

TYPE
CASE STUDY

INDUSTRY
METAL FORMING

LOCATION
FORT SMITH, AR

SPF ACHIEVES OPERATIONAL EXCELLENCE WHILE MAXIMIZING PROFITABILITY WITH PLEX

Southern Precision Fabrication (SPF) America, LLC is a fabrication company with over 45 years of experience in copper bus bar and connector production. The company provides both precision components and assemblies to the OEM market from a variety of materials including copper, mild steel, stainless steel, and aluminum. With an unparalleled focus on quality, SPF is committed to being a top supplier of products that exceed customer expectations.

RESULTS



Increased margins
by 10+%



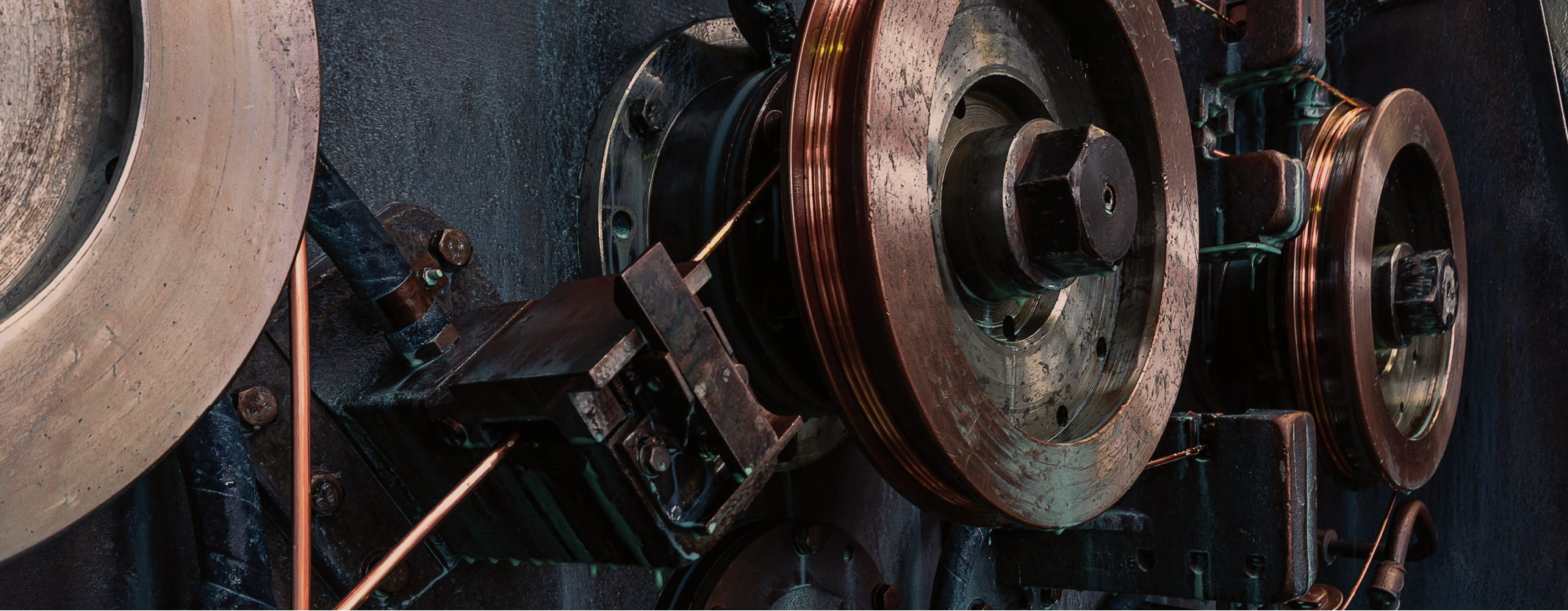
Increased On-Time Delivery
(OTD) by 40%



Reduced temporary workforce
from 20 to 3 employees



Tracking & Increasing Overall
Equipment Effectiveness (OEE)



THE PATH TO PLEX ERP

Before modernizing operations with Plex, SPF America, LLC relied on an existing Enterprise Resource Planning (ERP) system which required an external data retention portal. This setup resulted in several challenges, the majority of which stemmed from a lack of digitization within the company's operational framework. This absence meant that employees had to manually download data into spreadsheets for analysis, hindering efficiency and productivity.

SPF also lacked full plant floor visibility in their existing ERP system, with employees struggling to access real-time production status and resorting to manual searches. This slowed operations,

leading to gaps in communication and inefficiencies in workflow. Another difficulty SPF faced was the ability to obtain meaningful and trustworthy data. The measurement of Cost of Quality through internal scrap, external rejects, and rework was inconsistent, negatively impacting quality recording.

