Case Study
Bendalls Engineering

NexSys
Powering business growth

Industry

Manufacturing - Metal Fabrication

Number of employees

70 +

Solution & services

○ SYSPRO ERP

The challenge

○ Reduce lead times
○ Improve customer service
○ Replace a previous ERP system that was poorly implemented and was not suited for the business type
○ Gain control of the processes and improve costs, lead times and quality of the make to order products

The benefits

○ Integrated data flow throughout the business
○ Enhances project management making the company more efficient
○ Flexibility of product tracking, jobs and cost reporting
○ Improved processes and management control

Metal fabricator, Bendalls Engineering, praises ideal ERP solution from SYSPRO

BENDALLS ENGINEERING

Carlisle-based Bendalls Engineering was founded in 1894 and was once a division of CARR'S Engineering. The company and specialises in the design and manufacturing of specialist steel fabrications as well as the assembly of electro-mechanical equipment for a wide range of industries.

Case Study
Bendalls Engineering

NexSys
Powering business growth

The right tool for the job

For Bendalls Engineering, the SYSPRO ERP system has proven to be an ideal solution in meeting its specific engineering-to-order business requirements. Design and engineering skills have always been at the heart of UK manufacturing, and while the mass producers are disappearing rapidly or shipping production overseas, there is still a core sector of companies who succeed in the UK by designing, engineering or making products to order. However, with global competitors increasingly offering more than just low cost labour, these companies are also now under massive pressure to reduce lead times and improve 'customer service'.

"This modified WIP report has become a major part of our production control system, and typically forms the basis of production meetings. We can monitor individual job costs and progress. As soon as a project starts to go off track we know about it and can take corrective action."

In looking for ways to help to deliver the improved processes and management control needed, these low volume 'make to order' businesses are now following the route adopted by traditional high volume manufacturers, and introducing more and more sophisticated IT solutions; in particular ERP systems. Yet, as many have found, their businesses differ from mass producers in a number of fundamental aspects, but these differences are not always catered for by many of the traditional accounts and process based ERP systems available. Moreover, with make to order manufacturer tending to be SMEs, they often do not have the IT and process expertise to recognise potential pitfalls.

One company that initially fell into this trap is Bendalls Engineering. Recognising the need to improve key aspects of its business, and the potential benefits of computerisation, the company embarked on the implementation of a 'business

system' covering manufacturing, purchasing and accounts. But, as it soon turned out the solution chosen was unsuited to its needs. As Neil Murray, Finance Director for Bendalls Engineering, notes, "It was the wrong system for many reasons, and this was compounded by poor implementation. As a result, it failed to provide the benefits that had been anticipated and soon fell into almost disuse by much of the operation."

However, with growing pressure to move forwards, and using its past experience and new in-house IT knowledge as a guide, Bendalls Engineering then selected and implemented a SYSPRO ERP system from Manchester-based NexSys. This is now proving to be the right system, providing an integrated data flow business wide - with sales, engineering, purchasing, production and accounts each having access to a single data set through their own workstations. In addition, the system's flexibility is enabling it to be used by Bendalls to deliver the greater discipline, practice improvements and enhanced project management that the company needs to compete more effectively.

Fundamentally different

Bendalls Engineering, a division of CARR'S Engineering was founded in 1894 and designs and manufactures specialist steel fabrication and assembles electro-mechanical equipment for a wide range of industries. For example, its experience of the petrochemical industry spans many continents.

Project destinations, for products from Pressure Vessels to Gas Scrubbers, run from Azerbaijan and China to the United States. While its clients include most of the major global players in the industry. Equally, the company has supplied the nuclear industry for over 45 years, and is now an approved supplier to British Nuclear Group. Most recently, it was appointed as Lead Supplier to the BNFL Sellafield Site for the supply of machined and steel fabricated spares.

In meeting the requirements of these customers, the first clear distinction between how Bendalls operates and that of a typical manufacturing operation, that design and engineering input is almost always the starting point for every order. As a result, its internal management processes and systems have to operate within an environment where there is a very little in the way of standard products or even sub-assemblies, no Bill of Materials (BOM), no forecasting of demand, no standard costs, no buying in materials in advance, and so on.

"The SYSPRO ERP system has been proven in meeting our specific needs. Overall, we are not only managing individual jobs more effectively and efficiently, but the system has made managing the whole operation far simpler and easier."

Similarly, for mass producers, the production focus is on managing and improving processes, to control and improve costs, lead-time and quality. While Bendalls, as with all ETO companies, needs to focus on every aspect of each job, in order to keep costs within budget, to meet set delivery dates, and to ensure quality - for products that need to remain sage and reliable in the most hostile of environments - is never compromised.

