

RESULTS

COMPANY PROFILE

Now known as US Button / Emsig Manufacturing, the original company produced genuine mother-of-pearl buttons and dates back to the early years of the twentieth century. Today, US Button uses plastic melamine with compression molding technology to produce plastic buttons. Emsig Manufacturing has owned the company since 1995. Seventy-two employees produce buttons for the military, uniform and sportswear markets in a 90,000 square foot plant located in Putnam, CT.

SITUATION

Just before the events of September 11, 2001 rocked the rest of the world, a new Chief Operating Officer and his staff of dedicated employees, began to rock US Button's world. When Burt Elliott took over the operations of the company in August 2001, he realized that the only way for the company to succeed was to implement many difficult changes, both in process and in culture.

Production and scheduling were causing a backlog, resulting in over 1,000 lots of Work In Process (WIP). On time deliveries were 64%, with 6-8 week customer deliveries. The industry standard is 3-4 weeks. Burt spent most of his time fighting fires - answering calls from disgruntled customers, and then changing the work schedule. Most of the 165 employees, on all three shifts, were working costly overtime, just to meet the already late customer orders.

Operator and mold productivity in the mold room was less than 70%. The deteriorating mold cavities were creating press inefficiencies and inline problems for the operators. Press operators were frustrated with material sticking, and lots taking 30% longer to mold. These problems created inefficient production and operator stress.

Quality was jeopardized and compounded wastefulness. Overstaffed departments produced 3.78% scrap that needed to be sorted by 22 inspectors. Employee morale was down, resistance to change was high and absenteeism was rampant. Absenteeism in 2006 was over 3% of scheduled hours which added to costly overtime and gave rise to an uneven work flow.

Nine months into his first year, Burt knew he needed outside help. CONNSTEP's consultants, having contacted him previously, came to meet with him to review all the processes. They saw the same potential that Burt saw in this age-old operation - launching a valuable business partnership.

SOLUTION

CONNSTEP consultants introduced US Button to Lean by value stream mapping the operation. Burt and his team quickly learned the usefulness of data in qualifying and quantifying operational problems to determine the right solutions. CONNSTEP consultants guided Burt and his staff through the process of establishing metrics and a monitoring system for each department. They set annual goals with targets measured weekly. Departmental goals were posted for all employees to follow.

The company also replaced all of the defective cavities with newer products made of more durable steel. This was an expensive and time consuming solution which took one year to complete, but when finished, it brought immediate results. Once the mold improvements were completed, management worked with the union to develop a press operator incentive program. Together, they rolled out a plan for operators to earn up to an additional .90 per hour to their base rate.

US Button
Putnam, Connecticut
72 employees
www.usbutton.com

Lean Manufacturing Solutions

- Sales increase of 2.4%
- Overall efficiency improvement of 32%
- Scrap reduced to less than 1%
- 80% reduction in overtime
- On-time delivery averaging 100%



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At the same time, CONNSTEP introduced US Button to the kanban system and showed the company how it could reduce and manage its WIP. The company identified 45 SKU's which represented 85% of the sales volume, set stock levels for these items and scheduled timely replacement.

Employee resistance to the Lean journey was strong even with the union's cooperation. One high ranking salaried employee, speaking on behalf of all the employees, challenged many of CONNSTEP's recommendations. CONNSTEP handled each challenge professionally, with the right approach and the right answers, building trust and confidence. This same high ranking employee went on to successfully complete CONNSTEP's first Continuous Improvement Champion Certification (CICC) program and is now one of the biggest Lean champions within the company.

Once efficiency and employee acceptance improved, Burt formed a team to review and update the attendance program. The outcome to this collaboration was a new Attendance Reward Program which is based upon reward rather than punishment. Employees at US Button earn scheduled time off as a reward for good attendance.

RESULTS

The new mold cavities improved product quality, operator efficiency and employee morale. Today, operator efficiency is running 100%. The new mold cavities also allowed press operators to focus on quality. As a result, the operators reduced scrap from 3.78% to less than 1% in a four year period. Eventually the company reduced temporary labor in the molding and inspection department by 40%. This also meant less time, effort and money spent on human resource costs from constant ramping up and down. Regular employees were more productive and earning more money from their incentive programs.

US Button uses The Supermarket (kanban) to ship 85% of its sales volume from stock. WIP has been reduced from 1000 lots to the current 180 lots. On-time delivery decreased from six weeks to one day, with deliveries hovering near 100%.

Overtime has been reduced by 80% because of improved productivity and the new Attendance Reward Program. Unscheduled absenteeism is now at an all time low of less than 1%.

OVERALL RESULTS

Lean principles have helped US Button survive. By 2006, the company saw an across the board improvement of 20% to 30%. Between 2006 and 2008, the company continued its Lean Journey, re-inventing processes, finding new ways to improve safety, and continuing to improve morale.

By 2008, the company was able to report the following results:

- A sales increase of 2.4%.
- Eliminating the second and third shift operations brought a 44% decrease in labor and an energy savings of 18%. The company now uses a portion of these cost reductions to support the various employee incentive programs.
- By the end of 2008, payroll was reduced to 41% of sales. It was 55% in previous years.
- Unscheduled absenteeism was down to 0.83% in 2008. It was 3.27% in previous years.
- The mold room remains a focus, with an additional efficiency gain of 2.8% achieved in 2008. Overall, efficiency has improved 32% since 2003.
- Scrap level reduced to less than 1% in 2009. It was 3.78% in 2003.
- On-time deliveries climbed to 92.18% in 2008 and in early 2009 they are averaging nearly 100%. Before Lean, in 2001, they were 64%.

"CONNSTEP's amazing consultants have taught us the Lean Manufacturing tools and techniques that US Button needs to survive these difficult times.

Even more importantly, CONNSTEP training has taught us to take control of our future and long term success.

THANK YOU CONNSTEP - we are huge fans."

Burt Elliott
Chief Operating Officer
US Button/Emsig Manufacturing

LEAN SUSTAINABILITY

Burt and his team have maintained Lean excitement by continuing the journey. US Button conducts quarterly departmental audits incorporating the 5S program, continuously improves safety, training and retraining initiatives, attendance goals, and meeting company standards for production and quality standards. Group leaders are involved in departmental audits and are tied to financial and attendance incentives.

In addition, Burt has created a quarterly employee opinion survey. This survey offers employees the opportunity to make suggestions and comment on life at US Button. In this way, the company keeps its pulse on employee morale and can promptly react to employee concerns and ideas. The journey has become the new culture at US Button.

NEXT STEPS

One of US Button's new initiatives for 2009 is to become a greener operation. The plant is currently producing over 250,000 pounds of waste materials per year (raw resin, flashing, sawdust, etc.). Although in process waste has improved by 8% since 2003, the company is working on a method to use all in process waste – developing a new product line for the company and a new opportunity for its customers.