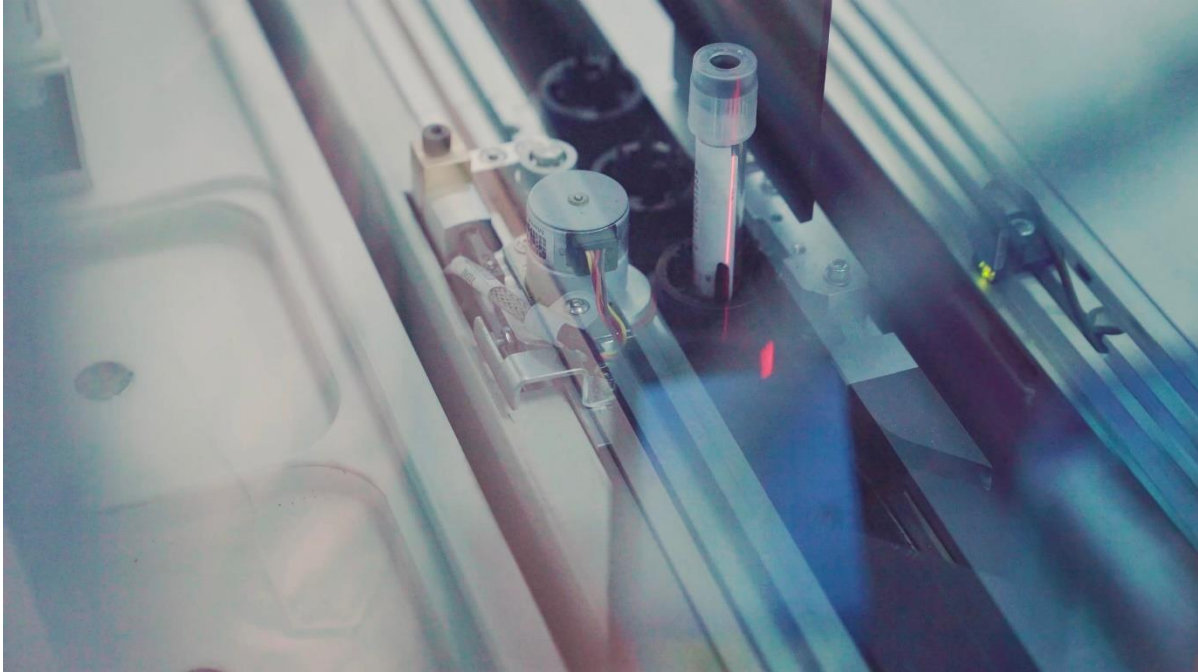


How Lab Automation Improves Quality



When you're handling large volumes of samples or performing multiple liquid handling procedures throughout the day, using lab automation can be very beneficial. Adding a more integrated system solution with [scheduling automation software](#) will make things much more streamlined.

Your labs can use various equipment to enhance the automation process, such as integrating automated scheduling software into your existing process and Laboratory Information Management System (LIMS).

The main component of the integrated system is the robotic arm coupled with the appropriate amount of plate storage. Robotic automation software is available in several different sizes and can have varying numbers of axes and joints. Which one is best for your company depends on your specific needs and applications. This is something that Retisoft engineers can offer guidance and advice for.

The amount of automation that a lab should implement varies greatly depending on the throughput desired and the complexity of your process.

Repetitive processes are one of the more tedious aspects of lab work, but they are the easiest to automate because many scheduling automation software relies on the identification of patterns in a large, repetitive sample size.

Benefits of Lab Automation

Any lab that requires repetitive liquid handling or plate processing can benefit from automated scheduling software, not just large research companies with large capital budgets.

Saves Time

Automating liquid handling saves scientists a lot of time pipetting and transferring liquids. They can spend this time elsewhere in the lab performing tasks that cannot yet be fully automated.

Increases Workflow

Scheduling automation software can also greatly increase the throughput of work. In turn, this enhances production and workflow and may boost business as well employee morale.

Reduced Risk of Error

It can reduce the risks of human error by removing the need for humans to complete any iterative tasks invoked in liquid processing or distribution. Robotic process automation software can perform tasks with higher accuracy, which is essential for liquid handling processes in many industries.

For example, in the medical and pharmaceutical industries, a precise amount of liquid may need to be added to a formulation to provide a specific dosage in a new medication. This dose needs to be exact to ensure patients are not exposed to toxic doses.

Better Reporting

Automating various liquid handling systems makes it much easier to identify what tasks were done and when they were completed. This is beneficial to keep a close eye on which samples have been processed and analyze where anything has gone wrong in the process. Retisoft's Genera 6 automation software integrates with most existing LIMSs to ensure a smooth transition to an automated environment.

Reduced Health Concerns/Improving Ergonomics

When humans repeat the same actions for prolonged periods of time, it can lead to joint issues. Automating processes like pipetting and pouring can, therefore, reduce issues associated with repetitive stress.



Contact [Retisoft](#) for more information on the automation software we can provide for your lab.

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