



Respect for Workers Key to 5S Success at United Tool and Die

United Tool & Die Co is a 15-person, 15k sq ft. metal stamping and machining job shop located in Wilmington, MA. When United started down the Lean Manufacturing path in 2008 no one within the organization had experience with 5S, continuous improvement, lean manufacturing or the Toyota Production System. What they did have was many years of excess and obsolete inventory and struggles with making value flow.

Like many companies starting on the lean journey, United realized that 5S, workplace organization, offered a good way to get workers involved early on in improvements that could benefit both the business and employees. However, their initial 5S efforts did not produce results right away. In fact, the company went quite awhile with little or no results; instead there was a fair amount of grumbling from employees about “wasting time” to “just cleaning up the shop.”

Real change began to occur when Dan Fleming of GBMP began working with United in the summer of 2009. By listening to workers’ concerns and showing respect for their experience and job knowledge, Dan and the management team at United have been able to change the thinking and mindsets of the folks on the floor about the value of workplace organization and continuous improvement in general. For example, one worker was particularly opposed to the 5S process and was vocal in his complaints after sitting through 5S training. He thought it was a joke and took away from his production time. Dan took the time to listen to this employee’s concerns and, based on his years of experience in manufacturing and with continuous improvement, suggested ways the employee could improve his workspace and systems. The focus was on making the job easier and allowing the employee to be more productive. Soon the employee was voluntarily cleaning and organizing his carts and machines, setting locations, and labeling his tools and spaces. Today this same employee is a vocal proponent of lean and frequently offers suggestions. This kind of change in thinking was only possible because the employee was able to see the relationship between 5S principles and tools and his daily work. Through tacit learning, or learning by doing, he realized he could make his work day better!

Below are some results United has achieved to date from their 5S and continuous improvement efforts:

- *Scrapped 80,000 lbs of excess or outdated dies, tools and coils, and thousands of lbs of unnecessary stainless, copper and aluminum material*
- *Dismantled storage racks, retired shelving and eliminated carts*
- *Set locations and shadow boards for tooling, supplies and scrap/trash bins, resulting in the elimination of “Treasure Hunts” and searching for lost/missing items*
- *Established kanban replenishment systems for most production supplies, resulting in reductions in processing time*
- *Created visual production boards and simple, visual systems for tracking WIP*
- *Set up a kit and kanban system for a customer-specific product line*
- *Sold or disposed of obsolete and excess machinery*
- *Cleaned out a mezzanine area that opened enough space to allow United to create 4 new offices*

With Dan’s help United has seen a big employee attitude shift with regard to 5S and continuous improvement. Now workers have a desire to continue to learn new ways to restructure the business and they look forward to Kaizen events.

Employees had the following to say about the 5S work they have done so far:

"I think the 5S program is worthwhile because it helped organize the shop."

"Dan has been very helpful in giving advice and leadership on what it takes to make the system work. The key is to keep up the process every week in order to maintain and achieve what we are looking for."

"It is now safer and easier to move throughout the building. A lot of tools are easier to find thanks to the shadow boards on the wall. I feel the 5S program has helped me personally learn more about our shop and our business. I think the program has helped our company overall."

"I enjoy working in an organized area-it makes working less stressful and you have more time to spend making and producing parts than having to look for items. A lot of good has come out of the 5S program."

"The shop is cleaner, more organized and a little more "user friendly". Using kanban systems has removed many of the extra steps in restocking items as well as keeping things we use everyday on hand. We are no longer running out of packing materials or tooling."

United Tool and Die has also made an ongoing commitment to company employees and improvement in general by dedicating one morning per week to continuous improvement tasks. They recognize there is still much to be done but now both employees and management are excited to see the process continue. The company's 5S successes are helping them to build a solid foundation for continuing the lean journey.

For more information about United Tool and Die please visit www.Unitedtd.com.

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

