

MIDRANGE ERP

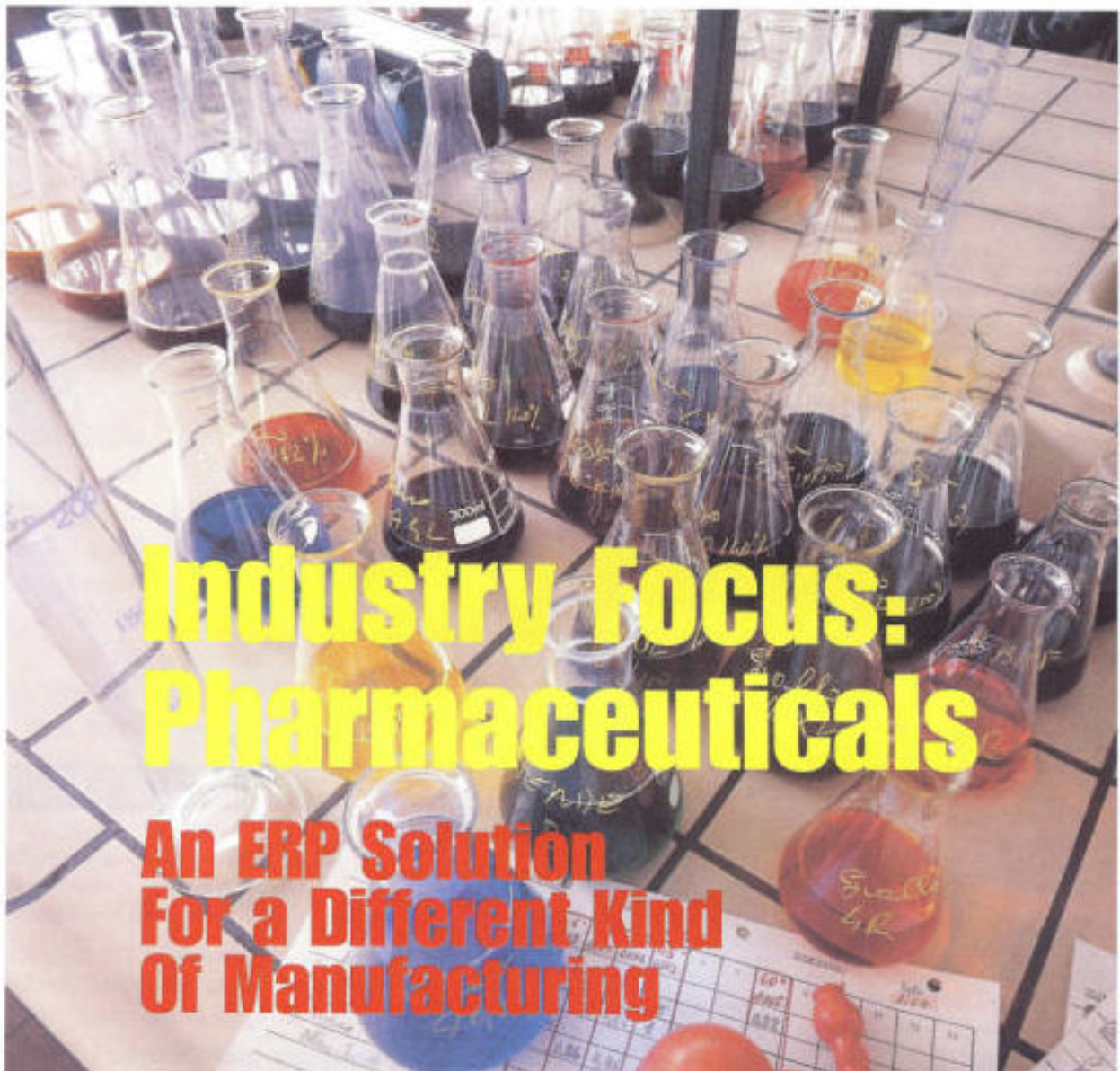
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**Implementing With Precision
Real-Time Connectivity
Achieving Zero Latency**

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Strategic Diagnostics Inc. (SDI) in Newark, Del., develops manufacturers and markets immunoassay-based test kits for rapid, cost effective detection of a wide variety of different analytes in three primary market segments: water quality, industrial testing and agricultural. SDI is a recognized leader in the field of immunoassay research and development. It concentrates on products for markets where the attributes of immunoassay technology – speed, ease of use, cost effectiveness, quantification and flexibility – meet specific customer needs.

The substances detected by SDI's test kits and strip tests include chemicals used to treat drinking water, proprietary chemicals used in industrial processes, environmental contaminants, pesticides, genetically engineered traits in plants and diseases of commercial crops. Currently, the company has about 200 employees at two locations in Delaware, a farm in Maine and a farm and processing plant in California. Sales go through a direct sales force in the US and distributors in the rest of the world.

SDI's products are so small they require a microscope to see, and the company's manufacturing processes resemble a clinical environment. SDI still has problems in common with many manufacturers of larger products, however.

SDI's one-step strip tests hold a leading position in the emerging market for analytical tests that detect water-soluble polymers and specific traits of genetically engineered plants. In addition, SDI manufactures and sells select immunoassay test kits for medical research applications, including Macra Lp[®], a leading method for measuring lipoprotein in human serum.

