Rockwell Automation | PLEX

EUROTRANCIATURA MEXICO

Eurotranciatura Mexico is one of North America's leading providers of electrical steel laminations, a major component of electrical motors and generators. The company's production capability consists of high–speed presses ranging from 125 to 600 tons, running progressive dies that produce loose laminations and interlocked stacks.

Industry:
Automotive

Location:
Queretaro, Mexico

Results

Reduced scrap rates from 2.5% to 1.5%

Boosted overall equipment efficiency 5%

Eliminated premium freight (0.7% of total sales)

On-time delivery improved to nearly 100%

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With Plex, we can now more precisely plan the specific quantities we need to have on hand, whether we're trying to minimize or whether a customer is requiring us to hold more stock. Our accuracy is now about 99%, and we've eliminated inventory obsolescence."

Eduardo Arana
Deputy Managing Director, Eurotranciatura Mexico

Business Challenges

1.
Processing steel requires a major up-front investment of capital and machinery.

2.
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3.
Customers push the company to improve its product quality.

4.
Processing steel requires a major up-front investment of capital and machinery.

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Eurotranciatura Mexico, one of North America's leading providers of electrical steel laminations, was running its business on an aging AS/400 system. Product traceability was becoming very difficult, and customers were pushing for improved product quality – all while rapidly changing requirements. At an important growth moment for the company, Eurotranciatura needed to address these challenges head-on and find a solution to better support its ambitions.

For Eurotranciatura Mexico– a company that makes lamination stacks, a major component of electrical motors and generators – this disruptive industry shift has contributed to the company doubling its size in the last two years. That boom is expected to continue, fueling future growth and opportunity for Eurotranciatura moving forward.

Although Eurotranciatura is thriving today, the company isn't immune to the challenges many other manufacturers face. Purchasing and processing a large quantity of electrical steel for the products it manufactures requires Eurotranciatura to make large up-front investments. Because processing is so machine-intensive, it's essential for Eurotranciatura to use its equipment as efficiently as possible.

"If we're only using our machines at 50 percent capacity, then it means we have to make double the investment to produce our products," explains Eduardo Arana, Deputy Managing Director, Eurotranciatura Mexico. "That's why optimizing production is one of our biggest priorities."

Adding to Eurotranciatura's manufacturing challenges, its customers often update their requirements based on changes to their own products. This means the company must be ready to redesign its processes on very short notice.

The situation came to a head when Eurotranciatura's customers—particularly in the automotive industry—began pushing the company to improve its product quality. To maintain a better handle on quality, Eurotranciatura realized it would need to implement a better ERP system than the aging AS/400 system it had used for years.

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We weren't in a position to invest millions of dollars in hiring a technical team to implement our solution and then maintain it for years to come. That's why choosing a cloud ERP system make so much sense for us."

Eduardo Arana
Deputy Managing Director, Eurotranciatura Mexico

Cloud ERP Offers Flexible, Affordable Solution

The search began for a new solution and the Eurotranciatura team leveraged relationships with key contacts externally and internally to learn what systems could potentially work for their company's needs. Two reliable sources – industry auditors and internal team members - pointed the team to Plex. In fact, some of Arana's colleagues in quality and production had used Plex in their previous jobs and had seen positive results.

"There began to be a buzz around Plex as a potential solution for us," recalls Arana. "A major selling point was that we knew Plex could help us with traceability and quality control in general, which was an area for improvement for us. We connected with Plex and began to explore what they had to offer."

In addition to cost, Eurotranciatura was concerned about finding a solution that would be straightforward to implement and easy to support over time. Plex fit the description.
With Plex, we were able to find a reliable local implementation partner to help us go live, and we continue to rely on their support to keep our system optimized. All of this came at a cost that we were comfortable with."

Working with its partner, SCM Malagón & Asociados, Eurotranciatura went live right on schedule in January 2017.

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Scrap Rates Plummet, Inventory Obsolescence Disappears

Eurotranciatura headed into its Plex implementation hoping to enhance product quality and optimize its production processes. The company's quality assurance team members have embraced the intuitive Plex platform.

"Our quality staff are very happy with Plex because they're completely confident that the system accurately records all of the most critical information about our products and processes," says Arana. "They're now doing statistical analysis that was difficult to do before, which enables them to go on the production floor and stop processes that are generating out-of-specification products. Based on this improvement, we've been able to reduce scrap rates from 2.5 percent to
1.5 percent."

Thanks to Plex's production management capabilities, Eurotranciatura has also optimized its equipment efficiency. For the company's non-automated operations, equipment efficiency has risen from 65 percent to over 70 percent. For automated operations, efficiency has improved from 85 percent to 90 percent.

Now that Eurotranciatura is making better use of its equipment, the company is finding it easier to meet customer needs without relying so heavily on rush shipping. In fact, on-time delivery times now hover close to 100 percent.

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Paying premium freight used to be a huge expense for us. It amounted to about 0.7% of our total sales. With Plex, we've basically eliminated those costs in just two years, while achieving nearly **100% on-time delivery for our customers."**

Eduardo Arana
Deputy Managing Director, Eurotranciatura Mexico

Eurotranciatura has realized these impressive results without resorting to holding excessive safety stock. In fact, since implementing Plex, the company has dramatically improved its inventory operations.

"Before we implemented Plex, our inventory accuracy was only about 85 percent," says Arana. "With Plex, we can now more precisely plan the specific quantities we need to have on hand, whether we're trying to minimize or whether a customer is requiring us to hold more stock. Our accuracy is now about 99 percent, and we've eliminated inventory obsolescence."

Better Processes, Better Corporate Image

Eurotranciatura's efficiency on the Plex platform is helping the company do more than increase productivity and save money—

it's also impressing potential customers.

"When a company is evaluating us as a potential partner and they visit our facilities and notice the level of control process investment we've made, they see us in a whole new light," explains Arana. "They start to take us seriously as a partner that can deliver products with outstanding electrical performance."

Auditors have also taken notice. They can now log on to Plex to see all relevant plans, results, statistical process controls, and more.

"Audits no longer make us nervous because we know we can access all the information we need right away," Arana reports.

"They can see for themselves how strong our processes and controls are. Our supply chain partners can also recognize how much our processes have matured. Implementing Plex has put us into a whole new category as a company."

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Innovating in an Industry 4.0 World

One of the biggest concerns for any manufacturer implementing a new system is user adoption. At Eurotranciatura, end users have not only embraced Plex but also continue to come up with new ways to improve the business on the platform.

"We have more than 100 employees using Plex on a daily basis, and they've found the system to be very user-friendly," says Arana. "Once our first wave of users experienced the greater control over production quality and engineering, they requested that we roll it out across all of our operations—right down to the production floor. And they continue to contribute new ideas on processes that we can move to Plex to make them more efficient."

Eurotranciatura's transformation couldn't have come at a better time. Like most manufacturers that serve the automotive industry, the company is preparing its manufacturing processes for Industry 4.0.

"With the improvements we've made through Plex, we now see ourselves as manufacturing leaders," Arana concludes. "We're a tier-one supplier to the electric vehicle industry, and with that comes an expectation of highly productive processes and high-performing products. Plex plays a crucial role in enabling us to create value for our customers. It enables us to continue to innovate in an Industry 4.0 world, so that we can help our customers to do the same."

Our quality staff is now doing statistical analysis that was difficult to do before, which enables them to go on the production floor and stop processes that are generating out-of-specification products. Based on this improvement, we've been able to reduce scrap rates from 2.5% to 1.5%. —Eduardo Arana, Deputy Managing Director.

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**