direct dispenses

STREAM DISPENSE (Puddle)
A developer which uses a standard automated dispense spinner and pressure cans. It functions, by "streaming" the developer and DI water on to the top of the substrate.

- Very Economical
- Utilizes standard auto-dispense lexan lid
- Uses suckback dispense valves
- Minimizes material usage

DI WATER RINSE
Cee offers both topside and backside DI water rinse options. This method of dispense is normally used in conjunction with a pressure can dispense or by using a house DI wvater supply.

Dimensions

- 13.25 inches (33.65 cm) W × 19 inches (48.26 cm) D × 18 inches (45.72 cm) H
- Machine Weight: 40 lb (18.1 kg)
- Shipping Weight: 100 lb (45.4 kg)

Programmability

- Controlled by onboard Windows®-based PC
- Touch screen interface and display
- Full-color alphanumeric-capable graphical user interface (GUI)
- 250,000 process recipe programs on board
- Virtually unlimited number of user-defined recipe program steps
- 0.1-second resolution for step times (9,999.9 seconds maximum step time)
- 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 200-mm substrate
  0 to 3,000 rpm/s 6-inch × 6-inch × 0.25-inch photomask recessed chuck
- USB and Ethernet ports for network connectivity and uploading/downloading process parameters with offline firmware (offline recipe number and steps unlimited)
- 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
- Security - password protection option available at no charge
- In-process/dynamic speed/acceleration control

Precision

- Spin speed repeatability: < 0.2 rpm
- Spin speed resolution: < 0.2 rpm
- Substrate sizes: < 1 cm to 200 mm round; 7 inch × 7 inch square

Reliability

- Indirect drive system protects the spin motor from contact with process chemicals and solvents
- Vacuum and lid interlock
- Industry-leading 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 Design

- 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 open lid designs available for process flexibility
- Drain and exhaust ports located in the bottom of bowl
- Optional nitrogen purge for an inert spin environment
- Optional auto-N_2 blow-off nozzle
- Optional auto-drain separator (solvent/aqueous)

Utilities

- Voltage ranges: 100, 110-125, 208-240 VAC, 50/60 HZ
- Power requirements: 655 watts (10 amps)
- Drain Port: 3/4" OD
- Exhaust Port: 1" OD
- Vacuum: 20-25" Hg
- Exhaust: 20-50 cfm
- Nitrogen or CDA (for automated dispenses): 70 psi
- DI water for developer spray and BSR (if hard plumbed); maximum flow 80 PSI; regulator to be supplied by purchaser

F.6.6.7043.A Effective Date: 07/02/2010

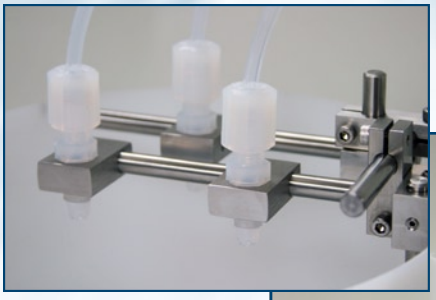
CE

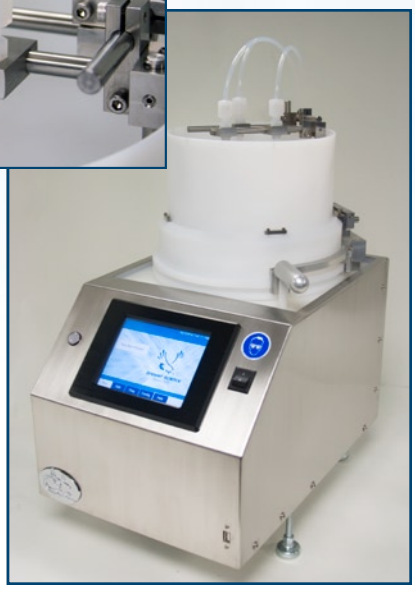
Sole-Source Justification

Industry-Leading Features

Brewer Science is very proud of the reputation we have earned as the vendor of choice for those needing R&D spin coaters with track-quality performance in a compact, portable, durable design. Brewer Science is the only manufacturer of benchtop spin coaters that brings together all of these design elements in a cost-effective benchtop product. Brewer Science is the sole supplier and distributor for Cee® equipment in North America. Cee® equipment separates itself from the competition by its design basics, including:

- All stainless steel cabinet construction
- Indirect drive system
- Heavy-duty spin motor, 200 W continuous; 800 W peak
- PID control
- 250,000 process recipes with virtually unlimited steps
- Alphanumeric-capable graphical user interface (GUI)
- Full-color PC touch screen interface and display
- Spin speed repeatability: < 0.2 rpm
- Spin speed resolution: < 0.2 rpm
- Spin speed acceleration: 30,000 rpm/s unloaded, 0-23,000 rpm/s 200 mm loaded
- PC controlled
- USB/ethernet port for downloading/uploading programs
- 12,000 rpm spin speed configurable at no charge (16,000 rpm optional)
- Step times up to 9,999.9 seconds
- 0.1-second resolution for step times
- Closed bowl design
- PTFE/Teflon® chemical-resistant spin bowl environment
- Security (password protection)
- Substrate sizes: < 1cm to 200 mm round, 7 inch × 7 inch square
- Drain and exhaust ports located in the bottom of bowl





Also available with stream dispense, chimny hood configuration

Brewer Science® Cee® References

SEMATECH-North
255 Fuller Road, Suite 309
Albany, NY 12203
John Hudnall
518-956-7396
john.hudnall@sematech.org

Cornell University
171 Kimball
Ithaca NY, 14853
Garry Bordonaro
607-254-4936
bordonaro@cnf.cornell.edu

Univ. of Illinois at Urbana-Champaign
405 N. Mathews
Urbana, IL 61801
Kathleen Motsegood
217-333-4751
kmotsego@uiuc.edu

Sumika Electronic Materials
3832 E. Watkins St.
Phoenix, AZ 85034
Louis Paff
602-659-2537
lpaff@sumikamaterial.com