



Cybox International:

Building Exercise Equipment to Customer Demand: Faster and with Lower Inventories

Cybox International, Inc. is a leading manufacturer of premium exercise equipment located in Medway, Massachusetts. The CYBEX product line includes a full range of strength training and cardio training machines sold worldwide under the CYBEX brand. Cybox products are frequently seen on the show “The Biggest Loser.” The company offers over 150 unique pieces of strength equipment and cardiovascular equipment including treadmills, bikes, steppers, and the revolutionary ArcTrainer – a cross trainer named Best Product of the Year by Fitness Management two years in a row.

After receiving a grant from the Massachusetts Workforce Training Fund in 2006, Cybox began working with Bruce McGill, GBMP Continuous Improvement Manager, to introduce lean principles and methods to all employees at the Medway manufacturing facility. After some basic introduction to lean concepts and tools, teams of Cybox employees began applying what they learned in their fabrication and production processes.

The early introduction of 5S/workplace organization resulted in a much cleaner, better organized production area and paved the way for further improvements. Cybox plans to continue 5S training for newer employees in 2011 and also plans to extend its 5S efforts to develop a visual workplace complete with visual metrics.

Pull systems are another tool that Cybox has found success with. The Kanban processes established in the Fabrication and Welding departments are working well, allowing employees to have a better understanding of true demand and synchronizing and connecting their work to that of their downstream customers. A pull system was also implemented in the Powder Coating department, significantly improving product flow and allowing Cybox to transition to “build to order” manufacturing in this area.

According to GBMP trainer/consultant, Bruce McGill, “Cybox was your traditional batch oriented, functionally laid out producer, complete with lots of work-in-process inventory and significant production stagnation. After some training and coaching in flow and pull they have done a good job at capping and controlling work-in-process inventory using pull and kanban methods. The piles of inventory have been replaced by orderly parts supermarkets and make-to-order FIFO lanes in various areas of the plant.”

Poke-yoke (error-proofing) has also been applied in several Cybox production areas, with the Welding area especially taking advantage of this powerful means for reducing defects. One example of applying mistake-proofing at Cybox is the 750T commercial treadmill weld fixtures. Cybox incorporated poke-yoke thinking into the fixtures to eliminate loading parts incorrectly and also to ensure parts loaded are made to print.

Commenting on the lean changes at Cybex, Bruce Horn, Manufacturing Engineering Manager and Lean Coordinator noted, “the transformation from a ‘push’ to a ‘pull / build to order’ system has totally changed how we manufacture our products. No more do we build to a ‘best’ guess forecast and hope the orders will come and, if they do not, discount product in order to move it. We now build to booked orders and only use labor, inventory and resources to meet actual customer needs. This has allowed us to greatly reduce warehouse inventory. By implementing Kanban in Fabrication and Welding and by implementing a “supermarket” in Powder Coating, we have cut our minimum lead time from four to two days. This has given us much more flexibility in the build schedule and has in increased response time in meeting customer demand.”

Cybex has also kicked off an internal idea system to encourage more ideas and improvement efforts from employees; the company has plans to enhance this program further in 2011. Other continuous improvement plans for 2011 include a total revamp of the assembly area to include physical layout changes to promote better flow and development of a “show piece” lean assembly line for new products. To encourage even more continuous improvement, the company has recently added a Manufacturing Engineering position focused on supporting and driving lean initiatives across its operational areas.

For more information about Cybex please visit www.cybexintl.com

For more information about GBMP please visit www.gbmp.org.



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