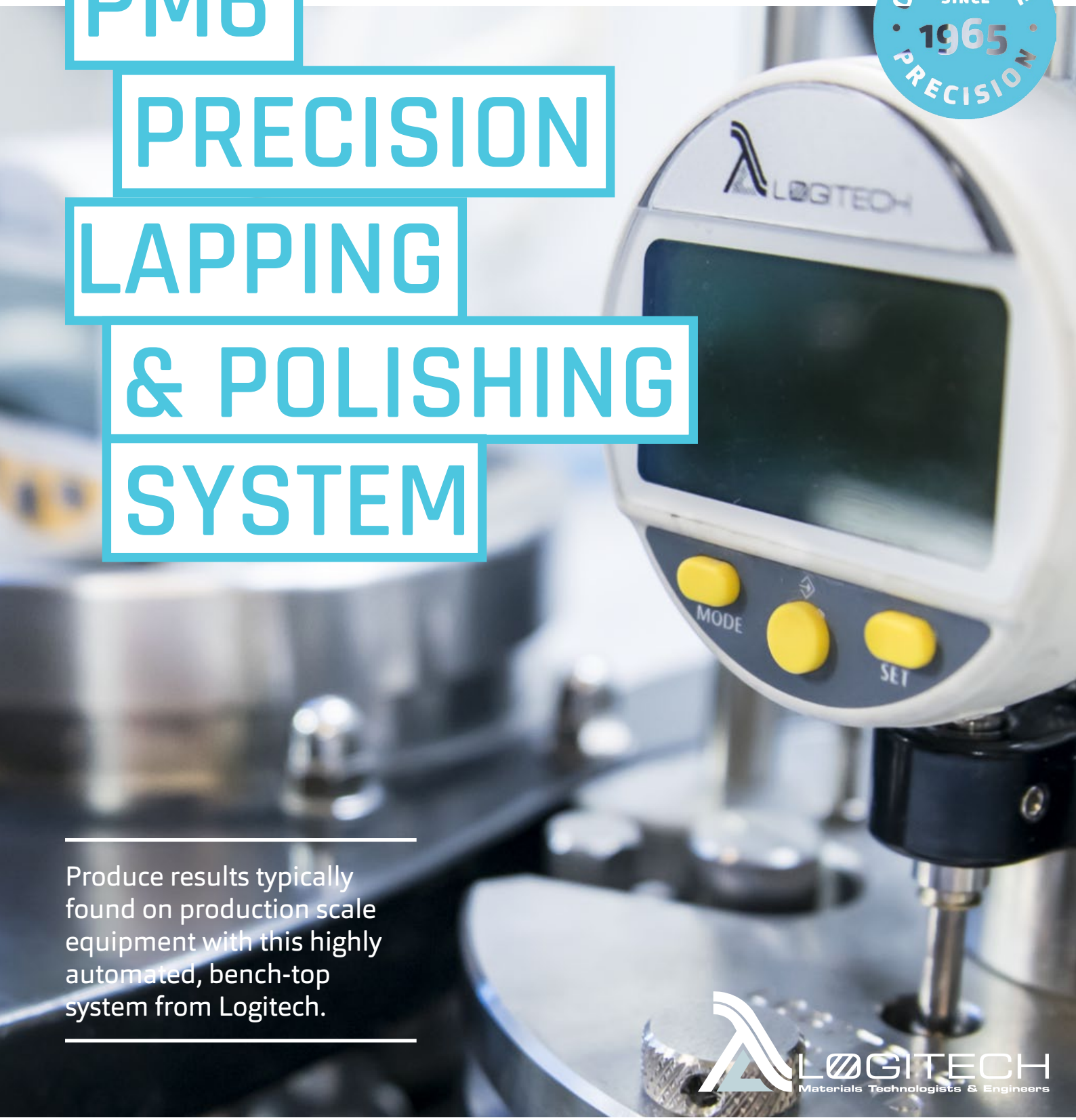
# PM6 PRECISION LAPPING & POLISHING SYSTEM

OBSESSIVE SINCE 1965 PRECISION




Produce results typically found on production scale equipment with this highly automated, bench-top system from Logitech.

