CMP ORBIS

OBSESSIVE PRECISION
SINCE
1965

Achieve results typically found in production scale equipment and enhance your CMP research capabilities with this floor standing CMP tool.

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CMP
ORBIS

The CMP Orbis is a precision engineered, floor standing Chemical Mechanical Polishing (CMP) system ideally suited for R&D environments where the main purpose or application is to conduct pilot production tests with optimum analytical capabilities and enhanced process performance.

The CMP Orbis has been designed to be readily adaptable as an enabling technology in preproduction testing, though it also has the ability to suit a range of processing uses. The highly adaptable system can be utilised for back-end IC manufacturing, Micro-Electromechanical Systems (MEMS) fabrication, Opto-MEMS and Bio-MEMS fabrication.

Achieve laser quality surfaces with Ra to sub-nanometer levels of materials removal across a wide range of materials.

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KEY FEATURES & FUNCTIONALITY

→ Floor standing CMP tool ideally suited to R&D environments - typically used in applications which conduct pilot production tests.

→ High capacity works pace for two samples up to 200mm/8" - or multiple smaller samples through the use of templates

→ Produces results typically seen on production scale equipment whilst keeping a laboratory scale footprint.

→ Utilises an array of sophisticated software based analytical and data collection modules to increase and significantly enhance your CMP research capabilities.

→ Motor driven carrier heads along with plate speeds of up to 160rpm facilitate faster polishing rates with greater levels of control.

→ 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 , carried load and slurry delivery.

→ Twin peristaltic pumps control slurry capacity and delivers equal volumes of slurry through two separate nozzles. Different slurries can be used in each pump for different processing needs if required.

→ The CMP Orbis comes supplied with an industry standard CMP diamond pad conditioner which fits on the second motor driven carrier, allowing pad conditioning to be carried out effortlessly during sample processing. This allows for greater wafer yields, increased process repeatability and a lower cost of ownership.

→ On-board analytical sensors allow the operator concise real-time monitoring capabilities via the systems interface. Operators can also save and export data via the USB port for external analysis.

→ 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.

Image 1: Logitech CMP Orbis

Image 2: Configure a wide range of parameters and process conditions via the touch screen interface

Image 3: Motor driven carriers with a wafer process capacity of up to 200mm/8"

TECHNICAL SPECIFICATIONS

Carrier sizes available:	100mm/4”, 150mm/6”, 200mm/8”
Height:	1950mm
Width:	1680mm
Depth:	781mm
Power Supply:	220Vac-240Vac 25Amps 50/60Hz
Plate diameter:	600mm
Carrier speed:	10-125rpm
Slurry flow rate:	20-500 ml/per minute