

MICHIGAN MANUFACTURING TECHNOLOGY CENTER SUCCESS STORY: Hayes Manufacturing, Inc. (Fife Lake, MI)



COMPANY PROFILE:

Hayes Manufacturing, Inc. (www.hayescouplings.com), a family-owned business located in Fife Lake, manufactures a diverse range of couplings, engine and motor adapters, and S.A.E stub shafts. They have 45 employees.

CELLULAR FLOW INCREASED CASH FLOW FOR HAYES MANUFACTURING

SITUATION: When Hayes Manufacturing, Inc. began pursuing business with John Deere, they realized their process needed to be updated to meet John Deere quality and process requirements. They were in danger of losing various other customers, as well as not gaining this valuable contract. Hayes reached out to Northwestern Michigan College (NMC) at the MMTC Northern Lower Office and the Lean journey began.

Jeff Miller, Quality Control Manager at Hayes, was hopeful that the Lean Champion tools and methodology would help to resolve the shop floor issues inhibiting growth. There was significant wasted time spent searching for tools or materials. Machines for one process were on opposite sides of the floor, creating excess travel, downtime and batching, which created either excess or insufficient material. Additionally, constant confusion from workers lead to a stressful environment.

SOLUTION: Beginning with a map of the current process, Hayes was able to find areas that needed the most improvement. Jeff began implementing cellular flow throughout the production floor. To gain employee trust and management buy-in with this new layout, he simulated the cell process to further understanding of the improvement opportunities. The cellular process smoothed the flow and improved overall atmosphere on the floor. Next, Jeff implemented a Kanban system and applied 5S methodology to help control inventory and decrease search time. This allowed Hayes to start making materials in-house, thus saving additional time and money. This required purchasing three new machines and hiring two employees, which saved a \$1 million/year contract. Making this product in house saved Hayes \$33 per piece. Visual management was also implemented in the office to track cell production times and shipping schedules. With the schedules and production clearly displayed, problem areas were made visible.

RESULTS: Due to the shift to cellular flow and visual management, Hayes was awarded the John Deere contract, and was able to retain other business.

- *Lead-time decreased from 52 days to 6 days*
- *On-time delivery increased from 70% to 97%*
- *Saved millions from retaining otherwise lost business*
- *Added two jobs*
- *Made products in house, without increasing labor costs, resulting in annual saving \$550,000.*
- *Decrease in cost of part produced from \$40 to \$7*
- *Purchased four new machines total*

According to CFO/Owner Penny Challender, in this down economy, "We've been able to manage with less sales, but preserve our profit by being Lean."



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