

Brewer Science® Equipment

for R&D and Low-Volume Production Environments



Brewer Science® processing equipment allows customers to cost-effectively enter new areas of product development and low-volume manufacturing. Our equipment can be used to develop process technologies for semiconductor manufacturing, MEMS manufacturing, thin films, sensors, and advanced packaging. Compact footprint, intuitive design, and unequalled experience add up to years of high-performance processing, perfect for any low-volume or R&D lab environment.

Key Benefits:

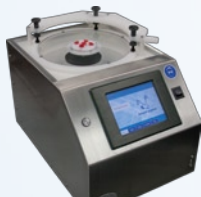
- ▶ Precise control
- ▶ Flexibility
- ▶ Compact footprint
- ▶ Ease of use
- ▶ Programmability
- ▶ Repeatable performance



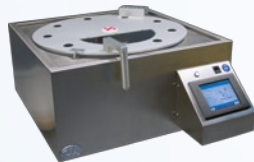
The **Cee® X-series** of precision equipment delivers revolutionary interface capabilities and exceptional chemical compatibility, with a convenient, compact footprint. This product lineup builds on the reputation of the benchmark Cee® legacy with enhancements that include a stand-alone PC controller with

a 7-inch full-color touch screen interface, a PTFE Teflon® spin bowl for the utmost in chemical compatibility, programmable hot plate lift pins, excellent temperature uniformity (with $\pm 0.3\%$ temperature variation across the wafer), as well as virtually unlimited onboard process programs.

COAT



Cee® 200X



Cee® 300X

COMBO



Cee® 200CBX



Cee® 200DBX

BAKE



Cee® 1300X

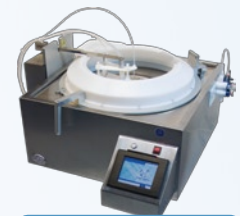
DEVELOP



Cee® 200XD



Cee® 300XD



Cee® 300MXD

COAT

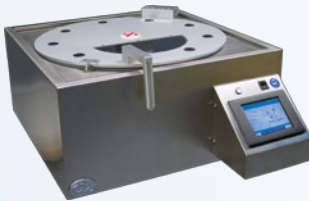
Cee® 200X Precision Spin Coater



The Brewer Science® **Cee® 200X precision spin coater** is the optimal spin coater for research, university, MEMS, and lab use. Fully programmable and user-friendly, the 200X features the accuracy and repeatability needed to eliminate processing variability from photoresist and thin-film deposition processes. With its convenient, compact footprint, chemical compatibility, and durability, this easy-to-use benchtop system will provide years of high-performance spin coating, making the 200X purchase a smart and cost-effective decision for applying coatings to substrates up to **200 mm** round or 7 in square.



Cee® 300X Large-Format Spin Coater



The Brewer Science® **Cee® 300X large-format spin coater** is specially designed to handle larger, heavier substrates. The 300X combines extremely accurate spin speed control, a high horsepower drive for aggressive acceleration, and an onboard Windows®-based PC controller for ease of use. The 300X has a state-of-the-art user interface and can accommodate substrate sizes ranging from 3 in to **450 mm** round and up to 14 in square.



DEVELOP

Cee® 200XD Spray-Puddle Developer



The Brewer Science® **Cee® 200XD spray and puddle developer** delivers track-quality performance, a revolutionary touch screen interface, and the utmost in chemical and process flexibility, in an efficient, space-saving design. The standard configuration utilizes two side-spray V-line 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 spray), or directly over the substrate for continuous direct-spray applications.



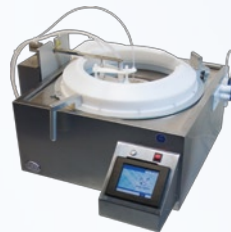
Cee® 300XD Large-Format Developer



The Brewer Science® **Cee® 300XD large-format developer** offers direct fan-jet spray, side-angle puddle, and stream dispense options, and can accommodate substrate sizes up to **300-mm** round or 14-in square.



Cee® 300MXD Megasonic Developer/Cleaner



The **Cee® 300MXD megasonic developer/cleaner** combines a megasonic transducer (ProSys MegPie) designed to apply uniform acoustic energy to spinning substrates, and a high-horsepower drive for aggressive acceleration.





Cee® 1300X Precision Bake Plate



The Brewer Science® Cee® 1300X precision bake plate features the accuracy and repeatability needed to eliminate processing variability from critical experiments. Recipes are easily entered, monitored, and stored with the convenient full-color touch screen interface and onboard Windows®-based PC controller. The Cee® 1300X bake plate can accommodate substrate sizes up to **200 mm** round or 8 in square. Compact footprint, intuitive design, and unequalled experience add up to years of high-performance bake-step processing.

