

# Brewer Science® Cee® 200XD

## Spray and Puddle Developer



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

### Developer Options

Spray, puddle, and stream dispense options are available. These dispense methods are normally used in conjunction with a pressure can component that holds the developer.

#### SPRAY DISPENSE (Puddle/Direct)

This option utilizes two spray nozzles to apply developer solution and deionized (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 1-gallon pressure cans as reservoirs for developer solutions
- ▶ Can use a maximum of four spray nozzles
- ▶ Can be configured to accommodate up to four center puddle/direct dispenses

#### STREAM DISPENSE (Puddle)

This option uses a standard automated dispense spinner and pressure cans. It functions by "streaming" the developer and DI water onto the top of the substrate.

- ▶ Very economical
- ▶ Utilizes standard auto-dispense Lexan® lid
- ▶ Uses suckback dispense valves
- ▶ Minimizes material usage

#### DI WATER RINSE

Both topside and backside DI water rinse options are available. This method of dispense is normally used in conjunction with a pressure can dispense or by using a house DI water supply.



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## 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 (maximum step time: 9,999.9 seconds)
- ▶ 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 with a 200-mm substrate
  - 0 to 3,000 rpm/s with a 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
- ▶ Password protection security 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<sub>2</sub> 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: ¾-inch OD
- ▶ Exhaust Port: 1-inch OD
- ▶ Vacuum: 20 to 25 inches Hg
- ▶ Exhaust: 20 to 50 cfm
- ▶ Nitrogen or CDA (for automated dispenses): 70 psi
- ▶ DI water for developer spray and backside rinse (if hard plumbed); maximum flow: 80 PSI; regulator to be supplied by purchaser

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