

CASE STUDY

CAST ALUMINUM SOLUTIONS (CAS)

Headquartered in Batavia, Illinois, Cast Aluminum Solutions (CAS) is a manufacturer of standard- and custom-cast aluminum heated parts for the food service, medical device and semiconductor industries.

Industry:
Industrial Manufacturing

Location:
Batavia, Illinois

Results



99 percent inventory
accuracy



Within the first four months of
implementation, the company saw an
average of 25 percent increase in sales



Time and money saved by
reducing the number of reworks



CAS, originally owned by Watlow Electric Manufacturing Company, was bought by LV2 Equity Partners, LLC in February of 2010. LV2 Equity Partners is a private equity group focused on investing in small to lower-middle market companies (\$3–\$30 million in sales). LV2 Equity Partners provides the capital, strategic direction and financial expertise to CAS.

Ownership Change Necessitates New Technology For Performance Enhancements

When CAS was part of the larger company, it lacked sufficient autonomy to develop its business model and strategies that best met its needs. It was primarily producing to support the parent company without much emphasis on its own growth and expansion. With a change at the helm, the company now has a strategic vision for growth, self improvement and success.

Under the leadership and vision of the new owners, the company faced the challenge of maximizing profits with limited resources. CAS took this as an opportunity to change old ways and enhance its manufacturing processes. The acquisition provided the opportunity for CAS to move away from an outdated batch-driven ERP system to a real-time ERP solution that would improve performance and streamline operations.

The need of the hour was to select a robust ERP solution that required minimum investment of cash and IT resources, along with maximum integration and real-time visibility into operations. “Initially we were attracted by the affordability of a cloud system, plus the ease of maintenance and the benefits of a large user group,” explained Liem McDonough, Chief Operating Officer, CAS.

They chose Plex ERP for manufacturers. For a private equity-owned company where return on investment (ROI) is essential and is driven by process and cost improvements, this technology provided the right tools to achieve these goals. The modularity of Plex ERP allows the organization to start with only the needed functionality, with the ability to add more functions as the need arises.



We have a 20 percent growth per year plan for CAS.
To achieve that goal, a system like Plex is essential.

Mike Flint

Senior Managing Director, LV2 Equity Partners

Also, a cloud model lets the enterprise avoid costly hardware, software, IT maintenance, upgrades, security and other costly infrastructure. “Plex gives us the functionalities of a larger ERP system, but can cater to a smaller company like ours at an affordable price,” said McDonough.

“Initially, I was against the cloud model. The more I learned, the more I liked it, from an investment standpoint,” says Mike Flint, senior managing director, LV2 Equity Partners. “We really appreciate the model for its low initial cost, low IT staff requirements, absence of annual maintenance fees and the option of only a single monthly fee,” he said.

Company Achieves Paradigm Shift in Manufacturing Processes

Under LV2’s ownership, CAS has repositioned itself as a leader in the cast-in heater market, focusing on engineering expertise, speed-to-market, and operational excellence. As 95 percent of its products are custom-made, customer satisfaction is primarily measured using two delivery parameters: on-time to customer requested delivery (OTR) and on-time to CAS promised delivery (OTP).

Prior to implementing the new ERP solution, the existing stand-alone software applications restricted productivity and growth because data was not integrated to provide operational transparency. As a result, the company missed critical data and experienced errors on a daily basis, which ultimately affected the delivery to the customer.

But things began to change with the Plex ERP solution implementation. Along with other cultural transformations within the company, the implementation let the company drive a major shift in mindset and methodology. The company moved away from batch processing to real-time processing. “This shift was huge and key to improving our efficiency,” exclaims McDonough.

Batch Processing vs. Real-Time Processing

There are many processes involved in the production of custom cast-in heated parts. In a batch system, there was really no effective method to report issues that arose during production. The company could not track critical data for further analysis and future prevention. It was easy to misplace WIP. These discrepancies affected inventory accuracy, customer deliveries and quality, along with other performance metrics.

