



**Boost In Vehicle Production Time** 

Improving manufacturing speed and reliability for Jaguar Land Rover through increased equipment uptime and performance.

With the goal of optimizing production efficiency by maximizing system uptime, JLR sought the expertise of Tucker's trusted Self-Pierce Riveting (SPR) specialists, ultimately selecting STANLEY Engineered Fastening as its exclusive partner for both SPR equipment and fasteners.

With a longstanding relationship of 15 years built on trust and proven technological expertise, SEF was well-positioned to deliver high-quality equipment and innovative solutions at a better price that aligned with JLR's production goals.

Thanks to STANLEY Engineered Fastening's full-service capabilities, the JLR team felt confident they could work together to improve the production process, allowing for faster and more cost-efficient vehicle production.

### JLR Enhances Manufacturing Efficiency Resulting In Significant Production Gains

As the JLR project was being scoped and planned, it was determined that there were three primary goals for the project:

- Increase the speed of the manufacturing systems.
- Boost system performance to enable higher car production rates for JLR.
- Enhance reliability, reducing equipment breakdowns, leading to more efficient production.

With a focus on solving customer problems and enhancing equipment performance, the SEF team got to work.

The first priority was establishing a continuous feedback loop between service engineers in the United Kingdom and the engineering teams in Germany. This allowed for ongoing discussions about equipment performance, and the team was able to make proactive improvements as the project progressed.

STANLEY Engineered Fastening was committed to continuously improving system performance through problem-solving techniques. To this end, the company used the "nine-panel" data analytic tool to analyze and improve equipment performance.

One of the main goals of this project was to increase production, and Stanley Engineered Fastening successfully delivered this through strategic system enhancements. This resulted in a notable uplift in production capacity, contributing to improved operational efficiency and supporting JLR's overall business performance.

# Continuous Improvement with Self-Piercing Riveting (SPR) Technology

STANLEY Engineered Fastening's evolving SPR technology allows the joining of different materials, such as aluminum, to steel, which traditional welding cannot accomplish. This is critical for lightweight vehicles, especially with the rise of electric cars, where weight impacts battery efficiency and range.

Through engineering innovations like implementing re-engineered system components and software based on fault data analysis, the SEF team has demonstrated a continuous cycle of improvement that can benefit their customers.

From beginning to end, the STANLEY team demonstrated an ongoing commitment to consistently delivering a top-tier customer experience by executing each promise made to JLR, emphasizing teamwork and collaboration to get the job done.



# Integrated Solutions Boosts Production and Enhance Manufacturing

STANLEY Engineered Fastening's collaboration with JLR has yielded significant benefits across multiple dimensions of its operations. By focusing on production efficiency, customer experience, and a reliable partnership, SEF has delivered targeted solutions that drive substantial improvements. These enhancements have positively impacted JLR, showcasing the depth and effectiveness of the Stanley Engineered Fastening team's integrated approach.



### **Production Efficiency**

STANLEY Engineered Fastening offered JLR enhanced production efficiency, allowing more cars to be produced at the same cost. By providing both the rivets and the joining equipment, JLR had a comprehensive solution that improved the reliability of production uptime. With on-site service personnel to monitor and maintain equipment, Stanley Engineered Fastening ensured that the manufacturing process ran smoothly and promptly addressed any issues.

### Improved JLR Customer Experience

STANLEY Engineered Fastening contributed to enhancing JLR's customer experience by supporting efficient production processes. By optimizing manufacturing uptime and performance, SEF helped JLR better meet customer demand and maintain timely delivery schedules, strengthening their partnership.





#### A Strategic, Reliable Partnership

STANLEY Engineered Fastening provided JLR with a comprehensive solution by providing complete problem-solving services without third-party involvement. This advantage of a single point of contact for fasteners and equipment ensures streamlined communication and efficiency. Additionally, the SEF team provided continuous support and problem-solving capabilities, enhancing the customer's overall satisfaction and reliability.

### JLR's Results: Increased Speed and Improved Technical Availability



STANLEY Engineered Fastening and the Jaguar Land Rover team point to multiple positive outcomes when quantifying the project's overall success.

#### Increased Speed and Reliability + Improved Technical Availability

- Enhanced production speed resulted in an increased production capacity.
- Improved technical availability (TA) from 99.75% to 99.87% translates to thousands of additional minutes of production time weekly.

#### → Continuous Development

- The STANLEY Engineered Fastening team is committed to ongoing product development to meet customer needs and industry challenges while adapting to changing project requirements.
- The engineering teams in Germany focused on creating new rivet technologies for evolving materials.

### **STANLEY Engineered Fastening:** A Commitment to Innovation

STANLEY's ongoing commitment to continuous development ensures compatibility with evolving casting materials multiple clients use, helping customers integrate new, cost-effective materials into their production processes.

### **LEARN MORE**

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STANLEY ENGINEERED FASTENING FAMILY OF BRANDS

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