



INTELLIGENT

SAMPLE

PREPARATION

AKRIBIS-AIR



---

Highly automated, stand alone system delivering superior quality results through intelligent automation features.

---

[Logitech.uk.com](http://Logitech.uk.com)



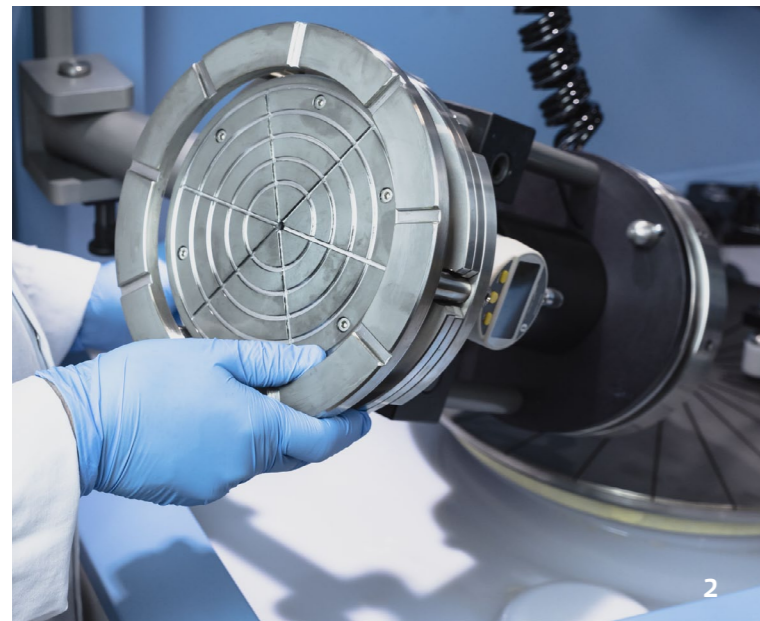
**LOGITECH**  
Materials Technologists & Engineers

# AKRIBIS-AIR

## INTELLIGENT SAMPLE PREPARATION SYSTEM

This intelligent, stand-alone sample preparation system delivers the ultimate in processing innovations and is a highly automated stand-alone machine. Offering dynamic load control of Logitech's intelligent Air Jigs, the system offers fast, reliable and highly accurate results across a wide range of applications.

The level of automation offered by Akribis-air substantially reduces user input, variability, set-up and clean up operations. The integration of an advanced software system provides a user friendly and high controlled platform for advanced processing. The intelligent, free rotating air jigs developed by Logitech uses air pressure to allow maximum sample load application throughout the process - meeting the needs of the most demanding applications.



2



3



4

## KEY FEATURES & FUNCTIONALITY

- Stand-alone, single station system with the ability to process either 100mm/4" or 150mm/6" specimen - a driven jig roller arm greatly increases accuracy and repeatability.
- 3.8ltr capacity abrasive cylinder with dual abrasive feed utilises auto-abrasive switch over functionality to allow for multistage processes with a quick cylinder change over.
- There is also the option for a third pump to facilitate a colloidal feed unit.
- The automatic drip detector will stop the plate rotating when the abrasive cylinder is empty - thereby avoiding any damage to the specimen running on a dry plate.
- All process conditions are controlled via the Graphical User Interface (GUI), including: plate speeds, material removal rates, the metered abrasive feed and jig load - giving the operator complete control.
- Chemically resistant to standard chemicals used in CMP applications, including sodium hypochlorite (Na OCL). Contamination can be avoided using the auto-wash feature and integrated, sample cleaning, de-ionised water and nitrogen guns.
- 400mm plate with rotational speeds between 5 and 100rpm - facilitating faster lapping and polishing rates.
- Bluetooth-enabled features include: real-time data collection and feedback from the digital indicator on the Air 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).
- 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.
- The recipe mode feature on Akribis-air allows operators to create, save and re-call multi-stage process recipes - making each process completely repeatable, even across different operators.
- Intelligent Air Jigs developed by Logitech allowing jig load to be accurately set to meet the needs of the application, in the range of 0.5kg - 12kg for the AJ100 (100mm jig) and 0.5kg - 21.6kg for the AJ150 (150mm jig).
- 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.

1: Akribis-air Intelligent Sample Preparation System

2: Free rotating intelligent Air Jigs allow jig loads to be accurately set per the application needs

3: Avoid contamination with the integrated sample cleaning gun

4: Advanced software system provides a user friendly platform for controlling process parameters

## TECHNICAL SPECIFICATIONS

Wafer Capacity: 1A100 1A150	100mm/4" 150mm/6"
Height	1844mm
Width	1003mm
Depth	702mm
Power Supply	240v/110v Single Phase
Plate Diameter	400mm
Plate Speed	5-100rpm
Abrasive Delivery	3.8ltr Cylinder, measured flow 1-100ml/min delivered via peristaltic pumps
Colloidal Delivery	1-100ml/min delivered via peristaltic pumps