ATI Industrial Automation
Intuitive™ ERP

Intuitive ERP Helps ATI Achieve Continuous Improvement

ATO/ETO Robotics Manufacturer Feels Growing Pains

ATI Industrial Automation (ATI) manufactures robotic end effectors that enable its customers to achieve a high level of flexibility in robotic automation. ATI's flagship product is the Robotic Tool Changer, a robotic wrist coupling that locks and unlocks automatically, allowing a single robot to perform many different types of tasks. With thousands of highly modular products and new configurations added every day, this fast-growing firm must accurately manage its product data in order to meet tight standards of quality and tough delivery deadlines.

ATI, which spun off from Lord Corporation in 1989, is based in Apex, N.C. Since 1998, ATI has increased its revenue tenfold and become a market leader in robotics products. Several of its major customers include Chrysler Corporation, ABB and Schunk. The firm has over 100 employees in three locations.

ATI subscribes to the lean manufacturing philosophy. Many of its products are engineered-to-order and assembled-to-order, as robotics configuration needs for each customer are unique. This environment poses a challenge for ATI: to maintain and track an extremely large inventory of individual modular products along with a wide variety of product configurations that have their own SKU numbers.

Rapid Growth Calls for New ERP Technology

Since 1998, ATI has experienced rapid growth, which has presented even greater hurdles for inventory control and management, as well as in meeting on-time delivery goals. Its previous ERP system was not keeping pace with the thousands of new products that were constantly being added to the company's inventory and was not robust enough to meet ATI's needs.

ROI at a Glance:

After implementing Intuitive ERP, ATI Industrial Automation, an Apex, N.C.-based robotic product manufacturer, was able to achieve the following:

- Increased revenue by 70 percent within the first two years of using Intuitive.
- Reached 97 percent on-time delivery.
- Reduced inventory levels by 15 percent, while increasing accuracy.
- Expanded product set by 240 items per month on average.
- Significantly improved ability to track thousands of serial numbers, enhancing quality control and customer service.
- Improved cash flow and productivity levels by executing material and labor scheduling "just in time."

"The system had a lot of limitations we needed to move away from," said Dave Lora, information systems manager and software architect at ATI. "There were very few options for customization and integration. But the biggest problem was that people in the company were just fed up with it. We knew that we had to change."

After investigating several other ERP packages, ATI chose Intuitive ERP from Consona Corporation. Its powerful manufacturing and planning capabilities were a good fit for ATI's product set and business model. Lora and his associates were excited about Intuitive's .NET/ SQL Server architecture, as well as the fact that the solution's source code was included to allow for easy customization. Intuitive's customer support was also an attractive plus.

Smooth Implementation Jump-Starts Delivery Times and Inventory Control

After a well-planned and executed implementation of the Intuitive ERP system, led by operations manager David Taylor, ATI soon began to see marked improvement in on-time delivery and inventory control. "We are one of the few companies out there who can say that we had a successful ERP migration from day one," said Lora. "We kept up with a strong shipping week right after cutover, with very few hiccups, even though we had hundreds of orders in process at that time."

Lora attributed his team's success to an intensive six-month implementation planning process, and a dedicated implementation team. The team provided rigorous training for all employees and leveraged Intuitive's virtual training resources. "You can't underestimate the scope of a project like this," he said. "We played out scenario after scenario in conference room pilots with our Intuitive implementation consultant, and we rehearsed the data migration every day before cutting over. But implementation isn't just something you do at the beginning of the project; it is ongoing. With software such as Intuitive ERP, keeping up with the latest version means continually enhancing your toolbox. You get access to new features that can help your enterprise achieve continuous improvement."

A successful ERP implementation takes more than hardware and software, it takes people. The role played by the ERP vendor's support organization is vital for success.

"Since implementing Intuitive ERP in December 2004, we have continually added new functionality, through both Intuitive enhancements and our own customizations," said Lora. "During that time, Intuitive technical support has always been very responsive and helpful when we've had issues. We really like the fact that Intuitive offers a direct support model as opposed to the VAR support and pay-per-incident models adopted by many other software companies."

