



CASE STUDY

# G&W PRODUCTS

G&W Products provides world-class contract metal manufacturing services. The company's areas of expertise include metal stamping, laser cutting, CNC punching, metal fabrication, manual and robotic welding, structural steel working, sheet metal fabrication, powder coating, and assembly. G&W has 135 employees working at 168,000 square feet of manufacturing and warehousing facilities.

**Industry:**  
Metalforming

**Location:**  
Fairfield, OH

## Results



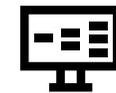
96% inventory accuracy—  
compared to as low  
as 40% previously



10-15% increase  
in delivery rates over  
a nine-month period



50% reduction  
in laser production  
department issues



8 man-hours saved  
per week on report  
preparation



**G&W Products struggled to generate reports in a timely enough fashion to guide its most important decisions. Employees were spending too much time finding the right data and not enough time analyzing it. G&W needed a way to zero in on any production issues so that it could take decisive steps to enhance product quality in ways that would help the company attract and retain new customers.**

G&W Products prides itself on being an agile manufacturer, and this agility is exactly what has the company poised for growth. Manufacturing continues to rebound in the U.S., and G&W wants to capitalize on new opportunities.

“We’re excited to see so many manufacturing jobs come back to the U.S.,” explains Jeff Karan, Director of IT, G&W Products. “This trend means we could be in a strong position to pick up additional business.”

Running three plants within a two-mile radius in Fairfield, OH, G&W serves customers primarily in the military, heavy truck, electrical equipment, and mining industries. The company

handles a full range of metal manufacturing jobs, including metal fabrication, metal stamping, welding, and powder coating. G&W’s stamping and laser cutting capabilities enable the company to work on objects as small as a fingertip or as large as the nose of a giant dump truck.

For years, G&W has run its business on the Plex Smart Manufacturing Platform. The solution has enabled G&W to increase profitability, reduce inventory, connect hundreds of devices in the cloud, and gain anytime, anywhere access to data. But the G&W team wanted to find a more streamlined approach to its stakeholder reporting. The team found itself pulling data points from Plex and creating reports in Microsoft Excel, which required too much manual work for the lean team and hindered the timeliness of the output.

“Excel is a powerful tool, but our people have been spending too much time on it,” says Karan. “For example, whenever we did a time study and tracked the results, all the data would be entered manually in a spreadsheet. And we had an associate who was spending multiple hours per week just preparing the data to present it in meetings. That’s wasted time.”



When there's an anomaly in our production, we see it as an opportunity for us all to improve. Because the reports are so fresh, people don't have to think back a week or two to remember what happened—we can easily find the source of a problem and work to prevent it from reoccurring.

**Jeff Karan**

Director of IT, G&W Products

Karan's greater concern was that the reporting function was poorly managed. Employees frequently ran reports too long after the fact for management to take action. If G&W was going to capitalize on new manufacturing opportunities, the company would need a way to react more quickly to business developments.

"In a business like ours, reaction time is everything," explains Karan. "Having employees come to us with data from four days ago wasn't working. We needed a faster way to respond to changes in our business."

## Delivering customized reports with less human effort

G&W Products added to its Plex portfolio by implementing Plex Manufacturing Analytics in 2019. The company soon gained speedy access to the information that informs its most important decisions.

"Plex Analytics gives us faster access to all the metrics that affect the direction of our business," says Karan. "We went from gathering and sharing our quality metrics once a week to posting them every day. That alone has a huge impact on the measures we can take to deliver reliable products that satisfy our customers."

With Plex Analytics, G&W can present its data in the formats that will make the most sense to its internal audiences. G&W uses VisionPlex and IntelliPlex to create issue management reports, saving its internal team eight man-hours per week. This new capability has compelled the company to dig deeper into its results to identify potential areas for improvement.

"The core Plex system gives good access to data, but we needed to go a step further," Karan explains. "Plex Manufacturing Analytics lets us customize the data in exactly the way we want to present it. This forces us to pay more attention to our results—and to question our numbers. When there's an outlier, we investigate what's really happening on the shop floor, or in purchasing, or in the warehouse, to cause those numbers. We've not only achieved a dramatic increase in accuracy, but also started looking more closely at the way we operate."

