

Roof Systems Supplier Struggling to Meet Customer Demand, MI

INDUSTRY | Automotive

Executive Summary

Seraph was invited to provide operational support and recovery of an automotive facility in Michigan. The client was having issues with production and output requirements for their customers, in addition to preparing for a huge OEM launch of rooftop components. The facility was operating with one 8-hour shift each day with an expected output of 230 sunroof vehicle sets per shift. Their output was averaging 52% of required production, with an average output of 120 parts per shift. They had planned to increase capacity and add two additional shifts to increase their production. This drastic increase wreaked havoc on their staff, leadership and organization.

With alignment between client leadership, Seraph developed a plan to focus on 3 key areas:

- Plant Leadership and Operational Management
- Quality and Logistics/Technical Support
- Production Data Monitoring and Operational Fundamentals

Individual work packages were created with input from key leadership from the client. Work packages included a set of deliverables and resources aligned with the client leaders. Each work package was supported by a lead from the customer organization and a Seraph consultant.

Project Dates: May 2021 – August 2021

Approach

The Seraph team implemented our standard crisis management methodology beginning with the *understand* phase, followed by the *improve*, and *sustain* phases:

The *understand* portion focused on a complete assessment of the operational aspects of the facility: production capacity, control and management, logistics processes, customer relationships, and specific roles in operational leadership.

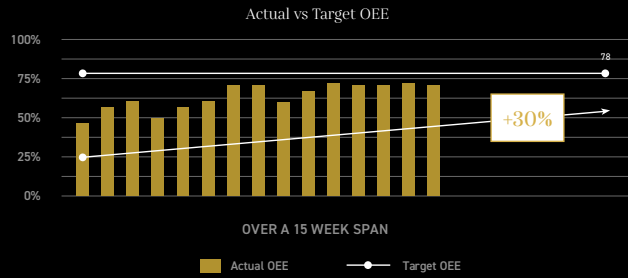
The *stabilize* phase focused on working with the client's leadership and steering committee to manage the overall production as the client prepared for a major OEM ramp up. The plan was to add 2 additional shifts along with required manpower and staffing to support them. Additionally, monitoring jobs per hour (JPH) and using ProductionNet software to track downtime, defects and performance.

The *sustain* phase focused primarily on disciplined application of measures taken during the *stabilize* phase, along the continuous improvement activities around work floor optimization and ensuring that "good parts" are being produced while reducing production downtime.

Accomplishments

30% Positive Increase

Seraph concluded project with a 72%+ OEE, a 30% increase



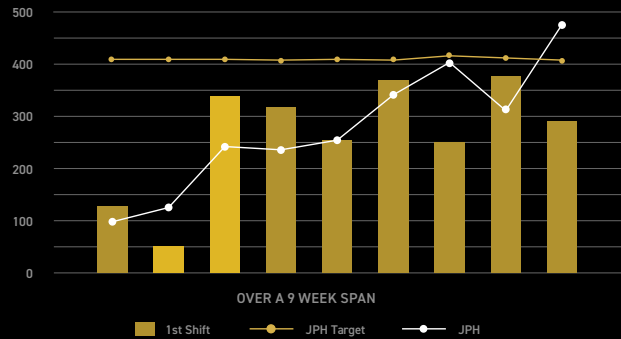
85% Decrease

Successfully reduced noise defects by 85% during production, a drastic improvement.



