



## KEY COMPETITIVE ADVANTAGES

- Proprietary architecture to maximize throughput without the handling constraints of other OEM platforms
- Lowest cost per wafer
- Higher capacity per sq. ft. of cleanroom space
- Only 200mm advanced CMP system that meets all current industry and international safety standards
- Compatible with existing OEM installation space and facility requirements
- Offers dual or single wafer polishing per platen
- Modern controls and sensors dramatically improve serviceability



Multiple membrane carrier choices available

The new Capstone<sup>®</sup> CS200 series is the next-generation CMP processing tool from Axis Technology offering the best-in-market performance for 100, 150, and 200mm wafer sizes. The state-of-the-art system architecture includes a superior load-polish-unload sequence for high throughput process capability and reduced system footprint. Capstone<sup>®</sup> provides more efficient application and utilization of slurry, providing 40-50% reduction in slurry consumption. The unique pad conditioning system also provides up to double the pad life of other CMP tools. The Capstone<sup>®</sup> CS200 series brings significant reduction in CoO, substantially reducing overall CMP process costs.

### **CS200-ma (Multi-load/Unload Aquarius Cleaner Configuration)**

- Can function as a standalone CMP polishing system, or as a fully automated Dry in-Dry out system with the integrated Double Sided Post-CMP cleaner
- True Bridge tool, can run two different wafer sizes simultaneously

STANDARD FEATURES	BENEFIT
Multizone Wafer Carriers (Concentra, Avalon, Crystal)	3 or 4-zone membrane style carrier with independent pressure control. All carriers optimize edge exclusion and WIWNU. The Crystal carrier is specifically designed to handle thin and fragile wafers.
100mm, 150mm, and 200mm capable	Can polish both wafer sizes alternately or simultaneously with no hardware or software changes.
Completely Independent Wafer Movement	Splitting or matching process times is not required, which reduces cycle times and increases throughput.
Unlimited Wafer Flip Capability	Allows single or double side polishing for processing substrate materials such as SiC. Flipping occurs within the polisher; separate recipes can be applied to each surface.
Linear Pad Conditioner with Symmetrical Travel Pattern	Conditions the entire diameter of the polishing pad on each platen; improving the consistency of removal rate wafer-to-wafer and extending the effective life of the pad.
High Pressure D.I. Water Rinse Bar	Cleans waste material out of the pad which helps minimize defectivity.
Minimal Wafer Handling	Minimizes performance variations compared to systems that require wafer transfer from carrier to carrier. Greatly improves consistency of polishing performance by eliminating multiple variables.
Smart-slip Sensor System	Recalibrates between each wafer to adjust for pad discolorization, making it a more reliable wafer slip detection system.
Slurry Flow Controllers	Replaces peristaltic pumping systems; reducing slurry shear-thickening for lower maintenance and longer effective lifetime.
On-board, State-of-the-Art High Speed Industrial Control Network	Improves reliability, maintainability, plus data collection and monitoring.
Connectivity	Remote troubleshooting with direct connection to Axis Technology to minimize downtime and MTTR.
Fully Integrated Post CMP Cleaner	Double-sided PVA brush cleaner with four brush boxes. The immediate hand-off of the polished wafer from the polisher to the post-CMP cleaner enhances the cleaning efficiency.

OPTIONAL FEATURES	BENEFIT
Optical and Motor Current EPD Systems	Provide accurate and repeatable endpoint of the polishing process for consistency, increasing yield.
Platen Cooling	Controls the process temperature during the polishing process and facilitates the optimization of polishing pressure to enhance material removal rate.
Wet Idle-Mode Recirculating System	Enables recirculation of idle water-flow. Integrated for use with CMP tools. Senses idle tool, filters, and recirculates DI water during extended idle period, including user selectable dump and replenishment times.