Integrating mobile data capture with its ERP sees productivity and profits rise at Baxi

BAXI

Baxi Group is one of Europe's leading heating and home comfort specialists, with a 150 year history and brands including Potterton and Valor. The group manufactures and sells an extensive range of fires, boilers and heating products from 3 main sites in the UK based around The Midlands. One site produces components, with sales and assembly completed at the other two facilities.

Business Issue

Baxi Group are continuously moving materials between 3 sites and needed to implement more efficient and accurate supply chain processes. The company engaged BEC to complete a full process review at the 3 main operational sites, from raw materials receipting to component manufacturing and dispatch to the final assembly line. The scale and complexity of operations at Baxi requires a large number of material movements, with data being captured at many points along the chain.

Baxi had implemented Movex ERP but this only solved one half of the problem, because there were many time delays impacting on production rates. Baxi needed an automated data capture system that was fully integrated with Movex to maximise their ERP investment.

Solution

After evaluating different solutions, Baxi engaged BEC to review their business processes and design a data capture solution based on eSmart Shop Floor Data Capture that integrated with Movex and met its precise needs.

eSmart Shop Floor Data Capture is an automated data identification and capture solution that is highly configurable. It offers real-time inventory management, from receipt to final delivery, using mobile devices to automatically transfer captured data to Movex. Based on industry standard RF infrastructure, eSmart Shop Floor Data Capture ensures the data going into Movex is always accurate and timely.

Warehouse operatives are now equipped with wireless handhelds and forklift truck mounted barcode readers, which communicate in real-time with Movex across a network of access points.

"The data capture system combined with Movex has enabled us to reduce raw material holdings by 14% and increase finished goods output by 37%"

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Raw materials including castings, steel and components are received and stored at the production warehouse, before being issued against component manufacturing orders, sub-assembly or dispatch pick lists and transferred to other sites.

At other Baxi manufacturing sites, assembly lines are serviced by trackside bins that are replenished from stores. Finished goods are also packed and dispatched from sites, with receiving and stock control processes handled by eSmart Shop Floor Data Capture. After successfully introducing mobile data capture to the goods receipting and production picking areas, it was extended to automate line replenishment.

Results

Improvements have been seen right across the supply chain. Overall manufacturing output has increased which has improved customer service levels whilst reducing resourcing costs, with 3 staff members redeployed to other areas.

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Across all areas of production and distribution, eSmart Shop Floor Data Capture has helped Baxi to maximise flexibility, process efficiency and accuracy by allowing certain transactions - such as the processing of re-useable containers - to be controlled outside of the Movex ERP system. These are allocated individual IDs and barcodes for easy reading and shipped to and from the three main sites on uniquely coded trailers. eSmart Shop Floor Data Capture allows each trailer and the containers being carried to be tracked automatically. A single barcode captured from an arriving or departing trailer instantly triggers the associated dispatch and goods inwards transactions.

In summary:
BEC's Added Value

▶ Replaced paper-based processes with automated shop floor data capture

▶ Improved efficiency and productivity, reduced levels of administration and removed data entry errors

▶ Reduced inventory levels and improved cashflow

▶ Solution was customised to suit Baxi's workflow processes.

No matter how sophisticated or comprehensive an ERP system is, the efficiency and cost savings achievable will be greatly reduced if the data it is utilising is inaccurate due to manual capture processes. Research has shown that operators collecting data manually make at least 1 error in every 300 keystrokes. In a facility like Baxi's that processes 10,000 order lines a day, this is equivalent to 17,000 data errors every year. The ability to add automated data capture solutions like eSmart Shop Floor Data Capture into process functionality provides significant benefits in terms of improved decision making, increased profitability and competitive advantage. This has been borne out at Baxi, where implementing eSmart Shop Floor Data Capture integrated with Movex enabled the company to reduce work in progress by 47% in 3 months.