

SAP Customer Success Story
Industrial Machinery and Components –
Industrial Tools and Metalworking Machinery



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Mark Haupt, IT Director, Wilson Tool International Inc.

AT A GLANCE

Company

- Name: Wilson Tool International Inc.
- Location: White Bear Lake, Minnesota
- Industry: Industrial machinery and components
- Products and services: Industrial tools and metalworking machinery
- Employees: 700 worldwide
- Web site: www.wilsontool.com
- Business partner: itelligence Inc.

Challenges and Opportunities

- Reduction of excessive inventory and waste
- Acquisition of business management software that supports integrated enterprise resource planning (ERP) capabilities
- Visibility into business activities that don't add value
- Lean manufacturing program to combat rising cost of materials

Objective

- Enable a flexible and opportunistic foundation for growth built on integrated ERP
- Implement lean manufacturing solutions to meet rising global demand and competition

SAP® Solutions and Services

- SAP® ERP application
- SAP Customer Relationship Management application

Implementation Highlights

- 11-month implementation with smooth go-live in March 2001
- Successful implementation of a top-tier ERP solution in a midsize business

Why SAP

- Only software vendor to meet comprehensive integration requirements, including variant configuration support for the sales desk
- Best practices and reproducible, stable processes as a foundation for continuous improvement
- Unlimited possibilities and choices available for the company's next steps

Benefits

- ROI in 18 months
- Reduced inventory and faster inventory turns
- Productivity-loss savings of US\$250,000 through increased inventory control
- 27% productivity increase
- 24% reduction in lead time
- Increase in orders and improved customer service due to Internet sales
- Reduced errors and returns in order processing
- Identification and elimination of activities that don't add value, through improved visibility

Existing Environment

Legacy business management software

Third-Party Integration

- Database: Sequel
- Hardware: Hewlett-Packard 64-bit DL585s
- Operating system: Microsoft Windows 2000 and 2003

WILSON TOOL

Going Lean with SAP® Solutions at the World's Largest Independent Tooling Systems Manufacturer

“Where there is metal being formed or bent or shaped,” says Wilson Tool International Inc.'s finance manager Larry Persuitti, “Wilson Tool is most likely providing the tool to do it.” Take a tour of the company's expansive facility in White Bear Lake, Minnesota, and people see the truth of Persuitti's statement. More tooling for punch presses, press brakes, and punch and die components for metal fabrication and stamping come out of there than any other competing company in the world. Wilson Tool's 700 employees serve more than 20,000 customers worldwide.

To manage and support this capacity, the 41-year-old company has established operations in every industrialized nation in the world. These include manufacturing sites in the United States, the United Kingdom, and China, as well as sales offices in over 40 countries spanning the globe. Every day, Wilson Tool meets the growing global demands of customers with its strategic locations, worldwide network of sales engineers, and a highly trained sales desk supporting eight languages. The company's state-of-the-art tool manufacturing capabilities and use of lean manufacturing principles and techniques are the envy of the industry.

Even with these global capabilities at its command, at the close of the 20th century, Wilson Tool found it needed help with controlling its inventory, order, and sales management processes. “With hundreds of highly specialized products,” says Mark Haupt, the director of information technology at Wilson Tool, “we needed to take control of our inventory system. And, with our business

growing rapidly around the world, we needed to automate and streamline our order and sales management processes.” Thus began Wilson Tool’s first steps on its journey to SAP® software and lean manufacturing.

Tooling Up for Lean at Wilson Tool

“Lean [manufacturing] has a pretty simple definition at Wilson Tool,” says the company’s senior business analyst Miles Burd. “It’s a continuous improvement process. It’s finding and evaluating where activities that don’t add value are taking place and focusing on activities that do add value.”

That is the view toward lean manufacturing today at Wilson Tool. But in 1999 people would have seen a different picture. “We came basically from nonformal legacy systems,” says Burd, “that did not support manufacturing functions, including bills of material and routings.” The existing systems primarily supported sales and finance functions. However, the company’s business management software was outdated and incapable of providing the widespread visibility of information Wilson Tool needed to track inventory and process orders around the globe. As a result, inventory was left sitting on the shelf.

“Each quarter,” says Haupt, “we’d have to shut down the plant for a full day to do our end-of-period inventory, after having spent 30 days planning for the operation. About 70% of our employees – basically everyone who worked in the plant – had to stop their normal jobs to take inventory counts.” As a result, the company was losing four operational days a year. In addition, lack of an integrated information flow was causing increased errors and issues with orders and returns.

Going Lean to Combat Rising Steel Prices

Another external factor pointing the way to lean manufacturing for Wilson Tool was the reality of dramatically rising steel prices, which were growing faster than sales prices. “In some cases, our steel costs went up 100%,” says Persuitti. “In talking with our salespeople, we found that we were unable to pass that cost onto our customers – so we had to find a way to absorb it. This meant going lean and cutting waste and spending elsewhere within the facility.” For this reason, Wilson Tool initiated its lean manufacturing program to enable profitable growth in a market with shrinking margins.

When Wilson Tool tried to add to its existing software package the functionality needed to grow and compete successfully, the company found the software could not be upgraded. As a result, the company recognized that it needed a new, fully integrated software solution to grow with – a solid, flexible, and adaptable foundation for its customer service applications and production and financial systems.

Wilson Tool Sets Its Sights on SAP

Two of the many reasons that Wilson Tool selected SAP software were its world-class functionality for sales and order management processes and its versatility as a lean manufacturing tool. For example, SAP supports best practices that advance the purpose of lean manufacturing, which is to provide reproducible, stable processes as a foundation for continuous improvement. Furthermore, SAP was the only software vendor that could meet Wilson Tool’s comprehensive integration requirements, which included support for sophisticated product variant configuration capabilities at the sales desk.

