Babcock BES sets course for improved efficiency with launch of IFS materials and manufacturing management systems

Babcock BES's principle customer is the Ministry of Defence Warship Support Agency, which is part of the Defence Logistics Organisation. Whilst Britain's naval shipyards are recognized as essential strategic facilities, many MoD refit contracts are let on a commercial basis and must meet stringent terms for cost and delivery. In addition, Babcock BES also has a core program of refits, allocated on a preferred contractor basis using the principles of partnership sourcing. This allows the yard to plan ahead and invest in the facilities required to meet the future needs of all its customers.

Currently Babcock is geared to surface ship refits, and the present order book includes a batch of five Type 23 frigates. In addition the yard is undertaking major modifications to all three of the Royal Navy's aircraft carriers to support operations of the new Merlin helicopter.

Babcock has installed IFS software as part of a key business systems investment to improve the management of warship refitting contracts. HMS Monmouth, one of the Royal Navy's latest Type 23 anti-submarine frigates, will be one of the first ships to benefit from the new system. Configured initially to meet the requirements of the materials and manufacturing divisions, the software provides better control of material procurement and the processing of emergent requirements as equipment is removed from ships and dismantled for refurbishment.

The challenge

The Rosyth dockyard first came under Babcock management in 1987 as a contractor- operated facility. Located on the banks of the Firth of Forth, the site includes four dry docks and a fully enclosed non-tidal basin with 1500 meters of berths, supported by traveling cranes of up to 50 tons capacity. In 1997 Babcock purchased the dockyard outright, giving the management greater freedom to pursue a policy of continuous improvement aimed at reducing costs and making the facilities more efficient.

"As part of this on-going review a number of issues were identified within the materials, spares procurement and manufacturing areas in particular with access to information and inventory control," explains Alan Gilmour, project manager for Babcock BES.

The former information system had, over the years, become heavily customized and inflexible. Reports were being printed "by the box-load", many of which were already out of date by the time they were distributed to the department managers. As a result users were creating localized spreadsheet solutions with inevitable duplication of effort and a reduced information flow.

The solution

This investment provided the opportunity to take a clean sheet and rethink the company's business requirements. The search for a replacement system started in 1999 with the formation of a steering group representing all of the relevant business functions and administration areas. Following some initial benchmarking research, which encompassed around thirteen vendors, a short list of three potential vendors was chosen for a more detailed competitive assessment. An alternative in-house development option was also kept under review during the preliminary stage.

Each of the candidate vendors was initially asked to produce a detailed proposal and system demonstration presentation prior to receiving and subsequently responding to a detailed requirement specification. The final stage of the assessment was a visit to a selected vendor reference site to see the software solution in operation.

"IFS emerged as a clear winner. The company showed that it understood the business, and the presentation was more relevant to our requirement for project-based engineering-to-order programs. Being an Oracle-based system also satisfied a key requirement of our IT strategy. Indeed although we started out just to replace the materials and manufacturing function, it soon became apparent that a component-based system would provide much greater potential benefit through integration and ultimately replacement of other existing legacy systems," said Alan Gilmour.

These include a system called VETS, using bar-codes for tracking equipment and material that has been removed from the ship for inspection and refurbishment. The company also uses another system for managing the refit work breakdown structure. Babcock can now bring all of these systems together within the IFS infrastructure and then link that structure through to a high level planning system.

As well as the IFS software, Babcock has bought the Primavera project planning software. A direct 'plug-in' allows the planning software to draw on the core data held in IFS to schedule the overall network plan and show how key events link in and flow through the system down to the low levels of material requirements. All scheduled dates are then linked back to a single plan to which everybody can relate.

Benefits

Summing up the benefits of the IFS implementation, Alan Gilmour highlights the wider dissemination of information available, as and whenever it is required, as one of the most significant steps forward. "Previously this information was limited because only a select few users had the ability to access the data. Everybody had to rely on historical reports and regular meetings to co-ordinate activities between departments. The information is now more readily available, there is a single source of the actual status and priorities are easily understood. As a result we are anticipating savings on time previously spent in preparing for and attending project review meetings.

"In financial terms we expect to see a reduction in inventory and in particular the better use of materials which can be carried forward to subsequent refit projects. Overall we have also benefited in being able to simplify our processes and procedures, and our business managers can interrogate costs and trends for their own areas of responsibility. Furthermore our commercial department has better visibility, which will assist in negotiating future refit contracts."

Software

IFS Applications suite, including mobile solutions.

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