BAKE

Cee® 10 Large-Format Bake Plate



The Brewer Science Cee® 10 large-format bake plate is designed for process and R&D engineers requiring a bake plate for large substrates. The Cee® 10 bake plate can accommodate substrate sizes up to **300 mm** round or 14 in square.

Cee® 11 Large-Format Bake Plate



The Brewer Science® Cee® 11 large-format bake plate is specifically designed for large area substrates, up to **450 mm** round or 20 in square. The compact footprint allows seamless installation within existing clean room hoods or on laboratory table surfaces.

Cee® 200CBX Precision Coat-Bake System



The Brewer Science® Cee® 200CBX precision coat-bake system combines a track-quality precision spin coater with a high-uniformity bake plate, all in an efficient space-saving design. With its convenient and user-friendly design, Cee® 200CBX programs are easily entered, monitored, and stored through a newly enhanced Windows®-based PC graphical user interface. Compact footprint, intuitive design, and unequalled reliability add up to years of high-performance coat-bake processing, perfect for any low-volume or R&D laboratory processing environment.



COMBO

Cee® 200DBX Precision Develop-Bake System

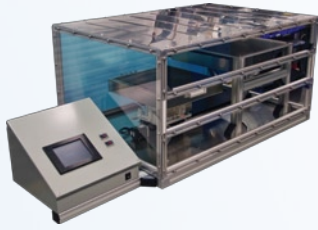


The Brewer Science® Cee® 200DBX precision develop-bake system combines a track-quality precision spray and puddle developer with a high-uniformity bake module for post-exposure baking. This combination has allowed customers worldwide to reliably and repeatably push the edge of technology in the fields of advanced lithography, optics, MEMS, and nanotechnology.



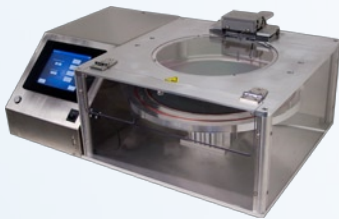
DEBOND

Cee® 1300DB Thermal Slide Debonder



The Brewer Science® **Cee® 1300DB semiautomatic debonder** enables high-temperature slide-off debonding of thinned wafers in a laboratory setting. This tool permits development engineers to complete the final step of thinned full wafer processing in a confidential developmental setting. Internal small-scale prototyping capability may be used to accelerate product development cycles and improve time to market for new ultrathin wafer technologies.

ZoneBOND™ Separation Tool



The Brewer Science® **ZoneBOND™ separation tool** is designed for separating wafers that have been bonded using the ZoneBOND™ system for thin wafer processing. The ZoneBOND™ system enables use of materials that broaden the thermal budget while maintaining very-low-stress room temperature debonding.

FLANGE-MOUNT

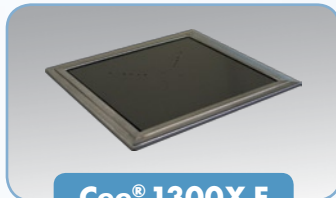
Cee® Flange-Mount X-Series



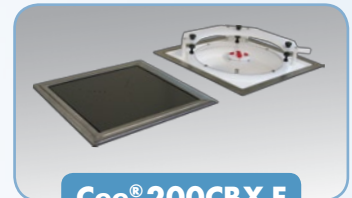
All the features of the revolutionary **Cee® X-series** in a flexible, space-saving package. Available for the following models:



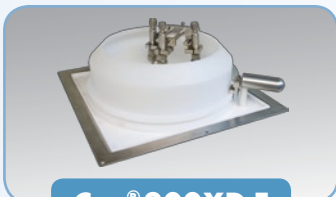
Cee® 200X-F



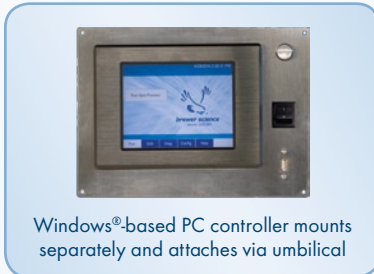
Cee® 1300X-F



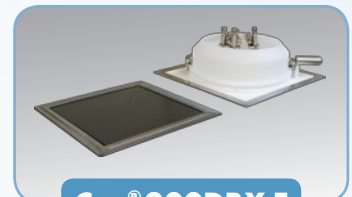
Cee® 200CBX-F



Cee® 200XD-F



Windows®-based PC controller mounts separately and attaches via umbilical



Cee® 200DBX-F

Windows is a registered trademark of Microsoft Corporation in the United States and other countries.

All statements, technical information and recommendations contained herein are based on tests we believe to be accurate, but the accuracy or completeness thereof is not guaranteed and the following is made in lieu of warranty expressed or implied. Neither the seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential, arising from the use or inability to use the product. Before using, user shall determine the suitability of the product for his intended use, and user assumes all risk and liability whatsoever in connection therewith. No statement or recommendation not contained herein shall have any force or effect unless in an agreement signed by officers of the seller and manufacturer.