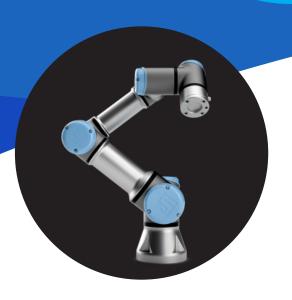


Machine Loading Using Cobots





- 1 Two UR10e's installed where there was limited automation knowledge
- 2 Increased working hours

- Operators embraced the new technology, increasing job satisfaction
- 4 Safety area scanners to ensure operators safety

Simple Flexible Machine Loading

Our client is a long-established high-volume manufacturer of fitted furniture with the capacity to produce 300,000+ MDF/MFC laminated cabinets and worktops per year for both new build and refurbishment projects.

The internal manufacturing process utilised traditional and CNC machines for cutting, drilling, and finishing.

The Challenge

Our client has been refining its process over many years and has invested heavily in equipment to manufacture boards and products. The SP Elements customer was a typical manufacturer who felt that automation was too expensive for them. They also required a solution that could be flexible and that their own inhouse team could configure and program.

- Operator speeds were controlling the production throughput, not the machine.
- Existing machines were over 50 years old but fit for purpose and worked well so they had to remain.
- · Simplicity was the key to success.
- · Remove tasks that could cause RSI.
- 20-30 repetitive manual processes around the factory.

The Solution

The company requested a site visit to demo a cobot at their facility. A machine in the customers factory was selected as a test bed. Like most companies, when the cobot was initially brought out of the box, to the untrained eye it seemed a daunting prospect.

With a selection of OnRobot vacuum tools mounted onto the cobot our engineer handed the control pendant to one of the customers operators and walked them through the process of programming. Within 30 minutes the machine was being loaded with boards. This of course required refinement and further training but very quickly the customer saw the benefits.

The final solution proposed consisted of two UR10e's each fitted with area scanners to slow the cobots down when someone entered the area. OnRobot VGC10 vacuum heads were employed to lift the boards onto the machine and sensors fed back to the UR for sequencing purposes.

Training - The customer signed up to the Universal Robots Training Academy and installed the system with limited input from SP Elements.

Features & Benefits

- Two UR10's installed where there was very limited automation knowledge
- Customers operatives are "self taught"
- Operators embraced the new technology and have seen it as a major improvement, increasing job satisfaction and improved output.
- Customer can now increase working hours without paying premium rates
- The UR10e's are being trialled on the customers lines to evaluate the need for more
- Safety area scanners to ensure operator safety

