

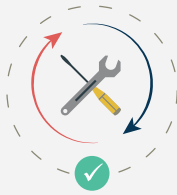


CHEP validates investment in a new automated assembly line design

Using SIMUL8 simulation software, logistics business CHEP **validated new automated assembly line designs**, ensuring investment in machinery and equipment would **provide fast return** to shareholders.



Using SIMUL8, CHEP achieved:



*Identified key points
to be addressed in the
proposed design*



*Experimented with ideas
in a risk-free environment
to find best solution*



*Validated new assembly line
design and ensured ROI on
new equipment investment*

About the project

CHEP is the world's leading pallet and container pooling company. Part of the \$11 billion Brambles Group, CHEP operates in 38 countries across six continents, providing equipment pooling services to many industries.

Pallet and container pooling is the shared use of high quality pallets and containers by multiple customers or users. CHEP maintains their customers' pallet pool and ensures that all pallets are in good condition by cleaning, inspecting and repairing any damages in their service centers.

CHEP provides pallets for more than 100,000 customers, including Wal*Mart, Procter & Gamble, Kellogg's, Kraft, Nestle, The Home Depot, Unilever, Hewlett Packard, Ford and GM.

CHEP contributes about 40% of the Bramble Group's revenue, with efficient processes in service centers vital to maintaining this contribution. Continuing investment in the business has led to new technology being introduced, automating certain processes used in the cleaning, inspection, and repair processes.

This process has also led to a complete redesign of the flow of pallets through service centers. As such, CHEP needed to validate this design and ensure that investment in machinery and equipment would provide a return to shareholders quickly and effectively.

*"You can't design systems like this **without simulation**, and the earlier in the design process you use it the better."*

Clive Atkinson, Project Manager, CHEP



Highlighting issues in the proposed design

CHEP's Industrial Engineering Department turned to simulation to help validate their design, with SIMUL8 was chosen as "the most user-friendly package".

Even in a simplified form, the simulation highlighted key points to be addressed in the proposed design. Maximum buffering sizes were found to be larger than predicted, due to the random nature of the delivery of damaged and undamaged pallets into the process. If this had not been uncovered by the simulation a costly redesign would have been required.

Armed with the learning and understanding from the simulation, Clive is now confident in the design and is in an excellent position in his negotiations with equipment suppliers.

As simulation skills improved, a detailed simulation of various machines was created using SIMUL8 components - custom reusable objects that can be placed onto a toolbar and easily reused in future simulations, reducing build times further.

What's next for CHEP?

SIMUL8 has been used in numerous other projects at CHEP to answer questions like **"if we improve reliability of a machine does it increase productivity?"** - this is not as obvious as it sounds and depends on downstream process not acting as bottlenecks.

Make fast, confident decisions with simulation

SIMUL8 Professional is the simulation software of choice for organizations around the globe; enabling agile, accurate and profitable process improvement decisions.

To find out more about how simulation could help your organization and to see SIMUL8 in action, visit www.SIMUL8.com/supply_logistics