

THOMAS SWAN Scientific Equipment Ltd

COMPANY DESCRIPTION:

Thomas Swan Scientific Equipment Ltd. (TSSEL) was founded in 1926 in Consett, Co. Durham, where it produced a range of specialty chemicals. The Semiconductor Equipment Division, which is located in Swavesy, Cambridgeshire, was founded in 1983 to specialise in equipment and components for MOCVD.

PARTNER:

Anglia Business Computers

SECTOR:

Manufacturing

PRODUCT:

Microsoft® Business Solutions–Navision®

CHALLENGE:

The company needed a solution that would replace its existing manufacturing system, which was not delivering the level of business management information required.

SOLUTION:

Expansion of existing Microsoft Business Solutions–Navision (Financials) system to include manufacturing and inventory control.

BENEFITS:

- Separate Design and Production Bill of Material (BOM) tables with the facility to copy the Design BOM to the Production BOM table allows the design team freedom to create and amend a BOM without any risk of impact on production until it is chosen to release the change
- Automatic calculation and posting of Advance Payment schedules
- Materials Requirements Planning completed in 15 minutes, rather than 13 hours
- Frees up purchasing staff from routine administration tasks allowing them to focus on negotiation, producing cost savings that means the system paid for itself within the first two months.

When Thomas Swan Scientific Equipment Ltd. (TSSEL) realised that its manufacturing system wasn't delivering the level of business-critical information it needed, the company decided to build on the Microsoft Business Solutions–Navision financial system that it was already using successfully. Consequently, planning,

manufacturing and inventory modules were added in a single-phase operation.

BACKGROUND

Thomas Swan Scientific Equipment Ltd. (TSSEL) was founded in 1926 in Consett, Co. Durham, where it produced a range of specialty chemicals. The Semiconductor Equipment Division, which is located in Swavesy, Cambridgeshire, was founded in 1983 to specialise in equipment and components for MOCVD. The company employs more than 55 staff, with an annual turnover for the financial year 2000/2001 of around £16.6million.

Systems in use within TSSEL at the time included a mixture of financial and office systems, accepting both manual and computerised data entry. Manually inputting data into both a Microsoft Business Solutions–Navision system, which the company was already using for financial management tasks, and its manufacturing systems, was time consuming. In addition, constraints of the existing manufacturing system included limited functionality for purchasing operations, inadequate reporting capabilities and an overall inability to be configured to meet the needs of the business.

Also, the lead-time for a top-level system was as long as five months and the admin-intensive procedures were heavily dependent on the accuracy and job knowledge of the personnel involved.

With the existing manufacturing system proving inadequate for running the business, the company wanted to expand its existing Microsoft Business Solutions–Navision system to include manufacturing and inventory management.

SOLUTION

The company needed the new system to 'go-live' within three months. As a result, it approached Anglia Business Computers, as the existing supplier of the Microsoft Business Solutions–Navision Financials system, to undertake the project.

TSSEL had specified that the extension to the existing Microsoft Business Solutions–Navision system should, as a minimum, cover; sales and purchase order processing, stock control and manufacturing planning and production. A key requirement was for a single company-wide information system accessible throughout the organisation. The company wanted to significantly reduce manual procedures and paperwork, and produce the management information required to run the business with a minimum of effort. The new system must have the capacity to expand as the business dictates.

As a result, the existing Microsoft Business Solutions–Navision system was upgraded to Navision V3.60 – and at the same time the planning, manufacturing and inventory modules were implemented in a single-phase operation.

The manufacturing module replaced a combination of manual procedures and hard copy spreadsheet schedules used by planners and buyers to raise purchase and production orders.

The full Inventory functionality is used with some additional enhancements developed by Anglia Business Computers, to fully support the desired way of working. Changes include: the addition of an 'Issue Number' on items to aid engineering change control; an 'Inspection Required' indicator that both provides information on the inspection level and a different routing on receipt of the item; automatic checking on receipt to indicate if the item is an overdue requirement on Production/Sales Orders and a 'Status' field to allow for monitoring the completion of data against the item.

In order to support the company's current procedures separate Design and Production Bill of Material (BOM) tables were provided with the facility to copy the Design BOM to the Production BOM table. This allows the design team freedom to create and amend a BOM without any risk of impact on production until it is chosen to release the change.

Further support for existing procedures was incorporated with provision for multi-level BOM reporting that shows the full costing based on both standard cost and last direct cost. Standard Microsoft Business Solutions–Navision MRP provided all the necessary functionality and no changes were necessary.

All documentation is produced and controlled from within Microsoft Business Solutions–Navision, designed to conform to SITPRO standard. This eliminates the need to use restrictive pre-printed formats. Facilities are provided to allow additional information to be entered on any documentation, and a sub-form created for the entry of packing details on the Packing List Document.

Functionality was enhanced to enable the automatic calculation and posting of Advance Payment schedules. All transactions are fully integrated with the existing Microsoft Business Solutions–Navision financial modules.

Full user training on the new system was provided on-site by Anglia Business Computers to enable the smooth transition from the old systems to the new. Data transfer was facilitated by the creation of specific data ports, this also allowed the user training to take place using data and scenarios that were both relevant and familiar to the users.

“Our old manufacturing control system was relatively new but creaking at the seams and we urgently needed to take action,” comments Charles Russell, TSSEL's Director of Finance & Administration. “Anglia Business Computers were already familiar with our business processes and our needs and demonstrated the benefits that an upgrade of our existing Microsoft Business Solutions–Navision system could provide.”

CONCLUSION

“In summary, the implementation went brilliantly,” says Russell. “It was the first computer system deployment I have been involved in that worked right first time. The system is already exceeding our expectations and is being accepted as a vast improvement by most users. Even purchasing now have access to more information than they realised they would have. It has freed up the purchasing staff from routine administration tasks allowing them to focus on negotiation. In one transaction, £130,000 was saved on previous prices paid for the same items. Cost savings like these have enabled the system to pay for itself within the first two months.”

A further business benefit of the new system is in the area of Materials Requirements Planning. Formerly the MRP procedure took 13 hours, now the run is completed in 15 minutes.

Russell concludes, “We are 100% reliant on the system and are already planning future developments that will be based on new business needs such as CRM and remote system access.”