

CASE STUDY

ARGENT International

Argent International, a 3M Preferred Convertor, was running its business on an ERP system that strained resources and introduced process disruption with every upgrade. End users found the system cumbersome, and it didn't provide critical visibility into capacity and inventory. This generated scheduling problems, missed delivery deadlines, and a reliance on errorprone and time-consuming manual inventory processes. As a business that competes on quality, these were big reasons to make a change.

Industry:	
Automotive	

Location: Plymouth, Michigan





Achieved nearly 100% on-time delivery rates



Boosted inventory accuracy to 98%



Eliminated \$60,000 of annual expenses



Supported 20% sales growth with fewer employees





Argent International is a 3M Preferred Converter. For more than 40 years, the company has specialized in the fabrication and distribution of unique adhesive and diecut solutions. Argent manufactures more than 20 million individual parts per month with 350 unique part numbers and can produce unlimited part configurations.

The company is TS 16949 and ISO 14001 certified, and makes quality its top priority throughout its great diversity of products that range from simple die-cut tapes, seals, and gaskets to fully assembled sub-components.

Argent used to track its operations in an ERP system from QAD. But the company's end users found the system cumbersome and its decision-makers grew concerned about the costs associated with the system.

"Because we had installed QAD in-house, we had to purchase and maintain our own servers," said Randy Garreston, System Administrator for Argent International. "We also found the upgrade process to be disruptive. Just when we'd get used to one version, they'd change it and we'd have to learn how to navigate a reconfigured interface." When Argent International began researching manufacturing solutions for a possible upgrade, the Plex Manufacturing Cloud stood out because its cloud delivery model helps eliminate hardware costs. There were other potential benefits just as important.

"We have to meet a lot of requirements for our automotive clients, and we knew Plex would make it easier to track compliance. We also appreciated the fact that with a cloud manufacturing solution, we'd be able to do our jobs from our phones even when we were out of the office."

Real-Time Data Helps Every Employee Contribute to the Bottom Line

Today, every Argent International employee has a Plex username and password. Upgrades to the system happen seamlessly. And Argent has eliminated the \$60,000 annual cost it was spending on maintenance, upgrades, and licenses for its QAD system not to mention the never-ending need to buy more powerful hardware.



"Plex clearly spoke the language and understood the issues of a company that works in the automotive industry."

Bob Ziolkowski

Purchasing Manager

"Just as important as the cost savings is the fact that Plex frees up IT's time to focus on higher-level opportunities," Ryan Stefanski, IT Manager, pointed out.

"Rather than doing day-to-day maintenance on servers, we can work on implementing technologies that help our company take the next step forward."

As Argent's decision-makers decide how best to steer the business, they can easily get the data they need from Plex. In contrast to the company's previous system, Plex serves up business data in a variety of intuitive views.

"There were only a handful of employees who really knew how to navigate our QAD system and mine the data out of it," said Ziolkowski. "With Plex, the report writing tools and graphing capabilities are powerful and extremely user friendly. We're getting the data we need to make quick, confident decisions about our business." Having easy access to business data in Plex supports Argent's open-book management philosophy, in which each employee is taught how they can contribute to business performance and then expected to deliver. Plex serves up the data that helps employees understand how they're contributing to the bottom line.

"Thanks to Plex, we display our weekly profit and loss numbers on a video monitor outside our lunchroom," said Stefanski. "We also look at those numbers in weekly meetings so that we can stay on track for the month.

Every one of our employees is involved in the business from a financial standpoint— working towards lower costs, higher quality, and better performance—and Plex supports that."

Plex reports even help Argent streamline quality audits. When third-party auditors come in to review the company's operations, Plex is their first stop. "Auditors still go out on the shop floor to make sure of what's going on," Stefanski said. "But they can clearly see how well we manage the quality side of our business through Plex."

Greater Inventory Accuracy and Less Downtime Drives Sales Growth

With such a high volume of parts produced each month, Argent must keep track of millions of pieces of inventory—both raw materials and finished products. The cycle count feature in Plex enables Argent to make highly accurate inventory counts without any of the manual data entry that the company's previous system required. Leaders use Bluetooth scanners to count finished inventory.

