

PROJECT PROFILE

ALANTRA LEASING



PRODUCTIVITY IMPROVEMENT IN MODULAR CONSTRUCTION

Alantra Leasing (Alantra) is based out of Sussex, New Brunswick. Alantra has distribution and maintenance centres in New Brunswick, Nova Scotia, Prince Edward Island, Newfoundland and Labrador, Quebec and Ontario. The company was established in 1981, producing mobile trailers and modular buildings. Alantra has a diverse range of products, fulfilling industrial, commercial, and residential needs.

PROJECT BACKGROUND

Alantra became connected with the Off-site Construction Research Centre (OCRC) with the initial goal of identifying and mitigating bottlenecks within the production process. This goal has since expanded to include more high-level process improvement initiatives, and the development of a design for a facility expansion and an analysis of how units will flow through this new design. The project is on-going, but thus far has involved time studies, process map development and investigation into possible future layouts and the incorporation of automation.

CURRENT RESULTS

After a four-month period of data collection, the data is currently being analysed in depth. Throughout the data collection process, qualitative observations were made alongside

the quantitative observations. Through these qualitative observations, it became evident how important an effective use of resources, particularly skilled labour, was for the production process to run smoothly. With this in mind, slight changes to the process were made, including shifting sequential processes to parallel processes with a lag time. To help with resource allocation, a basic inventory management system was put in place to mitigate travel time by skilled workers. Data collected through time studies was also used in the development of a new shop layout for the future shop addition.

FUTURE STEPS

Based on the data collected and observations made throughout the summer, the following steps will take the project forward:

- Analytical modeling of various stages of the process flow (i.e., before improvements, after improvements, and after incorporating automation)
- Develop a summary report of work completed and observations made
- Continuation of the relationship with OCRC and Alantra, through the development of a new facility
- Identify areas for improvement in current processes
- Identify possible bottlenecks that can be mitigated in the new facility layout