Improvement to Process Flow Increases Productivity



Background

Founded in 1989 in Milford, Connecticut, Sonitek specializes in the manufacturing of heat staking machines, ultrasonic welders, and air presses, primarily for the automotive, medical, and consumer electronics markets. Sonitek heat staking presses custom tooling offer high speed, ergonomic, and repeatable solutions for thermal applications like riveting of plastic bosses, insertion, filter and membrane sealing, plus other plastic joining applications.

Their ultrasonic welders are used in the joining of two or more thermoplastic parts, achieving a uniform bond between the parts, and can also be used in joining non-ferrous metals to create a strong weld without the use of applied heat or electric current. Sonitek precision air presses are used for crimping, sealing, bending, forming, pressing, swaging, riveting, and burnishing.

Sonitek is a past recipient of the Manufacturing Innovation Award from the Connecticut Business & Industry Association (CBIA). This award recognized the company's efforts to expand awareness of manufacturing as a career path while providing manufacturing opportunities for traditional high school students, acknowledging their partnership with Platt Tech High School in Milford, CT.

Challenge

Sonitek has worked with hundreds of manufacturers worldwide, providing design and application guidance for reliable and repeatable assembly processes. As a leading manufacturer of heat staking machines, ultrasonic welders, and air presses, Sonitek sought to improve productivity and customer satisfaction by implementing Lean continuous improvement (CI) training for their workforce.

Company leadership selected CONNSTEP's Continuous

Results for Sonitek Corporation:

- Retained Sales: \$300,000
- Jobs Created & Retained: 3
- New Investments: \$47,400
- Cost Savings/Avoidance: \$55,000

Areas down the line were exposed, we saw the hidden waste and inefficiencies, and were able to address them. In the process we fixed our ability to deliver a full complete kit."

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Tyler Webster Supply Chain Supervisor Sonitek Corporation



Improvement Champion Certification (CICC) program for a member of its team to participate in this Lean initiative and become a change agent throughout the organization. With the implementation of Lean concepts and continuous improvement initiatives among its workforce, Sonitek employees can enhance their skillset to examine and improve its manufacturing, support, and delivery processes.

Solution

The CICC training program offered by CONNSTEP provides a comprehensive series of 10 module sessions essential to understanding the principles and practices of Lean continuous improvement. Participants are able to contribute to their organization by identifying areas of waste to eliminate and by making vast improvements in their lead and cycle times, WIP, and quality which all lead to benefits including greater efficiencies, streamlined workflows, and cost savings.

To introduce and sustain a culture of continuous improvement at Sonitek, the employee who participated in CICC also implemented a mentored project at their facility with a CONNSTEP consultant which reinforced their classroom lessons.

After conducting a current state value stream mapping exercise, it was evident to Sonitek that they could do more, faster, and with less work in the process of their kit preparation for their heat staking Spectrum Series. Their internal supply chain was a weak link, with kits that were in production being inaccurate and missing components, affecting delivery schedules and shipping.

Results

By enrolling an employee in CONNSTEP's CICC program, the company streamlined their workflow, resulting in significant operational gains and reduced lead times, ultimately enhancing their overall performance. A team-based process improvement mentored project emphasizing a visual management system was completed, helping to deliver those operational gains. The mentored project provided greater value by dramatically reducing the time track from training to bottom-line results.

A key step was a visual management system put in place for better inventory control that improved the speed and accuracy of their workflow process. Visual work cells were designed to interact with each other to meet the needs of production and delivery. As a result, typical lead time for one assembly line of multiple custom machines was 18-20 weeks and the Sonitek team was now able to complete two lines in 14 weeks.







CONNSTEP, Inc. is a consulting firm strategically helping companies in Connecticut to grow their businesses and improve operational methodologies, leading to increased profitability, improved efficiencies, and creating sustainable competitive advantages in the marketplace.