ATI continued to build on the Intuitive ERP system by implementing customizations that integrated inventory system, price lists, serial number tracking and a company intranet. In June 2007, ATI participated as a beta testing site for Intuitive v8.1 and went live in January 2008.

"The Intuitive ERP solution has made such a difference for us," said Lora. "I love the fact that it is very customizable and has an open architecture. We can build entirely new forms and reports within the Intuitive framework, which we couldn't do at all with the old system. Overall, we've been able to achieve a high level of integration."

Equipped to Welcome More Growth

Lora's "ongoing implementation" approach has helped ATI realize measurable returns. Amazingly, the company achieved revenue growth of 70 percent within the first two years after the Intuitive ERP implementation. According to Lora and his team, Intuitive's infrastructure significantly contributed to this growth.

Serial-number tracking, quality control, and inventory management have become much more tightly controlled since the Intuitive ERP implementation. As a result, the company is now able to easily manage a product set that grows by an average of 240 items per month, with customer service and product quality improving. Additionally, the Intuitive Buyer's Workbench has allowed purchasing personnel to manage 2,500 items each, which would not have been possible with the previous system.

Tighter Shop Floor Control

In August 2008, ATI implemented Intuitive's Shop Floor Manager. "Before implementing Shop Floor Manager, we never recorded the completion of each process step, only the completion of the work order," said Taylor. "Our production lead time is relatively short. Work orders typically take one to two days to complete and we didn't have a mechanism to record each routing step. We knew which work orders were in process, but we didn't know exactly where they were on the shop floor or what operations had been completed."

Shop Floor Manager now provides ATI's shop floor management with the status of every job, and the workload in each work center. "Each work center on the shop floor has a terminal with Shop Floor Manager, enabling operators to 'clock in' and 'clock out' of jobs," said Taylor. "Previously, everything was driven to meet the sales order due date. Today, we are driven to meet the due date of each process step. This has improved performance and productivity in each work center. From 2007 to 2010, we processed between 25-30 percent more work orders with fewer staff. This wouldn't have been possible without Shop Floor Manager."

.NET Architecture Aids Integration

ATI has also leveraged Intuitive's SQL database and .NET architecture, enhancing the system to meet key business goals.

"We have found it very easy to tailor Intuitive ERP to our business environment, with additional functionality, new screens and custom reports. The .NET architecture and customization model has allowed us to customize Intuitive without worrying too much about upgrades. We have used that model not only to enhance the base system, but also to integrate Intuitive with our other systems," said Lora.

One such integration is to UPS Worldship®. About 95 percent of ATI's shipments go out via UPS. As a result of the integration, the company has dramatically reduced the number of shipping errors by eliminating redundant data entry and rekeying errors. In addition, UPS WorldShip® automatically exports data, such as tracking numbers and package weights, back to Intuitive ERP for easier access to this information.

Access to Information Improves Decision Making

ATI has developed many reports that utilize data from Intuitive ERP in creative ways to support its business processes and help improve decision making.

"We have created a large number of custom reports to help manage our inventory levels and costs," said Taylor. "We manage over 10,000 sellable items and around 10,000 components. We have leveraged Intuitive ERP to reduce stock outs, because we now have accurate information on trends and usage. In addition, we have reduced inventory levels by 15 percent and achieved an inventory accuracy of 97.8 percent (by item count) and 99.8 percent (by value)."

An example of one of these customized reports is the Inventory Usage Report, which shows various metrics, such as weekly usage and maximum usage for a range of parts, to help set the appropriate reorder levels.

ATI has also been able to achieve unprecedented levels of on-time delivery. The internal on-time delivery goal was set at 95 percent, and after Intuitive ERP, that goal was met. "We have since surpassed that goal," said Lora. "Today, our average on-time delivery stands at 97 percent, even though we are handling 50 percent more orders."