

PLATING LINE CYCLE TIME IMPROVEMENT

Plating line optimized to reduce cycle time by 236%



SOLUTION

- Created a user-friendly HMI that showed production in detail
- Improved the previous line's functionality by adding additional data tracking/logging
- Built in recipe control for specific parts
- Implemented serial number and bar code scanning to track parts and report data to PLC and PC
- Optimized crane movement and operations, thereby decreasing mechanical wear and material waste

RESULTS

- Reduced cycle time by 236%
- Implemented a fully functioning program that ran the first recipe in less than 2 weeks
- Increased the amount of automation throughout the line
- Added numerous new features including part tracking, barrel rotation control, trending, alarm history, warning lights/horn, and more
- Utilized live graphics and animated cranes and materials that helped engineers more easily understand what process the system was executing.

PROJECT SUMMARY

At Pieper Automation, we pride ourselves in our unique ability to provide complete industrial automation/controls solutions & services for our customers, including on-site support, integration of machines/systems, new equipment design and machine upgrades. Along with our custom assembly machine manufacturing and panel building, we deliver you a seamless solution – from one supplier.

A local padlock company hired a plating machine manufacturer to improve their existing plating line. After the project fell behind schedule, Pieper was brought in to review the work completed to date and determine the best way to proceed.

Pieper's assessment revealed that the HMI was not user-friendly and that the mechanical hardware needed to be significantly improved. Additionally, the panel wiring was very disorganized, making it difficult to maintain.

Pieper Automation used their extensive experience in plating line applications, which allowed the team to make significant progress in a short period of time. Pieper's team noted numerous areas for improvement of existing software as well as operations of the line which cycle time could be optimized and/or reduced. These enhancements were added throughout the line as well as numerous additional features were added for line efficiencies.

By using safe work practices and providing quality work with attention to detail, Pieper was able to complete the project ahead of schedule, meet and exceed all goals, and save the client both time and money.



WE ALWAYS FIND A WAY