

Success Snapshot:

CTC Packaging

E3 Project Jump Starts Continuous Improvement

Company

Founded in 1955, Clinch-Tite Corporation began a pallet manufacturing business in Sandy Lake, PA in Mercer County. Now a family-owned business, the Staples family purchased the company in 1973 and currently employs just under 50 team members. In 2015, the company changed its name to CTC Packaging to better reflect the company's unique and cost-effective supply chain packaging programs that reduce the total cost of acquisition and ownership of all packaging, pallet, crating, and supply chain requirements.

Business Issue

CTC Packaging was interested in gathering accurate data to evaluate their energy usage/conservation efforts in order for their business to improve in both efficiency and safety. Maintenance Director, Chris Groger, had been working with team members on continuous improvement initiatives to conserve energy and become more efficient. They recognized the value in having accurate data to assess areas of operation for the impact on energy efficiency for both their facility and the environment, as well as increased safety for their employees.

Solution

E3 Assessment

NWIRC facilitated discussions regarding a project related to E3 (Energy, Environment, Economics) among the expertise of the Pennsylvania Technical Assistance Program (PennTAP) and Lean Consultant, Craig Corsi. Via a grant through the Department of Energy (DoE), PennTAP was able to offer support from senior engineering students to provide a customized, hands-on analysis of production processes to identify efficiency gains, cost reductions, waste, emission reductions, and energy savings. Due to the strength and durability of the wood, the saw line is responsible for the majority of the electrical usage, historically cutting approximately 7,000,000 board feet each year. PennTAP provided a detailed technical and economic analysis of this usage. The lean consultant also worked with the CTC team to gather additional data including fuel consumption rates and jitney fleet costs, as well as diagramming flows of equipment and processes and cycle times. This was done to chart findings and develop various layout/design options to evaluate costs and benefits of product movement throughout the entire facility as part of CTC's continuous improvement initiatives.

Success

The E3 efforts resulted in a team effort to gather accurate data which led to an optimal layout design reducing the energy used and a reduction in the amount of distance, time and costs associated with moving product throughout the facility. It also reduced the risks associated with worker safety and provided validation of CTC's plans to install a

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Driving Impact for Manufacturers

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Success (continued)

new saw line to replace two existing saw lines, significantly reducing energy usage and increasing efficiencies. All E3 project expenses were covered under PennTAP's DoE grant. The E3 project was successfully completed and the company planned to apply for the USDA Rural Energy Assistance Program (REAP) grant to help offset the costs of the new saw line equipment. "The Northwest IRC is a great organization to work with," said Chris Groger, CTC Packaging's Maintenance Director. "They provided help by listening and then being responsive, bringing resources to the table to address our need. This E3 assistance will ultimately make CTC a more competitive company and provide a more energy efficient and environmentally sound footprint." He said the anticipated impact from the project is projected to be \$20,909 in cost savings; \$500K in plant/equipment investment, and \$400K in cost avoidance.



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