Because SDI engages in a significant amount of research and development, accurately tracking and analyzing R&D costs are essential. The company had been collecting and reporting costs incurred against different R&D projects, but the systems it previously used gave no assurances that all the costs associated with each project were being captured. Additionally, the company had no way to compare actual versus budgeted R&D costs.

For several years SDI considered the costs associated with R&D operations a necessary expense of doing and getting new business. It was not until SDI implemented a much-needed ERP system, however that it became apparent that R&D was actually a profit-generating activity for the company. The ERP system, IMPACT Encore from Syspro, has enabled SDI to establish a project accounting and tracking system for all of the R&D expenses, as well as the labor costs for the time reported by the researchers. With the visibility gained from monthly ERP reports, which compare budgeted dollars to actual costs, the profit generated by SDI's R&D operations is apparent. This information, in fact, led SDI to adjust overhead rates for the company's production operations.

Month-End closing shortened

Another problem that was solved with the strong financial features of the ERP system was month-end closing. Prior to implementing the new system, it took days to close each month. With the new system, closing takes a few hours.

SDI is growing rapidly, thanks to increasing product recognition and joint ventures in the field of testing materials and kits. This fast growth and product line expansion triggered SDI's search for a new ERP system in 1996. The firm looked at more than a dozen contenders before selecting the Syspro system. SDI engaged Driscoll & Associates to help implement the system.

As in all industries, product development at SDI is essential for continued growth and diversification. Developing testing kits requires many of the same kinds of disciplines and procedures used in other branches of the pharmaceutical industry.

E-commerce is also a growing concern. Recently, SDI was contracted by Rohm and Haas to develop a new product for water quality testing. Once the product was developed, Rohm and Haas contracted with SDI to manufacture the product and fill customer orders. Under the agreement, customers ordered product through the Rohm and Haas Website, then the orders were electronically transmitted to SDI's order entry module. Once the orders were processed and shipped, the system transmitted a shipping notice to Rohm & Haas identifying the shipping and tracking number.

The success of the process has prompted other customers to look to SDI to provide this new approach to marketing their products. Since this initial venture into e-commerce, Syspro has released a complete set of Web applications making it possible for customers to place orders on the Web, as well as check order status and inventory availability using their SKU numbers.

Mergers and acquisitions

Mergers and acquisitions were also a part of the landscape for SDI. The incompatibility of the different systems used by each of the merged or acquired units created chaos for the financial managers. Getting all of the operating units on the same financial system was an important accomplishment.

“A lot of planning and testing went into the project before we went live with any portion of the system,” says Rich Busch, SDI Controller. “Driscoll & Associates guided us through the entire process and provided suggestions along the way that saved us a lot of time over what would have been a trial-and-error approach. Driscoll’s experience in manufacturing and business management clearly enabled us to implement the system smoothly and successfully.”

The reports generated by the system let Busch provide his managers with accurate and timely information that helps them make decisions. “They can easily determine if we have the inventory to fill an order. They can adjust production times and provide accurate delivery dates.”

Jeffrey Bryant, SDI’s materials manager and also a biochemist, uses the system to manage by exception. “Prior to the implementation of the system, we were managing everything. Now, thanks to reports that provide change-only information, we manage 5 percent of what we did prior to the implementation of the MRP and inventory modules,” he says.

As a result of the ability to provide accurate delivery schedules, SDI has been able to significantly improve customer service. The sales department can even determine delivery dates while on the phone with customers.

One of the key elements in the company’s success was the decision to embed operating procedures within the system. Worker support procedures are easily accessed via the software’s context-sensitive help feature. Additionally, triggers in the ERP system activate third-party programs at preset points within the software. These and other user-friendly features enable SDI to use its ERP system as the main database for all company information.

Another important feature for companies working with controlled materials and products is the ability to track lots, serial numbers, shelf life, control temperatures and even inventory quarantine. The warehouse management features of the ERP software enable SDI to locate inventory in multiple warehouses and assign unique costing to each. As a direct result of this level of inventory control, SDI has been able to reduce its inventory investment by 35 percent. In fact, this enhanced control and visibility lets SDI manufacture on demand to meet customer requirements. Through the use of safety stock in MRP and the purchase order action report, SDI is fully aware of the products to be produced and the realistic quantities of materials that it must order to accommodate production.

Forecasting, coupled with a master schedule capability, allow planning based on orders, forecasts or a combination of both. This way, SDI can maintain a lower level of finished goods inventory while significantly reducing order backlog.

Not your typical plant

In many plants, it's easy to see the work in progress (WIP) stacked up behind the operations. At SDI it is difficult to see WIP at all. A typical production machine applying test samples to strips looks more like a biology lab. Even large quantities of the product are difficult to see. While the materials require special handling and tracking in the system, it is necessary to be able to visibly identify the in process batches easily. Tags are created to follow the materials through processing and provide visibility to the lots.

The next step in the evolution of technology in SDI's manufacturing processing is to introduce bar-coding. Through the use of bar-coded labels, the materials will be tracked faster and more accurately as compared to the manual tracking and reporting now being used. Bar-coding will also provide a real-time, 100 percent accurate update to the system compared to the batch processing of manual data input.

With additional products under development, as well as more potential acquisitions, SDI's future looks very sound. As the business grows and the diversity of its products increases, SDI is counting on the ERP system's scalability to support its future needs. And it is confident that the system's advanced Web applications provide the foundation that SDI needs to capitalize on e-commerce.