

Benefits & Advantages

There are a huge number of benefits and advantages to be gained by implementing robotic laboratory systems. They can increase your laboratory's capability and revenue generation potential in a number of ways:

Key Advantages of Robot Laboratory Automation

- An automated system offers speed performance in processing unrivaled by humans. Combined with a computer and a scheduling algorithm an automated system is able to process a number of samples at the same time taking advantages of system bottlenecks to perform other tasks.
- Increased process accuracy and repeatability are a standard by product of a robot assisted laboratory. Once programmed, the robot will perform a repetitive task reliably and efficiently, to an accuracy often difficult to attain even for experienced lab technicians.
- With a robot performing time consuming menial tasks, laboratory personnel can be assigned to more dynamic applications that can take advantage of their experience and education. Fewer staff can achieve increased production in a shorter time.
- Minimise materials wastage through accurate calibration, tracking, management and optimisation of your process and resources.
- All products are designed according to relevant international standards as well as any additional requirements that you may have.

Benefits of Robot Laboratory Automation

- Raw material to analytical result untouched by human hand providing safety and improved accuracy where human contamination detracts from quality of the result (biochemical robotic laboratory applications).
- Operates continuously and can provide processing 24 hours a day. Systems can be left overnight for long processing cycles - effectively doubling productivity where staffing is concerned.
- Modular design allowing for integration with existing systems or expansion / upgrades at later dates.
- Custom design allowing you to conduct your existing procedures. Think your process

is too complicated? Contact Argon. We are likely to surprise you!

- Proven control platform applied to your solution to provide reliable results with minimum operator interference, little downtime and greatest efficiency.
- Utilizes real time operating systems to meet critical safety requirements and is embedded with strict safety and error detection routines capable of recognising the smallest anomalies.
- Advanced Networking Interface - LIMS/LIS Compatible solutions are available with all our designs.
- Advanced analytical processing capable of new / undeveloped techniques. Simply provide us with your process and we will engineer a solution for you.
- Industry Tested Smart Automation Components:
 - Latest design 6-axis robots.
 - Auto-sampling systems with cross-contamination counter-measures
 - Automated mixing / stirring.
 - Beaker washing systems.
 - Weighing and dosing operations.
 - Robust designs capable of withstanding corrosive and dangerous environments.
- Engineering Excellence in the Laboratory with a long standing background in industrial automation applications our staff now encompass a wide range of backgrounds including engineering, computer science and chemistry.

To speak to an Argon consultant about how automation can further help your laboratory contact us.