

Knowledge Transfer Partnerships

KTP BENEFITS

Knowledge Transfer Partnerships are designed to benefit everyone involved

- 🔄 Businesses will acquire new knowledge and expertise
- 🔄 KTP Associates will gain business-based experience and personal and professional development opportunities
- 🔄 Universities, colleges or research organisations will bring their experience to enhance the business relevance of their research and teaching

Knowledge Transfer Partnerships

Accelerating business innovation;
a Technology Strategy Board programme

<http://www.ktponline.org.uk>

BLAIRS LTD INCREASED THROUGHPUT FOR MANUFACTURER FOLLOWING IMPROVEMENTS TO PRODUCTION LINE

ABOUT THIS CASE STUDY

Blairs Ltd is a leading manufacturer of high quality, bespoke timber windows and external doorsets. Working with the Department of Design, Manufacture & Engineering Management (DMEM) at Strathclyde University, this Knowledge Transfer Partnership (KTP) aimed to adapt the existing manufacturing software to accommodate a wide range of new product features and improve the overall production line.

ABOUT THE SPONSOR

The Technology Strategy Board is a business-led organisation established by the Government. Its mission is to accelerate research into, and development and exploitation of, technology and innovation for the benefit of UK business – building economic growth and quality of life.

FAST FACTS

- 🔄 Dedicated production line introduced capable of quick response manufacturing (QRM)
- 🔄 Significant increase in production capacity
- 🔄 KTP project exceeded expectations on profit
- 🔄 Won a KTP Award Winning Partnership award
- 🔄 Professional development and invaluable project management experience for the Associates

The Company



L to R: David Giles, KTP Associate, Trevor Turner, University of Strathclyde and Allan French, Engineering Director, Blairs Ltd

“True success is measured by the impact on the Company’s financial performance and by this measure the KTP project has been outstandingly successful.”

Allan French, Engineering Director, Blairs Ltd

ABOUT THE PROJECT

Blairs Ltd produces a comprehensive range of windows and doorsets for every application, and blends traditional timber craft skills with modern technology. These are fully designed, engineered and manufactured at their factory in Greenock but are fitted in buildings throughout the UK, from tower blocks to castles. Blairs recognised the need to improve operational efficiency across the production line. The aim of the partnership was to adapt existing

manufacturing software to accommodate a range of new product features and manufacturing equipment, and introduce improved production sequencing and operational routing, to improve manufacturing efficiency.

BENEFITS

Blairs benefited through an increase in capacity and reduced lead times resulting in greater efficiency, throughput and competitiveness.

RESULTS

- 🌀 The Company is now competitively placed as a result of QRM
- 🌀 User friendly IT system allowing for easier access and interpretation of production line management



🌀 Ability to adapt products/production line easily and quickly to meet changing market demands

🌀 Blairs has taken on a more structured approach to continuous improvement

🌀 The Company has a better understanding of its business as a result of the KTP

The Associate

“The KTP has helped provide me with an advanced career path into senior level management.”

David Giles, KTP Associate

David’s role on the KTP involves managing the production line to improve flexibility and increase capacity. He has undergone rapid personal and professional development, which has led to an increase in his confidence at dealing with people and processes.

“The KTP has provided me with an investment in my future, it was an aspiring time and one which I value.”

John Ritchie, KTP Associate

Working for a small company meant that John experienced all of the operational aspects that contribute to the effective running of a business. John’s role at production planning and control meant that he saw at first hand how the Company has benefited from his part in this KTP project. For him, this has led to employee satisfaction and a real sense of achievement.

RESULTS

- 🌀 Accelerated learning
- 🌀 Exceptional project management skills
- 🌀 Enhanced technical skills
- 🌀 Both Associates were offered positions with Blairs Ltd

The Academic Partner

“Working with Blairs has helped the academics in DMEM improve their profile as experts in operations management with the skills needed to help manufacturing businesses improve their performance.”

Trevor Turner, Department of Design, Manufacture and Engineering Management (DMEM), University of Strathclyde



University of
Strathclyde
Glasgow

BENEFITS

The project allowed the academics involved to test out a new paradigm called quick response manufacturing (QRM). This improved their competence in the design of operating systems for high variety, high volume product mixes. Case studies of the Blairs KTP have been included in several conference presentations and journal papers, as well as other prestigious manufacturing industry publications. Courses on operations management within the department have been modified to include the QRM manufacturing paradigm. Case studies of the methodology used to simulate and then implement QRM based operating systems at Blairs Ltd have also been introduced to both undergraduate and postgraduate modules.

RESULTS

- 🌀 DMEM is first engineering department in UK to introduce QRM to their courses
- 🌀 Results presented in two papers and presented at international conferences
- 🌀 Senior management at Blairs Ltd have also participated in two research programmes being undertaken in DMEM