The range of integrated applications available from the SAP for Industrial Machinery & Components solution portfolio supported Wilson Tool’s growth into new global markets. “I think it really came down to SAP’s breadth of integrated applications,” comments Haupt. “SAP’s major competitor didn’t have as integrated a solution. We liked that SAP software does everything – all the applications, all the pieces. In fact, we bought the SAP ERP license so that we would have the ability to use whatever we felt we needed, whenever we needed it.”

Wilson Tool Paves Its Lean Manufacturing Highway

“It’s the journey along the way that really defines companies that undertake the road to lean,” says Burd. The implementation of SAP software is helping to build that highway by enabling many lean practices at Wilson Tool. These practices include the creation of its own version of the Toyota production system and the use of demand flow technology, as well as kaizen events and kanban and vendor kanban. Already, Wilson Tool has successfully completed the first stage of its lean manufacturing journey by building the backbone to support its financial, production, and customer service processes. Lean manufacturing initiatives are happening throughout the company.

Wilson Tool Goes Lean in Just 11 Months

The IT backbone that enabled these lean techniques and methodologies began during the 11-month implementation of SAP software for ERP in 2000 and 2001. At go-live in March 2001, Wilson Tool – leveraging the implementation expertise of SAP partners itelligence Inc. and Experio Solutions Corporation – succeeded in implementing a top-tier ERP application in its midsize enterprise.

The initial implementation included software for manufacturing, materials management, production planning, financial accounting and controlling, and sales and distribution. Since 85% of all Wilson Tool products are configurable, the company also implemented a highly functional tool for configuring multi-dimensional products. The SAP variant configurator offered Wilson Tool enhanced accuracy in pricing, lead times, and product configuration. In addition, the bill of material and routing functions of the configurator resulted in highly accurate production orders.

The next step paved another major section of the lean manufacturing highway for Wilson Tool – automating and streamlining processes. In 2002 Wilson Tool implemented an extension of the SAP mill products solution. The extension is designed to support complex order-entry processes that involve families of products, each with multiple attributes. This additional functionality has helped Wilson Tool's salespeople to speed up the order-entry process while the customer is on the phone. In 2003 this was followed by the implementation of a sophisticated archiving solution for enterprise content management.

Wilson Tool Innovates New, Lean Processes

A year later, with its new IT backbone almost in place, Wilson Tool “leaned out” its order-to-cash processes with the implementation of the SAP Customer Relationship Management application. This enabled the company to add a powerful, business-to-business Internet sales application and to complete its lean manufacturing processes. The application allows Wilson Tool's customers to initiate and configure the engineer-to-order process online and have the flexibility to attach PDFs and many other file types. “This application has our competition beat, hands down,” remarks Haupt. “Nobody's got the kind of capability we're developing for Internet sales.”

The addition of the Internet sales function, visited by thousands of Wilson Tool customers, is creating new opportunities and benefits for Wilson Tool. Haupt explains: “With Internet sales, we can grow the business without increasing our number of people. We can get more orders in, and we can give access to information more readily to our customers. They can get online, look at past history and orders, and then reorder – all on the fly, any time of day, any day of the week. If it's international and it's a holiday here, we're still taking orders. For us, that has a tremendous impact.”

More Lean Manufacturing in Action at Wilson Tool

Another example of lean manufacturing process transformation was when the company replaced a centralized warehousing system with a decentralized network of satellite warehouses located at the work centers. This important change relocated the product supplies directly to the work center where they are needed.

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Under the old warehousing system, production orders would be printed at the centralized warehouse, where staff then manually distributed the orders to a variety of different work centers. This resulted in excessive material handling over considerable distances. Under the new satellite warehousing system, production orders can be printed directly at the relevant work cell. This decentralization eliminates the need to move inventory manually, saves hours of labor, and minimizes errors and delays during sales and production order processing.

Wilson Tool's Business Benefits Anything but Lean

SAP solutions also bring in a parade of financial and strategic benefits. These include an ROI of 18 months – resulting from reduced inventory and faster inventory turns. In addition, improved inventory visibility and control have led to fewer physical inventory counts, a reduction in activities that do not add value, and significant savings from a reduction in productivity losses. “We have a much better view of what is happening, and we’ve reduced our physical counts,” says Haupt. Moreover, Wilson Tool no longer loses days of production to the time-consuming process of managing inventory. “We don’t have to do that anymore. That’s pretty significant, right there. That’s four days of operation – about US\$250,000 a year in productivity loss avoided – right off the bat,” observes Haupt.

Measurable Benefits

The large number of options and opportunities available through integrated applications has improved Wilson Tool’s ability to direct the company strategically. With the introduction of Internet sales, Wilson Tool has improved customer service and increased orders. With the increased accuracy of the variant configurator, the company has reduced errors in order processing and there are fewer returns. And by implementing a software extension for mill products solutions, Wilson Tool has cut the cycle time for order entry by more than 50%.

Today, Wilson Tool measures its gains against key performance indicators. For example, productivity is up 27%, lead times are shorter by 24%, and setup time is 53% shorter. On-time delivery of supplies is slightly up, and the distance deliveries have to travel is 57% down. The company now needs 43% less space for manufacturing. Moreover, the company has reduced its inventory by 20%.

Ready for Tomorrow at Wilson Tool

Wilson Tool is already planning more lean manufacturing initiatives to meet future challenges. With the power of a top-tier ERP application tuned to lean manufacturing supporting the company’s operations, managers are now discussing, for example, a move from product-based to value-based accounting methods. This will simplify reporting and make it easier for manufacturing managers to control costs. “Going lean means celebrating the small victories. It means more than going on a journey,” concludes Burd. “Going lean means going on an adventure.”