



Auto Control Systems were approached to design and manufacture an automated sample loading system utilising a Universal robot with a three finger pneumatic gripper featuring custom designed components. The whole system mounted on a Stainless Steel location plate designed to fit the laboratory work benches

CASE STUDY

The Problem

Manual loading of single samples was slow and cumbersome producing a bottleneck in the testing process.

The Solution

After considering the requirement of the application it was decided a UR3 robot would be the best fit for the project.

Auto Control Systems provided the system design, electrical drawings, robot programming and manufacturing of the product in the Perth Metro area. Our skilled engineers produced the finished system on time and to budget.

The technology we used for this project included:

- Universal Robot UR3
- Custom gripper incorporating SMC pneumatic components

Return on Investment

Due to ease of integration with UR robot, engineering costs were kept to a minimum meaning a low cost solution, providing an ROI of only 14 months on this installation.

Flexibility and adaptability

Our system allowed faster testing rates with a user-friendly interface that reduced human error. The automated loading removed a bottleneck in the sampling process and allowed staff to concentrate on other less repetitive tasks.

