Case Study
Robert Wiseman Dairies

This Case Study outlines the experience of Robert Wiesman Dairies in selecting and implementing an OEE Performance Management Software solution for their state-of-the-art dairy at Bridgwater in Somerset, UK.

It outlines their approach, challenges and results during the program, and their plans for the future.
Robert Wiseman Dairies processes and delivers over 30% of the fresh milk consumed in Britain, every day. With an investment of over £80 million the company commenced production at its latest dairy at Bridgwater in Somerset in December 2008. The company now employs in excess of 4,800 staff across six dairies and fifteen distribution depots throughout the United Kingdom and the 325,000m² dairy at Bridgwater is capable of processing 500 million litres of milk per year.

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The issues
As part of its ongoing initiative to drive efficiencies across the supply chain, Robert Wiseman Dairies decided to invest in an OEE (Overall Equipment Efficiency) Program. Having initially developed an in-house OEE software solution for the older dairies, with the opening of the Bridgwater dairy the business decided to investigate OEE software solutions from specialist software providers.

Critical to the success of the Bridgwater investment was the early achievement of the plant’s efficiency goals, so the OEE initiative was implemented as part of a ‘Lean Toolkit’ and a SMART (Specific, Measurable, Achievable, Realistic, Time-based) Continuous Improvement Program. In order to support the delivery of the dairy’s efficiency goals, the business decided that it needed a ‘best-of-breed’ OEE Performance Management solution and in June 2009, following the development of an in-depth business requirements specification, Robert Wiseman Dairies chose OEEsystems’ PerformOEE™ Performance Management Solution to be implemented at the Bridgwater dairy.

The solution
According to the RWD's Project Manager, Andy Anderson - "the primary reasons for choosing to work with OEEsystems was the powerful, graphically-rich software, PerformOEE™, combined with the impressive expertise and track-record of their Operational Improvement Consultants and Technical Team. Early on in the engagement OEEsystems developed an in-depth understanding of our business, both technically and operationally, and demonstrated a solution to meet both our existing and future business requirements."

PerformOEE™ from OEEsystems is the premier Manufacturing Intelligence and Operations Performance Management solution, used by the world’s leading progressive manufacturing companies as their preferred application for managing real-time operational performance improvement.

Providing actionable information for Lean Manufacturing, Six Sigma and other Operational Excellence programs, PerformOEE™ delivers real-time Production Performance Improvement based on accurate, real-time Manufacturing Intelligence.

For the Bridgwater solution, OEEsystems also installed its DMAIC Project Management software to manage the projects which are identified by the PerformOEE™ software and the XDT™ Executive Desktop communications module to alert specific personnel in real-time of particular incidents and events on the production lines.
IMPLEMENTATION

At the Bridgwater dairy PerformOEE™ was installed on all the production lines over a period of twelve weeks and integrates with the equipment PLC’s, the in-house LPS (Line Production System) as well as the CMMS software from Mainsaver. Andrew Rice, Technical Director of OEEsystems comments – “Our PerformOEE™ software is designed to be configured to a wide range of business environments – for high volume and for high mix, in both harsh and regulated (GMP) environments. While the technical implementation in RWD is impressive, the real challenge is to ensure that the software is configured to identify the operational performance losses and establish the true root causes of OEE losses. We worked closely with the RWD team to integrate the software with their Daily Operations and Continuous Improvement Program.”

A goal of the implementation was to minimise the requirements on the Line Operators to enter data into the system, always a challenge for real-time data collection systems. For the online Operator Interface (HMI), OEEsystems chose DLoG IP67 rated terminals with wall-mounted large-screen plasma screens used to display the performance of each line. Andrew Rice notes – “we want Line Operators to be able to use the software in real-time to drive operations improvements and not to be distracted by the need to enter data into the system. Smart system configuration allows us to pick up work order details, good/reject quantities and different types of changeovers without Operator intervention. In fact in the RWD implementation we have built our detailed knowledge of the dairy operation into the software, allowing it to provide advance warning of potential OEE losses and ensuring that the Line Operators take action to prevent these losses.”

THE RESULTS

After an initial twelve months working with OEEsystems, the Bridgwater dairy is delivering impressive improvements. OEE improvement has increased by more than 10% and is on track to deliver the same again over the next twelve months. Pete Twiss, Site Manager at Bridgwater comments – “PerformOEE™ is fully integrated into our daily operations, morning meetings, shift handovers, short-interval control and Engineering and Operations Reviews. The software quantifies opportunities, identifying and tracking projects to deliver improvements and the OEEsystems team has helped us deliver improvement projects and train our teams on operational improvement and problem solving techniques.”

THE FUTURE

OEEsystems’ PerformOEE™ software continues to evolve and the team at Robert Wiseman Dairies in Bridgwater continue to drive requirements for more detailed reporting and new performance reports. In a technologically complex and advanced processing plant, the company is also using the PerformOEE™ software to enhance and improve the production control logic and to optimise the interaction of different pieces of equipment on the line.

And the company plans to use OEE as a metric to benchmark the performance of new equipment during the commissioning, testing and acceptance phases and to develop agreed OEE performance criteria with the suppliers of new production equipment.