



DESIGN SYSTEMS, INC.

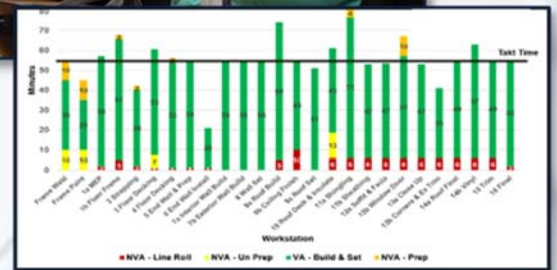
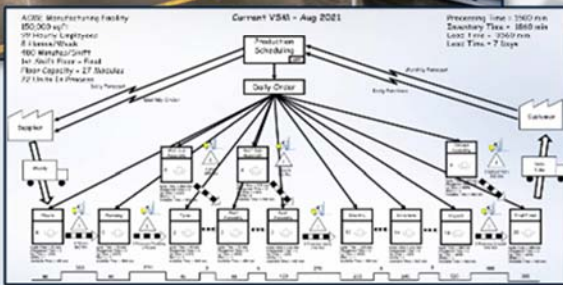
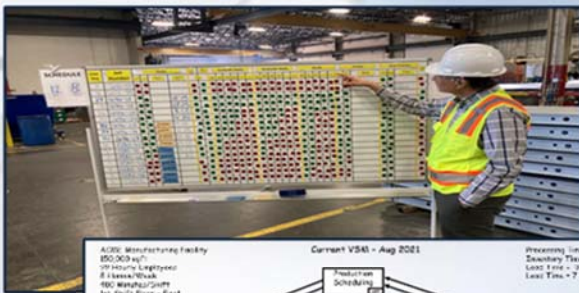
Manufacturing Engineering & Consulting

OVERVIEW

Large semi-truck manufacturer struggling with quality defects at several critical path stages throughout their process. Additionally, they were seeking throughput increases to help expand their market capitalization based on forecasts. Lastly, there was a drive to implement lean culture and improve ergonomics to combat employee retention.

APPROACH

DSI executed this project in 4 phases using our Value Stream Transformation process. Engagement started with a VSM workshop. Next, our experts conducted a process optimization study to identify solutions. We then managed vendors, provided on-site support during installation and validated results post installation to ensure the expected outcomes were achieved.



RESULTS



50% Productivity Improvement



Avoided need for additional workforce accounting for \$800k/yr.



Overall reduction in quality defects



Increased annual profits by \$7.8M

CONCLUSION

DSI provided lean manufacturing expertise to our client over this 12-month project. By executing our VST process, we successfully identified bottlenecks in buffers and critical path operations. We provided a holistic solution for a wide spread quality problem that was affecting the ability to scale production to meet forecasted demand. Post implementation, quality has improved by 15%, employee retention rate has increased by 22% due to improved ergonomics and production ramp up is on track to meet 50% throughput rate increase as projected.