In fact, key operational differences run throughout the business even down to dispatch and invoicing, where detailed documentation packages have to be put together for each product and approved by the customer.

Meeting ETO requirements

Unlike the earlier business system that failed to take account of these operational differences, the key to the successful introduction and ongoing development of SYSPRO at Bendalls is that it has proven flexible enough to 'logically' and effectively encompass the way the ETO business has to operate - from quote to invoice - and provide the management support the company needs.

As soon as an order is received, SYSPRO creates a job number and job file, without the need for a BOM. From this point, the important infromation and documents relating to the job are made accessible through this file.

For instance, the company has developed its own estimating system for pressure vessels, and these quotes are now easily fed directly into the ERP system and help within the appropriate job file for ongoing reference. Also, once an order is won, the company's first task is to produce production drawings, within the in-house CAD system. However, while these drawings are still being produced, engineering can now provide access to an incomplete parts list of long lead-time materials and components through the job file.

Further, as soon as bought in items are received, checked and passed by inspection, the test certificates are cross -referenced within the file to the published parts list. Similarly, final product inspection and certification details are recorded within the job file. This helps to ensure complete traceability of materials, components and work throughout the production process.

As Murray observes, " Since the introduction of the SYSPRO system, jobs are just so much better 'hung together' as regards to everyone having easy access to information they need, when they need it."

Crucially, tracking individual job costs and progress on a daily basis, if necessary, is also an easy task. The system's WIP module allocates costs to individual jobs, with labour entered manually from daily time sheets, and material costs set against the jobs as soon items leave inspection. From this data the company now produces a weekly modified report that shows the total cost build up of each job to date (hours worked and materials in), along with

the cost of committed materials. The report also includes the original estimate, and this enables ongoing reconciliation of actual cost against estimate.

"Previously, cost information was just not accessible in a format that was readily usable. Essentially, single job reports were just not possible, and it was a case of accessing all labour costs and material costs and manually cross referencing them. A very time consuming and error prone approach," explains Murray.

He adds, "This modified WIP report has become a major part of our production control system, and typically forms the basis of production meetings. We can monitor individual job costs and progress. As soon as a project starts to go off tract we know about it and can take corrective action. For instance, if the variances against the estimate do not look right, we can quickly audit a project and track costs and activities back to their source. As well as identifying potential problems, the data can also become the basis for a claim if it is found that modifications requested by the customer have caused these extra costs,"

Further, by using the report's data to assess to progress of all the ongoing jobs, production control can now really determine present and future work load and see which fixed resources may become stretched, or conversely identify where there might be low utilisation.

Professional approach

The integrated nature of the SYSPRO system offers a read of general benefits, which the engineering department has become increasingly keen to exploit. For example, accessing the WIP module allows engineers to look at current jobs, to become increasingly keen to exploit. For example, accessing become increasingly keen to exploit. For example,

accessing the WIP module allows engineers to look at current jobs, to monitor stores inventory and track supplier lead times.

While the purchasing module provides engineers with immediate access to the order history related to a specific job, or supplier. Also, the department has found that the ability easily access report summaries, and transfer these into MS word or PDF format, is extremely useful for providing clients with progress reports and suppliers with expediting reports.

The system has also brought new disciplines, such as the inputting of information at the right time, to key activities. For example, previously, orders would be placed with agreed suppliers, but without getting a proper price. The practice was to update the files later. Now, not only does this poor practice become widely visible, but the resulting incorrect build up of costs - and its detrimental impact across the business - is far better recognised and understood. As a result, those personnel involved in this activity now maintain a much stricter system discipline. "In the past the excuse was always that people were 'too busy to do it properly'. Yet it is now obvious that when tasks are done properly and the set disciplines followed, it actually saves time and effort," states Murray.

Finally the preparation of account and invoicing has become 'more professional'. Again, previously, cost information, product documents, test certificates and inspection reports were scattered about the company, and as a result this could cause delays in completing jobs, to the point of holding up dispatch, or final payments, while customers were waiting for final documentation. Now with all essential information held, or accessible, through a single centralised data source, the preparation, validation and submission of a complete documentation package at the end of the project is much faster and efficient.

About NexSys

NexSys is a SYSPRO elite partner, with 40+ years' experience of delivering Innovative ERP+ solutions to manufacturers and distributors throughout the UK. NexSys technologies grant organisations of all sizes maximum visibility over business-critical information, enabling decisions to be made based on accurate, reliable, real-time insight. The company provides solutions that enable agility, innovation, and competitive edge. As part of the global K3 group, NexSys has specialists that have remained loyal to the business for more than a decade. It provides project management, software development, consultancy, support and training to customers to help them realise maximum ROI.