



## Mabey & Johnson

### Bridging systems world leader finds a bridge to success with FrontLine

#### Background

Mabey & Johnson is the world's leading manufacturer of modular steel bridging systems and bespoke bridges. Seven times winner of the Queen's Award for Export, this 150 year old paragon of British manufacturing exports over 90% of its output.

The success of Mabey in the fiercely competitive global market is the result of high quality, low cost and blisteringly fast speed of delivery. Mabey is the supplier of first choice for rapid replacement bridge infrastructure destroyed in disaster zones around the world.

Business performance is driven by continual improvement initiatives - cutting edge design innovation is matched by manufacturing excellence. Using the most advanced robotics and welding technology, manufacturing cells operate on a 24/7 basis.

◀ One of the 6-axis robots in action

#### Needs

Mabey's performance improvement aspirations were being frustrated by the unreliability of manufacturing equipment. Equipment failures were interrupting production, putting product quality at risk, inflating costs and limiting the delivery times that could be promised. Mabey management realised that better maintenance practices were the key to increased equipment reliability and manufacturing efficiency.

As professionals, the maintenance team knew very well what they had to achieve but paper-based planning and control systems were constraining their realisable performance. The team faced considerable challenges in respect to the availability of useful data and performance management information.

Kelvin Dunn, Senior Maintenance Engineer, explains: "We were using a paper-based system which was not allowing us to measure performance trends or record enough detail for us to introduce controlled

improvements. Furthermore, without this information it was impossible to track the costs or measure the performance of the equipment - or even complete an accurate asset register. Also, our stock records and values at the site in Gloucestershire were incomplete. Our quality standards also needed better documentation and vital Health & Safety information was not fully attributable to individual work. I needed information to report back to the senior management team at Mabey about stock, quality, performance of machinery, maintenance planning and schedules - and I couldn't".

Kelvin and his team clearly needed a computerised maintenance management system that could handle large volumes of data and provide them with timely, accurate and actionable information.

#### Solution

Mabey turned to Shire Systems to provide a complete software solution to the maintenance and spares management needs of the business.



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Initially, Kelvin purchased the FrontLine Maintenance Management and Stock Control modules. “FrontLine was easy to use and by far the least expensive tool available on the market. We barcoded all of our assets to create the register and set up a planned maintenance schedule”.

“*We’ve saved Mabey & Johnson time and money through investing in FrontLine from Shire Systems*”

The second phase was the introduction of ‘FrontLine on the Move’, the mobile version of FrontLine. This was deployed on low cost PDA handheld computers throughout the site, transforming work efficiency and productivity.

### Benefits

Facilitated by FrontLine, the maintenance team has delivered equipment reliability whilst at the same time reducing maintenance costs. There are now minimal production interruptions and Mabey’s aspiration of prime quality products delivered faster and at less cost has become reality.

Kelvin has achieved the transformation to proactive maintenance - “My maintenance team respond to and raise work orders, allowing their time to be better managed. The reports I now generate show the performance of my team and we now offer a proactive service to the organisation.”

Before installing FrontLine, the inaccuracy and irretrievability of data and lack of an efficient means of data analysis was frustrating efforts to improve. Kelvin said “We’ve saved Mabey & Johnson time and money through investing in FrontLine from Shire Systems. I am extremely pleased with the products, training, guidance and support we have received from Shire”.

Use of PDAs eliminated paperwork, freed up time and increased data accuracy. Time and expense is being saved by recording stock deliveries and issues on the spot - as well as enabling better control of materials availability and inventory. Work orders are also raised and signed off directly at the point-of-action,

providing a further all-round increase in efficiency and data accuracy.

### Insight

Maintenance management is 10% engineering and 90% information management. A computerised maintenance management system (CMMS) provides the essential framework needed for systematic maintenance management and proactive asset care. Without an easy-to-use CMMS like FrontLine, effectiveness and efficiency in an asset-intensive manufacturing organisation will remain an aspiration, never the reality achieved by Kelvin and his team at Mabey & Johnson. ■



The Queen's Award for Export