

# 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
- 🔄 University, college or research organisation will bring their experience to enhance the business relevance of their research and teaching

A DTI Business Support Solution

# EUROPRESSINGS LTD

## ABOUT THIS CASE STUDY

EUROPRESSINGS LTD, NOW KNOWN AS CORUS EUROPRESSINGS, IS A CARDIFF-BASED COMPANY SPECIALISING IN HIGH PRECISION METAL PRESSING. WITH CARDIFF UNIVERSITY AS THE KNOWLEDGE BASE PARTNER, THIS KNOWLEDGE TRANSFER PARTNERSHIP (KTP) HAD THE DUAL AIMS OF IMPROVING BOTH NOISE CONTROL AND PRESS TOOL FAULT DETECTION.

## ABOUT THE SPONSOR

ENGINEERING AND PHYSICAL SCIENCES RESEARCH COUNCIL (EPSRC)

THE EPSRC IS THE UK GOVERNMENT'S LEADING FUNDING AGENCY FOR RESEARCH AND TRAINING IN ENGINEERING AND THE PHYSICAL SCIENCES.

## FAST FACTS

- 🔄 More reliable inspection systems
- 🔄 Reduction in the number of defective products reaching customers
- 🔄 Significant improvement on production output
- 🔄 Staff working conditions improved as a result of the introduction of a Noise Management System
- 🔄 Employment of an Associate by host company

## The Company



“Company profitability has increased due to the reduction of seasonality in the order book, brought about by diversifying the business into new market sectors and, as a direct result of the KTP, Europressings has been able to retain existing customers and attract new business.”

D Gurney, Director, Europressings Ltd

Europressings Ltd provides specialist metal pressings and sub-assembly components for a wide range of industry sectors, from automotive to domestic appliances. These are all areas in which high levels of precision, quality and production are vital.

## ABOUT THE PROJECT

The KTP's aims were the automated visual inspection of product; improved noise control; and press tool fault detection and monitoring.

## BENEFITS

The innovative results of this KTP provided important improvements, both financially and operationally. The project led to the implementation of new systems and procedures which have had wide-reaching benefits for the company. The introduction of a visual inspection system greatly improved part inspection; staff can now devote more time to 'value adding' activities following the introduction of a computerised quality management system; a co-ordinate measuring machine provides fast, repeatable measurements, has had a significant improvement on production; and a noise management system has improved the staff working conditions.

Diversification into new markets has reduced the effects of seasonality. This has increased profitability and led to the

company attracting new business, whilst retaining existing customers. Forecast results indicated that post-KTP exports increased from just 9% to 14.6%, new markets increased by 4.5%, sales by 80.5%, quality improvements by 5% and operations improvement by 10%.

The KTP was instrumental in helping to create a more efficient, profitable and innovative company with staff who have been trained in new areas.

## RESULTS

- 🔄 A wide range of new systems and procedures have been introduced, including a Vision System, Energy Management System, Computerised Quality Management System and Noise Management System
- 🔄 Greater exploitation of existing resources
- 🔄 Improved management techniques
- 🔄 A solid introduction to the value of research and development

## The Associates

The three Associates recruited for this Programme were graduates in Mechanical Engineering, Advanced Manufacturing Systems and Manufacturing Systems Engineering.

**“The skills, knowledge and expertise I've gained during my time as a KTP Associate are used on a day-to-day basis and have greatly boosted the implementation of procedures and the attraction of new and profitable business. The projects I undertook led to the introduction of innovative systems and operations, which proved to be of strategic benefit to the company.”**

Claire Petheram, KTP Associate (now Project Engineer)

## BENEFITS

The KTP gave the Associates the opportunity to develop and extend their skills through training courses; the management and supervision of both student and company projects outside the scope of the main programme; and exposure to a wide range of manufacturing-related topics.

## RESULTS

- 🔄 One Associate taken on permanently at Europressings
- 🔄 Associate acted as Industrial Supervisor for next Associates
- 🔄 Associate presented paper at a major conference in China
- 🔄 Pursuit of Chartered Professional status

## The Academic Partner



The Knowledge Base Partner for the project with Europressings Ltd was Cardiff University's School of Engineering. The lead academics were Professor Pham and Dr Andrew Thomas of the Manufacturing Engineering Centre.

**“I congratulate the three Associates involved in this valuable project. Being involved in this KTP has also challenged and developed my own understanding of the processes involved in metal pressing. It is great to have been involved in something that has yielded such fantastic results.”**

Dr A Thomas, Cardiff University

## BENEFITS

- 🔄 The Knowledge Base Partner now has improved awareness of industrial problems in the press-working industry as a direct result of the practical experience gained through various aspects of the processes involved. The project has led to the publication of one journal and six conference papers and case studies. These are now being used as course material
- 🔄 Student projects with the Company have provided an opportunity to explore the application of systems engineering tools.
- 🔄 The experience has led to further strengthened links with other industry partners

## RESULTS

- 🔄 One journal, six conference papers and case studies
- 🔄 Strengthened links with industry partners