Recognizing the need for a stronger solution, SPF began the search for a new, cloud-based ERP system that could address numerous requirements. The company sought a platform capable of improving job scheduling, enhancing operational cost visibility, and consolidating various functions such as accounting, production control, material management, and record retention into a single system.



A TEAM EFFORT FOR IMPLEMENTATION

A team of SPF employees, including ownership, IT, quality, production, and other key stakeholders, assembled to select the new system. After a rigorous evaluation process involving three potential solutions, SPF ultimately selected Plex ERP.

Plex stood out due to its ability to surpass SPF's needs, its avoidance of subscription-based pricing models, and the proactive support provided by Plex implementation partners. Additionally, Plex provided comprehensive product demonstrations and connected SPF with an existing customer, which further increased SPF's confidence that Plex ERP offers the best combination of features and functionality to address their needs.

The Plex-SPF relationship officially began in December of 2021 with training beginning promptly, and by August of 2022, SPF

was live on Plex. The success of this 9-month implementation process is attributed to the efforts of the SPF team, Plex, and implementation partner Control+M Solutions.

With the help of Control+M, SPF developed a diligent implementation approach. They created structure around their plan, utilizing various checklists to ensure no detail was overlooked and carried out weekly team meetings where tasks were assigned and prioritized. Four individuals from SPF were also in charge of reviewing existing data necessary for the migration to Plex's ERP. Interactive training sessions provided by Plex assisted in fostering a smooth system transition. Although demanding, this process proved to be highly beneficial.

Despite encountering a few challenges along the way, SPF's implementation journey highlights the importance of planning, communication, and a willingness to adapt. This combination ultimately led to the team's successful go-live.



We have improved scheduling, throughput, production control, and material control. The OTD is drastically improved through the personalized reports developed in-house.



JOE BRACKIN

Plant Manager, SPF America LLC

SPF AMERICA'S REVITALIZING RESULTS

Since implementing Plex, SPF America has experienced a significant transformation in their daily operations, marked by enhanced visibility and efficiency across all processes. The company now has unprecedented visibility into their shop floor operations, allowing employees to better anticipate and manage potential disruptions. Moreover, SPF has improved control over production costs, a critical aspect for maintaining profitability in the competitive metal forming market.

Through utilization of IntelliPlex, an integrated data visualization and analytics platform, SPF is now able to automate the tracking of all business processes, providing real-time insights through intuitive dashboards displayed across the shop floor. This increase in available information, including metrics such

as on-time delivery (OTD), overall equipment effectiveness (OEE), and scrap, enables daily reviews with shop leads, encouraging continuous improvement and focused attention on KPIs. The access to real-time data has also streamlined order expediting processes, leading to increased profitability and agility in response rates to customers.

Throughput, although already robust, has been further optimized with Plex's comprehensive visibility into shop floor operations. Productivity gains have been realized through enhanced monitoring capabilities and reporting functionalities and Plex's accuracy in providing OEE metrics has surpassed the previous system. One additional exciting benefit is SPF's margin growth of over 10%. Despite complexities that arose from SPF's multiple locations and differing go-live dates, the integration process continues, promising further enhancements over time.



Before Plex, our production scheduling had severe limitations and orders were routinely late. We had little visibility of the actual cost of jobs until the entire job was completed. Now, with Plex, our production scheduling is spot on; our OEE is rising, OTD is consistently at 98%, and we can view the job costs at each operation. The amount of data that can be retrieved is refreshing and helps us run the operation much more efficiently.



JOE BRACKIN

Plant Manager, SPF America LLC

Employee engagement and confidence has increased following the Plex implementation, driven by monthly meetings to foster understanding and alignment with organizational goals. The streamlined processes and enhanced access to data have empowered employees to embrace change and actively provide valuable input. SPF has also been able to significantly reduce their temporary workforce, shifting from 20 to 3 employees. Additionally, the company increased sales without increasing headcount.

Plex has revolutionized SPF's operations, providing a comprehensive system that enhances production visibility, problem-solving capabilities, and overall efficiency. The improved access to data has enabled SPF to thrive in the dynamic manufacturing environment, achieving operational excellence while maximizing profitability.

ABOUT PLEX

Plex, by Rockwell Automation, is a 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, asset performance management, production monitoring, process automation and analytics to connect people, systems, machines and supply chains, enabling them to lead with precision, efficiency and agility. To learn more, visit www.plex.com