CMP TRIBO

OBSESSIVE SINCE 1965 PRECISION

Achieve the highest possible standards of processing control with this bench-top system designed for the research of wafer processing.

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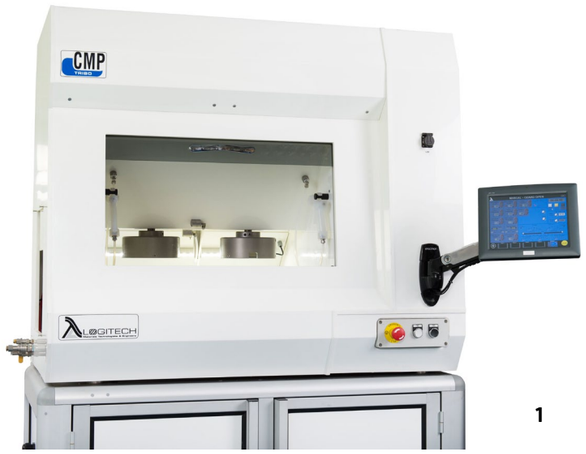
CMP TRIBO

The Logitech CMP Tribo is a bench-top chemical mechanical polishing (CMP) system designed with the research of wafer processes in mind, including their associated wafer, pad and slurry interactions. Primary application areas for the CMP Tribo are in the field of CMP planarization or delayering, with secondary application in the field of Tribological science and research.

The CMP Tribo achieves industry standards in control and layer removal for CMP and produces laser quality surfaces (0/0 scratch dig), making improvements to surface topography. The system can achieve nanometer level material removal on a wide range of wafers/ substrates used in today's device fabrication processes.

A highly versatile system, the CMP Tribo can be tailored through the use of different carrier heads, polishing templates, wet bench modules or end point detection.



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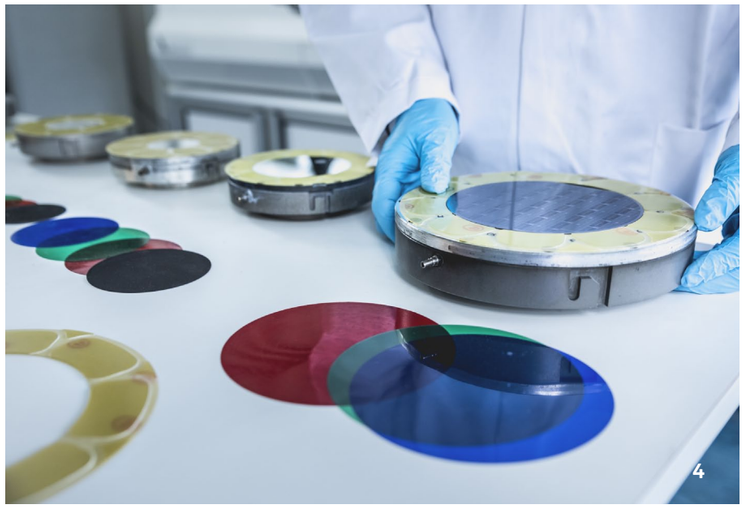

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KEY FEATURES & FUNCTIONALITY

- Bench-top CMP system designed with the research of wafer processes in mind with secondary applications in the field of Tribological science and research.
- The ability to process part wafers and full wafers up to 4"/100mm on the 400mm polishing plate.
- Second driven carrier arm allows for various in-situ pad conditioners to be mounted depending on customer requirements - allowing for greater wafer yields, increased process reliability and a lower cost of ownership.
- Both the carrier and pad conditioner arms can be independently set for sweep, amplitude and download force depending the pad type and surface being processed - allowing independent parameters for improved pad conditioning and prolonged pad life.
- Allows for a bespoke approach in machine set-up and operation by allowing the operator to configure a wide range of parameters and process conditions via the touch screen interface including CoF , carrier load and slurry delivery.
- An optional configuration allows for the integration of up to four independent slurry pumps simultaneously - allowing for the incorporation of multiple slurries into process recipes, either individually or mixed to create customer slurries to cater for different process requirements.
- The CMP Tribo has the ability to automate an entire CMP process consisting of various sub-processes - freeing up operators time as the system will automatically perform specified recipes or system operations.
- Advanced in-situ sensors constantly provide the operator with real-time process information allowing operators to identify and evaluate important process conditions such as End Point Detection (EPD) or process stability factors which are paramount for optimal performance.
- Recipe mode allows users to build, save and re-call multi-stage recipes allowing for easy process repeatability - even across different operators.
- Chemically resistant to standard chemicals used in CMP applications, including sodium hypochlorite (Na OCL). Contamination can be avoided using the integrated, sample cleaning, de-ionised water and nitrogen gun.
- Achieve the highest possible standards of processing control in laboratories with limited space without sacrificing system performance.

Image 1: Logitech CMP Tribo bench-top system

Image 2: Driven carrier heads for faster polishing rates and greater control

Image 3: Process conditions controlled via touch screen interface

Image 4: Carrier heads with a wafer process capacity of 4"/100mm

TECHNICAL SPECIFICATIONS

Carrier sizes available:	100mm/4” - Templates can be used to allow partial and smaller sizes.
Height:	1123mm
Width:	1382mm
Depth:	985mm
Power supply:	220v - 240v Single inlet 16Amps - 50/60Hz
Plate diameter:	400mm
Carrier speed:	10-100rpm
Carrier down pressure:	Min: 0.4psi/2.8kPa Max: 9psi/62kPa
Carrier back pressure:	Max: 50psi/62kPa
Slurry flow rate:	20-500 ml/per minute