

Woodward is an independent designer, manufacturer, and service provider of controlsolutions for the aerospace and industrial markets. The company's aerospace systems and components optimise the performance of fixed wing and rotorcraft platforms in commercialand business aircraft, ground vehicles and other equipment.

The Prestwick site opened in 1998 and brings a highly skilled workforce to Ayrshire servicing customers that include leading original equipment manufacturers (OEE's) and end users of their products throughout the world. Woodward components are incorporated into aircraftservicing 20 million flight per year populated by 30% of the world's population.



Business Improvement Academy Project

Three members of staff from Warehousing and Technical areas assembled to look at the front end process of how components enter the Prestwick facility. The business is at the beginning of an exciting time in its history with dramatic growth forecast over the next decade and this is highlighting a need for creating more capacity and improved turnaround times.

Activity started with the team walking through the process as product arrives through to placing components in to test areas. They documented all activities and produced a high level "Value Stream Map" which was displayed in operational areas for discussion.

Project Analysis

As the map was drawn up the team investigated the time spent at each work station and this was used to measure current performance against current capacity and capability for the future. Analysis of Visual as Received (VAR) was displayed in a series of "Pareto Charts" relating to unit throughput and average hours utilised for each product type. It became clear to the team that there were elements of

duplication and often too many steps in specific parts of the process. It had been a useful and thought provoking experience taking a step back from day to day work and looking at how processes had evolved over the last 20 years. Studies carried on over a 2 month period which led to changes being made prior to the team presenting their project formally at a Scottish Enterprise "Lean" event.

Implementing Improvements

The studies were carried out with the wider workforce who all had total buy in to making changes. These included:

- Reducing the time spent photographing product for customer approvals
- Standardising the defect identification process
- Training technicians in specific areas to increase flexibility and streamline the flow of work

As duplication was removed and process steps were simplified the new methodology created a capacity improvement of 37.5 units per month which represents an increase of 23%.

"As a team we thoroughly enjoyed participating in the Business Improvement Academy. Throughout the course we learned new skills and techniques which not only helped us during this project, but will continue to help us in the future as we create a lean culture within Woodward. We would like to give a big thanks to Accelerate and Scottish Enterprise for creating such a good learning environment and making it so enjoyable."

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Kirsty Harvey, Scott Hilderley and Paul Clark.