"With Plex, our inventory accuracy has risen to 98 percent," Ziolkowski said.

"And because everything is barcoded, we know exactly where it's located. Our inventory data is so accurate that we don't even need to do physical checks on our raw materials anymore."

Once the right inventory is available, Argent uses Plex to ensure that the manufacturing process will run as smoothly as possible. Planners use the system to release orders to the shop floor. Every work center has a computer, where operators can view and update information. As kitting teams prepare raw materials, everything is scanned into the system.

"When it comes to raw materials, Plex is rigid—and we appreciate that," said Tom Glenfield, Plant Manager.





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"Unless a raw material was barcoded wrong during the receiving process, it's now almost impossible to use the wrong raw material for a job. That saves us from a lot of potential human errors."

Argent's leadership can check in at any point in the manufacturing process to see how jobs are progressing and how much time is left. In an effort to keep machines running optimally, Argent recently implemented Andon lights to alert maintenance staff to problems. Andon lights are used on workstations to indicate that the line has stopped, acting like a visual cue to alert line managers that there is a problem that needs to be addressed. The strategy has paid dividends.

"Going back as far as 2013, we've seen a year-over-year decrease in set-up time while our sales have grown by 20 percent per year—with fewer employees," Glenfield said. "Machine downtime has also decreased. We credit this to a combination of Plex and our Andon lighting system." If an operator on the shop floor is in setup or downtime for longer than 20 minutes, an Andon light will begin flashing. If the disruption lasts more than 45 minutes, the Plex system sends out text messages and emails.

"On our previous system, unless the supervisor happened to walk by and ask, we sometimes wouldn't even realize for up to two hours that a machine was down," Anna Mele, System Analyst recalled. "Plex alerts us to these problems much more quickly so that we can take action to keep machines running."

Achieving Near-100% On-Time Delivery for \$100 Million of Product

Since implementing Plex, Argent's sales have continued to increase. But thanks to the efficiency the new system brings, Argent hasn't needed to add headcount. In fact, its purchasing staff has shrunk from three to two, even as the company manages \$12 million of product and achieves nearly 100 percent on-time delivery rates.

By serving up real-time data to anybody who needs it, Plex enables Argent to run an even leaner operation. For example, the company has reduced its scrap rates significantly since 2011.

"In our old system, when someone scrapped a large amount of material, supervisors might not find out about that for a few days, and the reports weren't necessarily accurate," Glenfield said.

"With Plex, they can find out right away and take action to prevent it from happening again. And because all the materials are barcoded, we can really trust the data."

With data at the fingertips of decision-makers, the Argent team can stop being reactive and start planning ahead to meet customers' needs. Instead of building products a day or two before shipping, Argent routinely builds seven days ahead of a customer's due date. This not only gives the company the flexibility to change the schedule to fill a rush order, but also allows the company to carry a smaller inventory of finished products. Even before implementing Plex, Argent had a reputation for being able to get parts to a plant within hours. Plex has given the company the visibility to not only keep filling rush orders, but also meet more of its regularly scheduled deadlines.

"It used to be that if you gave us an order today, we'd get it to you tomorrow— but if you gave us an order for four weeks out, we'd miss the ship date," Ziolkowski said. "We'd take a rush order and knock three other orders off schedule because we didn't have visibility into our capacity, materials, and manpower. Today, we're hitting more of our regular ship dates because Plex helps us keep a close eye on all aspects of our business."

ABOUT PLEX

Plex Systems, Inc., a Rockwell Automation company, is the leader in cloud-delivered smart manufacturing solutions, empowering the world's manufacturers to make awesome products. Our platform gives manufacturers the ability to connect, automate, track and analyze every aspect of their business to drive transformation. The Plex Smart Manufacturing Platform includes solutions for manufacturing execution (MES), ERP, quality, supply chain planning and management, Industrial IoT and analytics to connect people, systems, machines, and supply chains, enabling them to lead with precision, efficiency, and agility. Learn more at **www.plex.com**