Now, the company is able to record and track every stage in the manufacturing process. The powerful and highly detailed inventory tracking system tracks containers, pieces and/or assemblies as they move through the production process. Its simple-to-use interface makes it easy for shop floor personnel to enter data as production is underway. All data, minor or major, is tracked in real time. If there is an issue, Plex will not allow production to advance unless the issue is resolved, enabling the company to respond to problems quickly and avoid quality issues — saving both time and money.



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By tracking and fixing issues in real time, the company improves all aspects of the manufacturing process including inventory management, time management, material handling, waste management, production management, shipping and handling and forecast management.

“Plex requires the use of good manufacturing practices. It drives efficient operations,” said McDonough.

Shop Floor Efficiencies

At CAS, the shop floor has gone through a significant transformation in processes, driven by the robust Plex ERP solution. To highlight a few:

- The company implemented an error-free inventory tracking method, saving time and money by reducing the number of discrepancies. “We used to have daily

inventory issues, but no more. We can’t start a job unless it is recorded in inventory and all the details are loaded, so we can’t lose track of anything,” explains McDonough. The inventory accuracy is at 99 percent compared to 60 percent prior to the Plex implementation.

- Shop floor workers track the materials sent out for further processing by suppliers. In the past, suppliers would combine the batches together, adding to traceability issues. With the drill-down capabilities of Plex ERP, this intermediate process has become smoother, more efficient and traceable.
- At any given time, the company accesses readily available information about all previous transactions and the status of a particular process from the shop floor to the top floor. Employees are more accountable with this ready access to accurate data.
- The company is able to utilize resources and manage schedules efficiently because of the real-time data. For example, some of the workcenters were over-capacity



while others were under-capacity. The company was able to identify these issues right away with Plex providing data such as the number of jobs scheduled and the number of hours spent at a particular workcenter.

- Plex also supports the company's lean accounting philosophy. "We're very satisfied with the reporting and dashboards," said McDonough. "We have gained a very robust drilldown capability in accounting, sales and purchasing."

Implementation Expectations

CAS chose Plante Moran, a certified public accounting and management consulting firm, as its implementation partner. Plante Moran specializes in technology consulting for businesses. "Because of the deadlines in our purchase agreement with Watlow, we needed to complete the implementation in a compressed time frame that required focus and commitment from the CAS team. The implementation schedule was a challenge and Plante helped us get it done," said Linda Kelleher, chief financial officer at CAS.

"Even though the schedule was tough, with Plex, we were able to ship about 35 percent of our scheduled orders on the first day and continued to improve our performance to schedule every day. Our new owners had experienced many ERP implementations with results ranging from disastrous one-week shutdowns to successful "non-events" with virtually no disruption to operations. We were pleased to have an ERP launch with minimal production issues," Kelleher continued.

Within the first four months after implementation, the company saw an improved order flow to support an average 25 percent increase in sales. "With a little over a year since our acquisition, we have made great strides with the new ERP system and have the necessary tools to meet and exceed our projected goals," said McDonough.

"We were going through a culture change anyway. We'd been a small part of a big company but there was nobody left to 'save' us now," said Kelleher. "The 'Beam me up, Scotty' mentality was gone. We now have accountability and Plex facilitates that accountability."

Conclusion

In today's changing economic times, private equity firms drive portfolio companies toward sustainable organic growth for better returns. Such organic growth represents the strength and vitality of the core business. The strategic vision of LV2 Equity Partners encourages CAS to be independent.

"We have a 20 percent annual growth plan for CAS. To achieve that goal, a system like Plex Cloud ERP is essential," explains Flint. "We need to meet our delivery commitments to our customers. It is vital we understand capacity constraints and effectively schedule the production floor. We need a system that is easy to use, based in real time, that has the tools we need to manage the overall business better."

"We know we have only scratched the surface with Plex. There is so much more we can and must do," explains McDonough. "We are growing as a company, and growing rapidly. We are very confident that Plex will accommodate all the changes we are going through and help us achieve our potential."

"We are very happy with Plex and are considering implementing it in other companies in our portfolio," explains Flint.

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