

From the GBMP Lean Case Study Library (CS No. 92)

A Day at Aushon BioSystems: The Power of Team-Based Kaizen

Aushon BioSystems is a privately held company headquartered in Billerica, Massachusetts. A leading provider of instrumentation and laboratory services for biomarker discovery, development and analysis, Aushon's goal is to enable breakthroughs in biological research, diagnostics, drug discovery and the treatment of disease.

Global leaders in the pharmaceutical, biotechnology, academic and diagnostic industries expect Aushon to provide the most reliable protein biomarker data available, in the least amount of time, at low cost, and in a manner that will allow them to improve their own research productivity. These high customer value expectations made lean a perfect fit for the employees at Aushon BioSystems.

In 2011 Aushon began working with Dan Fleming, GBMP Continuous Improvement Manager, to learn and apply lean principles and methods to their business. In May, during a Team Based Process Kaizen activity, Dan coached a team of Aushon employees as they worked together to make improvements in their Kit Assembly Process. This area creates chemical kits for testing drugs and antibodies. The kits are used internally and are also shipped to customers.

After a short discussion about the goals for the one-day activity and role assignments for visiting gemba, the team hit the Kit Assembly area to observe and measure the current process. After analyzing the current state, the team moved the process steps into a work cell layout, re-ran the Kit Assembly Process and re-measured. They then made some further improvements to the cell and measured again. Their efforts provided huge results and employees were very happy with what they had accomplished in one short day! The table below shows before, after and after2 metrics from the one-day event.

Dan has returned to work periodically with Aushon BioSystems in the Kit Assembly area and the cell continues to improve. For example, the team went on to create a full set of Standardized Work documents to cover all work done in the cell. They continue to identify and make progress against a list of action items and are sustaining their overall results.

"I like to have a team take a step back and really look at their work processes with an eye for flow", said Dan Fleming. "When they are allowed to do this and are coached in the difference between work and waste at the same time, their eyes are really opened. This particular team saw the flow interruptions right away and was impressive in terms of how rapidly they were able to envision, implement and test out a new work cell layout. When they re-measured and got immediate, positive feedback on their changes, they became the owners of the 'new way' and were invested in making it successful in the long run."

Kevin Oliver, Aushon's Vice President of Manufacturing and Engineering, is convinced this kind of handson improvement is an important base for future improvements at Aushon. "You know the team got it right when the changes stick and no one wants to go back to the old way. The group now has a common methodology and language to use in identifying and eliminating waste, and they have started thinking this way as part of their daily routine. There is still a lot of work left to develop this mindset as the new "normal", but with Dan's training and coaching we are building a very strong foundation."

Results from the Kit Assembly Kaizen at Aushon BioSystems

Metric Item	Before	After	3rd Event
Total Travel Distance (FT)	2595 FT	48 FT	48 FT
Set Up Time (time to beg of value - print label)	5 min	1 min	1 min 10 sec
Set Up Time (time to beg of value - inspect)	12 min	2 min	1 min 21 sec
Set Up Time (time to beg of value - kitting)	17 min	8 min	6 min
Total Process Time (kit of 1)	32 min	21 min	14 min
Productivity (kit of 1) Kits per hour	1.9	2.9	4.3
Total Process Steps	107	40	31

For more information about Aushon Biosystems please visit www.aushon.com
For more information about GBMP please visit www.gbmp.org

