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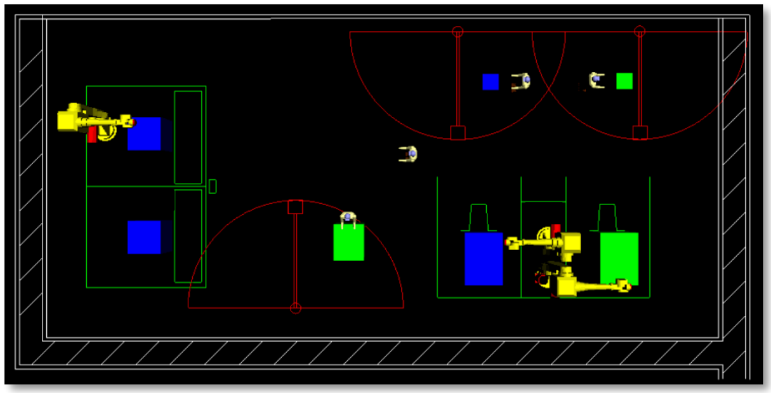
DESIGN SYSTEMS, INC.

Manufacturing Engineering & Consulting

Process Review of Cab and Loader Arm Weld Lines
Construction Equipment Manufacturer

Project Description

The Manufacturing group of Design Systems, Inc. travelled to Kansas to study the process of cab and loader arm weld lines. The team conducted a cycle time analysis of existing operations on the loader arm weld line and the cab cell weld line. The main goal of the project was to determine the throughput capability of each line and identify potential problems that could be interfere with throughput.



Client Objectives

- Create a 3D throughput simulation models for both of the process lines to reflect current and future conditions.
- Determine the overall throughput capacity of current state in both lines and identify opportunities of improvement.
- Discover any underlying process or sequencing problems that may impede the overall throughput of each process line.

PROJECT OUTCOMES

- Proposed 4 recommendations for quality, time and line balancing improvements when observing the cab and arm line.
- Increased production rate for the cab line by 26%, the automation arm line by 60%, and quality by 65%
- Production increase of approximately 5,000 units per year for the cab line and approximately 9,000 units per year for the arm line.

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