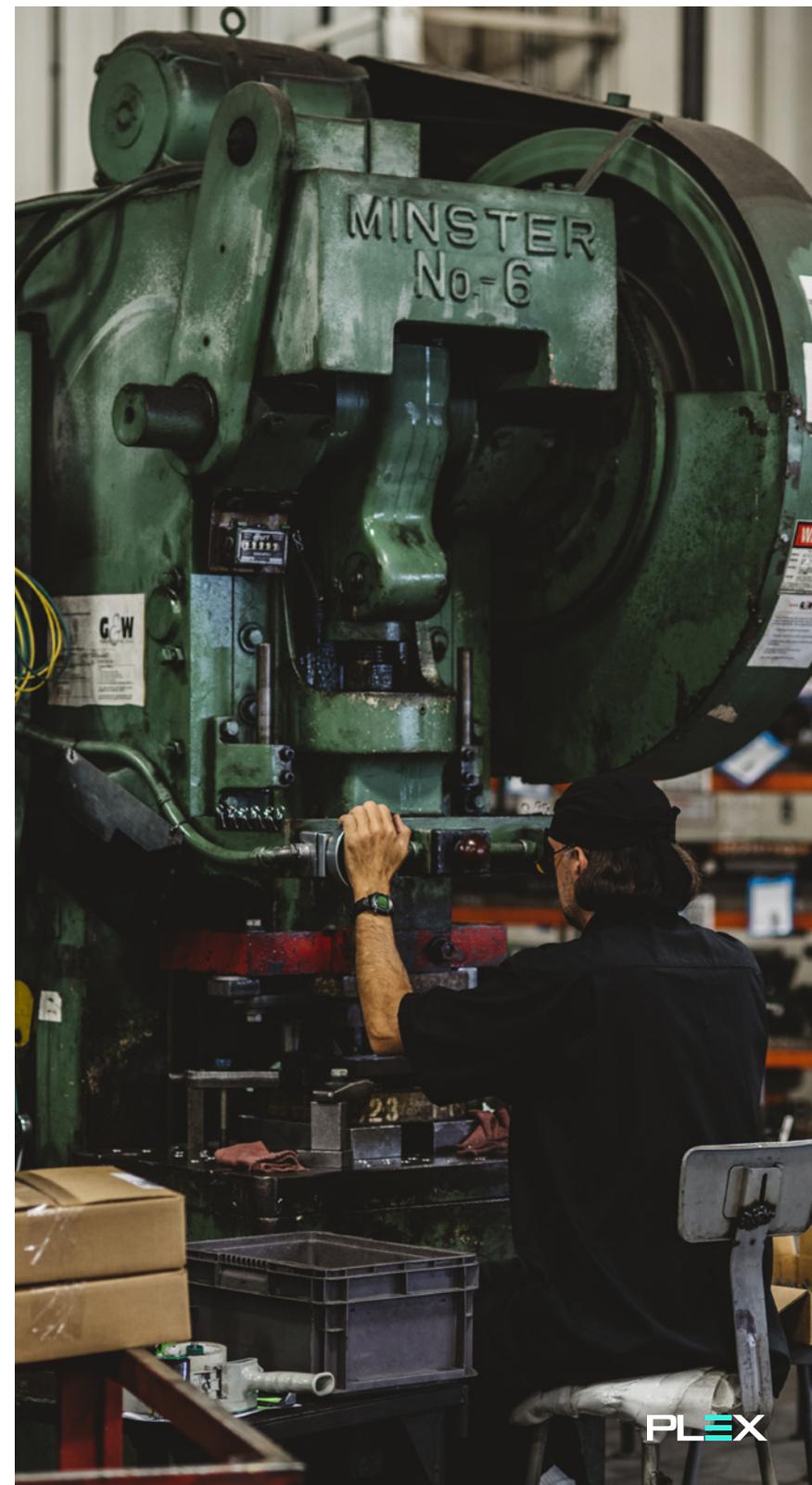
## Driving better performance with timely reports

Having access to performance data in near-real-time enables G&W to take action much more quickly. As a result, workers on the shop floor are paying greater attention to recording their daily results accurately. Everyone across the company can see the latest metrics on quality, delivery, inventory, and production as they work.

“We approach problem-solving in a positive, constructive way. When there’s an anomaly in our production, we see it as an opportunity for us all to improve. Because the reports are so fresh, we can easily find the source of a problem and work to prevent it from reoccurring.”

Everything that happens in production at G&W is now recorded in the Problem Control module of Plex. If shop floor workers encounter even one part that is of uncertain quality, they halt production and discuss the issue with the company’s MRB group, who then document the issue in Problem Control. This revamped process has enabled the company to improve its overall quality. The company’s laser production department alone has reduced problems by 50 percent.

“Each quality incident results in a conversation about how we can do things better,” says Karan. “Our rework rate is at 672 parts per million, which is great, and we’ve flirted with world-class rates of less than 500 PPM. Thanks to Plex, we can also tell exactly what was wrong with any piece that came from a supplier and present that in a supplier scorecard. That has led us to help our suppliers improve their quality—the same way our customers have helped us to get better.”



## Boosting inventory accuracy and delivery rates

One of G&W's most dramatic improvements has come in the area of inventory levels. When the company implemented Plex Manufacturing Analytics, it also began cycle counting. Since then, G&W has improved inventory accuracy from as low as 40 percent in some areas to 96 percent. The company also improved delivery rates by 10 to 15 percent over a nine-month period.

G&W is creating dashboards for every department for widespread transparency around KPIs and metrics. With three dashboards already in place, the company is experiencing a new era of performance-related discussions and is excited to extend analytics to other areas of the business. "Having anytime access to data in Plex Manufacturing Analytics is helping us shatter a lot of myths about the way we do business," says Karan. "Whereas before people used to say things like, 'We're always late on these deliveries,' we can now see that it's only happening, say, 20 percent of the time. The data also helps us confirm the things we're doing well."

## Raising the bar—in the cloud

Karan sees Plex Manufacturing Analytics as a key tool in helping G&W Products become the best company it can be.

"Our whole journey with Plex has been about being the best," Karan concludes. "We don't want to supply our customers only with what they ask for—we want to anticipate and deliver on their needs. As we try to land more business especially from military clients who are always increasing their requirements, we need to be ready to blow them away with our quality and service. Plex Manufacturing Analytics is helping us get there."

### 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](http://www.plex.com)