Success Story: Milton Steel Implements 5S in its Transom Line

written by Lauri Moon | December 2, 2015 Milton Steel, a Milton, PA-based subsidiary of Acrow Bridge, Milton Steel manufactures modular Acrow bridges and other fabricated structural steel products.

SITUATION

Like many small and mid-sized manufacturers, Milton Steel understood its market well and produced high-quality products, but the company recognized a need to enhance its ability to improve its operations quickly enough to maintain a competitive edge in a rapidly changing global economy.

Milton Steel's Manufacturing Engineer, John Scholl, attended IMC's training in Lean Manufacturing and became certified as a Lean Practitioner. Enthusiastic about the Lean tools and practices he learned from the training, John was excited to combine this knowledge with his engineering and manufacturing background and begin working with the Milton Steel team to implement improvements at the company's facility.

The company contacted IMC for help in developing its use of Lean Manufacturing and Continuous Improvement practices and in identifying a starting point within the company to engage a small number of key stakeholders. IMC met with company leaders. After touring part of the plant and following a discussion of the company's current practices and objectives, IMC and Milton Steel leaders decided to begin with a focused 5S effort in the company's Transom area.

SOLUTION

IMC provided all-employee training in Lean Manufacturing principles and practices, and, along with Milton Steel's president, Chris Holcombe, explained to employees the need for and benefits of the company's plan to begin a Lean journey. At John's leading, IMC also provided basic 5S training to a core group of Milton Steel employees, including supervisors, and the team decided on a basic action plan. IMC

then provided the team with a collection of 5S tools, along with additional consulting services, to help the company implement the 5S initiative.

The team went through the company's entire Transom area to identify the seven wastes and to begin applying the Lean tools the members had learned.

RESULTS

Through its pilot program in the Transom area, Milton Steel was able to identify and eliminate waste and make significant improvements. The company:

- Increased the efficiency of its Transom division by 20 percent
- Eliminated significant waste and unnecessary movement of employees, including 600 feet of walking, by relocating tools and items employees need and placing them at the ends of the Transom
- Decreased the amount of Work in Progress (WIP), resulting in less material handling, less cash being invested in inventory and more "Just-in-Time" deliveries
- Increased the company's bridge sales, as the company became more competitive in its ability to fabricate and deliver bridges in a shorter amount of time
- Implemented Standard Work in its Transom area
- Implemented the A3 project management tool to track problems and contributing causes as well as identified solutions and outcomes

After the excellent results it experienced with its pilot program in Lean/CI, Milton Steel has now implemented 5S throughout more areas of its facility including a robotic cell that produces small components for the company's bridges. The Lean team improved workflow in this area by adding bins and tables so employees would have easy access to parts and would no longer need to bend to reach items they need, improving the ergonomics of this unit.

In addition to the examples noted above of decreasing steps and restructuring work areas so tools and parts are elevated to standing level to eliminate unnecessary bending and stooping, another issue identified during the Lean process was the heaviness of a steel tool that has now been replaced with a much lighter, aluminum

version. As a result of Milton Steel's Lean initiatives, employees are now able to accomplish more work with less effort, resulting in enhanced employee morale and safer and more efficient operations.

"Milton Steel's Lean/CI efforts have been a big hit with employees, who have been excited to offer their critical knowledge and expertise in continually identifying ways in which to improve the company's work environment and flow." John Scholl, Milton Steel Company