50% Positive Increase

Increased jobs per hour by 50%

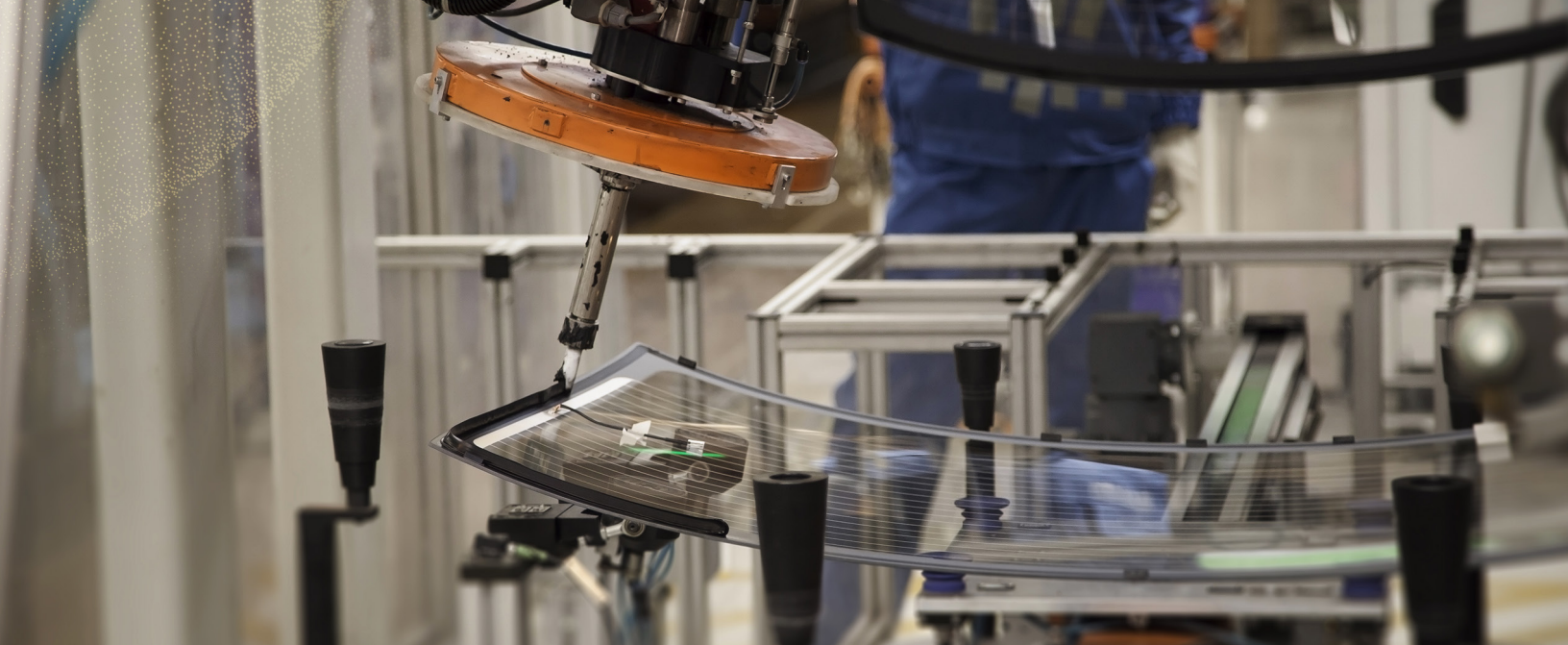


50% Reduction

Down time reduced by 50%



Continue reading to learn what we implemented that brought this success.



Implementation

Prior to Seraph engagement, the facility operated with one 8-hour shift (7 effective hours) each day with an expected output of 230 sunroof vehicle sets per shift. Current output was averaging only 52% of required production, with an average output of 120 parts per shift. Over the first six weeks, the facility was expected to have increased capacity to produce 600 vehicle sets on 3 shifts, adding two additional shifts to support this objective.

The glidepath to 600 was poorly defined, and such an increase had drastic effects on staffing, leadership and organization across the facility. The Seraph team continued to drive the progress made, and ensure local leadership was equipped with the tools and knowledge to manage the extra two shifts and production requirements effectively.

The team implemented shift carry over for supervisors, as well as the 5S clean-up plan to better enable the client's organization for production. Production oversight was the focus for the Seraph team due to down time issues, and quality control. In week 14, ProductionNet and the team were able to monitor assembly performance, quality control and equipment. The client started with a 43% OEE, assembly started at 50% OEE, and frame side started at 56% OEE.

ProductionNet identified that assembly performance was the main contributor to overall performance, and neither quality nor equipment was hindering production performance. The Seraph team was able to closely monitor production and enabled it to increase OEE by 30%, going from 300 to 630 pieces per day. Seraph also enabled JPH to improve over 50% in just nine weeks.

Seraph accomplished a significant amount in just nine weeks with the client.

Conclusion

In conclusion, Seraph accomplished a significant amount in just nine weeks with the client. With an overall OEE increase of 30%, Seraph was able to increase jobs per hour by 50%. This is a remarkable "good parts" increase for the client. Seraph's implementation strategy was precise and created an overall better work environment for both the leadership and employees.

Seraph.

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