

## PROCESS FLOW FACILITY LAYOUT & 5S COACHING LEADS TO 30% INCREASE IN PLANT CAPACITY

**ABOUT CREATIVE WORK SYSTEMS - MAINE WOODWORKS.** Maine Woodworks creates cottage-style furniture that is bench crafted and built to order in Saco, Maine. They use regionally sourced, sustainably harvested hardwood, environmentally friendly finishes, and a combination of time-tested and modern day joinery. They are also social enterprise of Creative Works, a 501(c)(3) nonprofit organization that supports individuals with disabilities. Maine Woodworks employs an integrated workforce made up of people both with and without disabilities.

**THE CHALLENGE.** Jay Flaker, CFO, Matt Hickey, COO and Maine MEP's Wayne Messer, part of the MEP National Network™, had a discussion regarding a previous LEAN project they had worked together on and how a similar program could be beneficial for Creative Works, specifically their Maine Woodworks operation. Leadership wanted to give Creative Works - Maine Woodworks a facility design which would increase capacity and create a road map to allow for production growth.

**MEP CENTER'S ROLE.** Working with Creative Works Systems senior team and a team from the Maine Woodworks, the group performed a thorough 5S review on the majority of the facility removing wastes and freeing up 30% of usable manufacturing space. The team also broke down their product offering into product family and developed ideal lean flows for each component of each product family. The team then created optimum layouts using spaghetti diagrams to look at material and worker flow to create an ideal layout. This layout incorporated point of use storage, minimal product handling (reduction of touches) in a clean organized work environment. Through this process the Maine Woodworks team developed a better understanding of Lean concepts and have come up with many ideas to reduce waste and improve efficiencies.

"Thanks to Wayne Messer and the Manufacturing Extension Partnership (MEP), Maine Woodworks is prepared for significant growth in the future. Drawing on Wayne's expertise and leadership, Maine Woodworks completed a total re-design of the production floor layout. The new layout has reduced waste, improved efficiencies, and lowered inventory levels. Production has increased by 6% and first pass yield has improved by more than 15%. Maine Woodworks is experiencing a record year, on pace for more than 1.3 million in shipped sales. In addition, Maine Woodworks has made significant upgrades to our equipment and facilities. MEP was key in prioritizing those difficult decisions with a focus on increased production capacity and return on our investment. Maine Woodworks has empowered our employees through staff development and training. MEP has been instrumental in helping Maine Woodworks create a LEAN culture. Employees are engaged and consistently seeking out new processes that reduce waste and improve efficiencies. Maine Woodworks is grateful for the continued support of MEP and is poised for significant growth in the future. This growth will only strengthen our mission of empowering people with disabilities to live, work, and contribute to their communities."

-Matt Hickey, Chief Operating Officer

## RESULTS



6% increase in production



5% reduction inventory levels



2 jobs created



Eliminated excess inventory, freed up manufacturing space, lowered inventory levels.



Lean principles adopted. All employees generate ideas to reduce waste and improve efficiencies

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