Maine State Prison woodworking shop increases efficiency, revenues

AUGUSTA, Me. – When Scott Reiff joined Maine Department of Corrections as Director of Industries, he wanted to make the Department of Industries more effective and efficient, and raise revenues. He called Maine Manufacturing Extension Partnership (Maine MEP) to apply Lean improvement techniques to the manufacturing, retail supply and paperwork processes at Maine State Prison’s woodworking shop in Warren. Bob Doiron, Maine MEP senior project manager, facilitated Lean awareness training in the woodworking shop, the largest of the prison system’s industries. The shop produces handcrafted wood products sold at the popular Maine State Prison Showroom in Thomaston.

“With the redundancies we had, the lead time was eight to 14 weeks from the time the product was completed until it hit the shelves,” said Reiff. “That has been reduced to one week.” For a particular cutting board, Reiff saw a 60-percent increase in throughput, based on time and materials. For a decorative bowl, the quality pass-through rate improved from 60 percent to 98 percent, and throughput by 200 percent. The 80 inmates who participated in the Lean awareness program were very engaged in the 2015 training and continue to offer ideas for improvements, which is changing the entire culture of the shop.

“This is the classic situation of Lean transformation,” said Doiron. “The ultimate goal as a facilitator and Lean practitioner is to have something like this happen and to have the culture change.”

The wood shop has received federal permission (through the Prison Industries Enhancement Certification Program, PIECP) to sell wood products across state lines. This necessitated process improvement cost reductions to compensate for the increase in wages mandated by the PIECP interstate program. Reiff said “Without Lean training and techniques we would never have been able to bring our costs down enough to justify participation in the program.”

The program improvements earned the praise of Maine Commissioner of Corrections Dr. Joseph Fitzpatrick.

“The Lean manufacturing initiative achieved significant improvements in the efficiency of operations at the State Prison’s woodworking shop. The cost savings were directly responsible for enabling the program to meet the federal requirements for selling goods out of state, while the inmates benefited by learning the skills and workplace culture needed for Lean manufacturing success,” said Commissioner Fitzpatrick.

The Maine State Prison system operates eight industry shops, producing a variety of goods from embroidery to license plates. The Program teaches inmates not only soft skills like, work ethic and teamwork, but also gives inmates hard skills they can use after release. “Adding Lean training increases their employability,” said Reiff.

“We are proud to have participated in transforming this unique operation,” said Maine MEP President Muriel Mosher. “Lean techniques can make virtually any process more efficient, profitable and productive for its stakeholders.”
About Maine MEP
The Maine MEP is a program of the Maine Department of Economic and Community Development and an affiliate of the National Institute of Standards and Technology (NIST) under the U.S. Department of Commerce. The national MEP system is a network of manufacturing extension centers that provide business and technical assistance to smaller manufacturers in all 50 states, the District of Columbia and Puerto Rico. Through MEP, manufacturers have access to more than 2,000 manufacturing and business professionals whose job is to help firms make changes that lead to greater productivity, increased profits and enhanced global competitiveness. For information on the Maine MEP program, please visit www.mainemep.org, or phone 207-623-0680.