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Materials Technologists & Engineers

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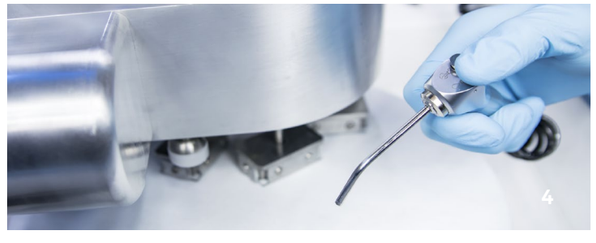
# PM6

# PRECISION LAPPING & POLISHING SYSTEM

The PM6 Precision Lapping & Polishing system produces results typically found on production scale equipment. Highly flexible in use, the PM6 allows users to work with many different materials including; gallium arsenide, silicon, rock and soils. This system provides the ability to produce specimens repeatably with superior quality and surface finish. Precise plate set up options combined with an intuitive control system provide an effortless consistency of results with a very high degree of accuracy.

Wherever there is a need for a controlled flat surface with a high quality finish the PM6 makes an invaluable investment. The PM6 system offers enhanced process performance through a combination of innovative designs and intuitive operator controls.




## KEY FEATURES & FUNCTIONALITY

- Single workstation with a wafer process capacity of up to 4”/100mm – driven jig roller arms greatly increases accuracy and repeatability.
- Bluetooth automatic-plate-flatness control provides continuous in-situ measurement of the plate flatness, automatically correcting any deviation from the specification set by the operator.
- Bluetooth-enabled features include: real-time data collection and feedback from the digital indicator on the PP series jigs allowing greater end-point thickness control for increased accuracy.
- Real time data collection and feedback via Bluetooth to allow users to export information via the USB port for external analysis – this includes: target material removal and actual material versus time of removal, and plate shape analysis (actual shape and target shape versus time).
- Plate speeds of between 5 and 100rpm, which facilitates faster lapping and polishing rates.
- The recipe mode feature on the PM6 allows operators to create, save and re-call multi-stage process recipes - making each process completely repeatable, even across different operators.
- Logitech customers are achieving increased material removal rates (MRR), with far greater control, compared to similar systems without metered abrasive delivery or a driven-jig-arm functionality.
- All process conditions are controlled via the Graphical User Interface (GUI), including: plate speeds, material removal rates, driven jig arm, the metered abrasive feed - giving the operator complete control.
- The automatic drip detector will stop the plate rotating when the abrasive cylinders are empty - thereby avoiding any damage to the specimen running on a dry plate.
- The metered abrasive feed unit, via the peristaltic pumps, allows operators to set the flow rate of between 1-100ml per minute. This greatly increases the quality and the accuracy of results, while reducing both wastage and operational costs.
- Options exist for a PM6 chemically resistant to standard chemicals used in CMP applications. Contamination can be avoided using the integrated, sample cleaning, de-ionised water and nitrogen gun.
- Twin 2 litre abrasive cylinders allow for multistage processes, and increased capacity means longer, un-interrupted processes.
- The Time Weighted Average (TWA) functionality on the PM6 allows operators to produce superior results in both lapping and CMP processes.

**Image 1: PM6 Precision Lapping & Polishing System**

**Image 2: Metered abrasive feed unit via peristaltic pumps**

**Image 3: Bluetooth enabled automatic plate flatness monitor**

**Image 4: Integrated sample cleaning with de-ionised water and nitrogen gun**

# TECHNICAL SPECIFICATIONS

| | |
|---|---|
| Wafer Capacity: | 4”/100mm |
| Height:<br>(including extraction port) | 915mm<br>965mm |
| Width: | 802mm |
| Depth: | 720mm |
| Power Supply: | 240v/110v Single Phase |
| Plate diameter: | 300mm |
| Plate speed: | 5-100rpm |
| Abrasive delivery: | Up to two 2L cylinders, measured flow<br><br>1-100ml/min delivered via peristaltic pumps |