

## LORD Corp.



A diversified technology and manufacturing company, LORD Corporation strives to work in collaboration with customers to provide innovative aerospace, defense, automotive and industrial solutions. The company is known for developing highly reliable adhesives, coatings, motion management devices and sensing technologies. It says its products and solutions significantly reduce risk, improve product performance and provide long-term value for customers.

Headquartered in Cary, N.C., the company has more than 2,900 employees in 25 countries and operates 15 manufacturing facilities and six R&D centers worldwide. In 2012, it had revenues in excess of \$860 million.

### Responding to Growth

In the past few years, the company has embarked on an effort to transform its supply chain through its system, processes and people. Part of the reason for this was the company saw 40 percent growth in aerospace sales in 2012 and its aerospace supplier capacity was severely constrained. In fact, supplier delivery averaged in the low 70 percent range and delivery to the company's aerospace customers was slightly below that.

"These challenges pushed us to transform how we do business in key areas and deliver to our customers," says Sharon Martin, director of global supply chain planning. "Because of this quick growth, we were challenged in areas like supplier delivery, but we faced these challenges head on by developing a transformation strategy and not just adding more bodies to the line."

In one year, the company needed to grow its workforce by more than 30 percent. It had to get new people trained, ready and prepared for the company's culture of safety and quality, all without impacting its current schedule.

At the same time, the company had to improve its operational capacity through queue management, workload balancing and improved scheduling processes. It had initially implemented SAP as its ERP solution in 2003, but engaged Reveal USA as a consultant on a SAP supply chain transformation effort.

The company had three distinctly different businesses that required the same supply chain realignment and optimization. However, these businesses required different attention and SAP functionality based on their particular nuances. The company focused the initiative on the aerospace industry group first since it is the most complex with respect to bills of material, planning strategies, lead times and processes.

“We adopted the Reveal methodology, which enables companies to take full advantage of their SAP implementation, make it sustainable and let SAP do the heavy lifting,” Martin says. “We learned how to feed SAP correctly and keep the data clean. This eliminated lots of extra spreadsheets, meetings and non-value-added activity.”

“The methodology is based on maximizing the SAP investment and re-aligning supply chain best practices with SAP functionality by educating users, [and] introducing exception management and information maturity into the supply chain,” adds Martin Rowan, senior partner at Reveal USA. “The net result is improved services levels, which is exactly what the company achieved.”

Beyond that, the company formalized its sales, inventory and operations planning (SIOP) process and worked to improve its demand management through transparent customer and supplier interaction. It launched collaborative demand planning with customers, as well. Baseline forecasts are augmented with customer-specific monthly forecasts and detailed labor and machine capacity planning in SAP. Bottlenecks are managed proactively and SAP finite scheduling ensures that the company has feasible production schedules.

The supply planning transformation effort has been critical to the company's improvement plans. The company learned how to vertically optimize its part planning. The goal is to eliminate stockouts at all levels of the bill of material and establish a heartbeat of supply to the plant. The company's suppliers see the benefit, too, because order patterns have become more stable.

Other steps have included developing and qualifying additional suppliers for critical product families, reducing risk and improving its ability to react to demand changes. The company had a dedicated and experienced team focused on this initiative to qualify new sources.

“This project was a major undertaking since it involved plants in Erie, Pa., and Dayton, Ohio, and co-locating approximately 35 people on a daily basis for six straight months,” Martin says. “All production planning, procurement and operations planning staff became certified in SAP materials management.”

The transformation involved significant change in the way the supply chain organization operated on a daily basis and viewed their roles and responsibilities.

### **Opportunities Ahead**

LORD Corp. began to see delivery improvement to customers during the latter half of 2012. By mid-2013, supplier delivery performance improved to 95 percent for three straight months. Customer delivery averaged 94 percent for the same period. The disciplines and processes are now being deployed in all of the company's SAP manufacturing facilities.

Because LORD Corp. recognized the need to address capacity constraints and aging infrastructure, it is in better position to be able to meet many goals, such as improving operational capacity. It will also be able to focus on the immediate removal of constraints so it can meet current requirements and make investments that will position the company to meet future growth.

Looking ahead, the company will work to proactively identify bottlenecks and make investments in key pieces of equipment. It is benchmarking best practices in manufacturing for incorporation, and it is working proactively with customers while in the midst of its transitional efforts so it can retain concurrent manufacturing for a period of time and ensure that customer business is not impacted.

Perhaps one of the most exciting undertakings coming up for the company is the development of a new technology and manufacturing center serving LORD Corp.'s global aerospace customers. It purchased and is redeveloping a 1.1-million-square-foot facility, which is seven miles south of its current location in Erie County. This is the single-largest investment in its history.

"I have championed a number of projects in my 24 years here," Martin says. "The aerospace transformation was the most comprehensive and successful by far, and the work we did with Reveal sets us up for the move to the new facility. The lessons learned and processes are now being implemented across all industries."