BREAKTHROUGH

Lean Implementation & Training Resource Publication
Brought to you by Lean Manufacturing Solutions Partnership, Inc.

STOPPING TO FIX PROBLEMS

By Aaron Styles

PRIMARY LEAN PRINCIPLE

I am often asked, "What is the most important principle of Lean manufacturing?" By far, the most important principle is stopping to fix problems. It is perhaps also one of the most misunderstood principles, and not an easy one to implement, because it involves changing Management behavior. The big misconception is that "stopping to fix problems" means "stopping production to fix problems." Nothing could be further from the truth. Toyota knows better than anyone that you had better satisfy the customer… and the customer doesn't want a delay in receiving their goods or services from us while we are fixing our problems. Rather, the first step of robust problem response is the restoration of flow. Any manufacturer that can't figure that out will not be in business very long. Instead, "stopping to fix problems" means "stopping Management to fix problems." Management usually thinks they are too busy to fix problems. Why Management? Management sets direction, Management controls resources, Management can remove barriers, and Management has the responsibility to grow competent problem-solvers.

IMPORTANT GETS CHECKED

Standardized work extends to Management and results in MBWA (Management by Walking Around, another poorly understood concept). Workers know what is important by what Management checks. It is Management that checks to make sure we meet the budget, so we know that is important. Management checks to make sure we hit our production target, so we know that is important. Management checks our stock price, so we know that is important. However, Management is usually asking workers to make production with broken machines, methods and materials. The earliest record of such a manager is the Pharaoh who Moses dealt with as recorded in the book of Exodus in the Bible. Pharaoh stopped supplying his workers with straw, but expected them to make the same number of bricks. If they did not meet their quota, he had them beaten. Know any managers like that? Management asks workers to hit the production target with perfect quality, but rarely checks to see if there is any problem with the process those operators are working in.

HEAR. SEE. DO_ILLUSTRATED

We often go into unionized environments where there is a combative culture. We find that Management has the union they have earned 100% of the time. In these cases, LMSPI has quickly earned the respect and trust of the operators, resulting in cooperation and engagement in what we we're doing. How? First, we read their mail. We correctly predict that Lean is something that has been done to them rather than with them in the past. We correctly predict that in the past, Management and engineers descended upon them to "make improvements" without their input and in a way that did not address the resulting problems and was incomplete. When an imperfect result is obtained, they blame the operator. We correctly predict that new ways of doing business have been promised in the past, but Management did not follow through with changing the way they do their work. We get lots of head nods at this point.

We then tell them we are not going to do Lean that way. We (truthfully) tell them that we don't know if Management will follow our advice and example and that we can't control that. But we can control what we do and what we tell Management they should do. We tell them we are going to do Lean with them. They are the process experts and we will ask for and incorporate their input.

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We tell them we are not going to implement something and walk away, but we are going to (where Management allows us) stay with them until the change gets the expected results. We invite them to not believe us. They usually don't. We tell them our plan will not be perfect and adjustments will need to be made. They do believe that. We tell them we will be with them through those adjustments. They don't believe that.

Next, we do what we said we were going to do. And when we do that, a metamorphosis occurs. The people who were most contrarian give us the most help. People who have never offered a solution to problems start giving their input. The most negative become our biggest fans. We train them in core problem solving and we take Management to the Gemba, not to check to see if the Man is doing what he is supposed to do, but to surface problems with the machine, material, or method.

ACTUAL RESULTS

We implemented a major change in how a client approached assembly of their product. An hour after go-live, everyone was ready to abandon it (what a client executive calls "Plan-Try-Abandon-Revert," as opposed to the effective method "Plan-Try-Reflect-Standardize"). However, because we were present to provide 24-hour go-live coverage for the first week, we addressed the problems that were exposed, quickly made adjustments, and earned the cooperation of all involved. A year later, I visited the plant and you would have to pry the gate system out of the dead fingers of the operations manager if you wanted to remove it.

At another client, an operator's first problem leads to $240,000 per year in scrap savings because we asked her to solve a problem, taught her how and provided the resources to execute the countermeasure. At another client, one union member who did nothing but complain every time we saw him is now strutting about because he identified $10,000 per year in cost savings. Now his stated objective is to save the company two times his annual wages through problem solving every year. Multiply that by the number of operators in a plant and you get an idea of the exponential improvement available if we "Expose and solve problems utilizing all people" (the LMSPI definition of Lean).

In a takt attainment project at another client, I dealt with a combative group who were negative and thought our objective was unobtainable. We went out and started pacing the line by takt and they immediately could see how to rebalance it. After we provided the first suggested change, all subsequent changes implemented came from the hourly work leaders. We would never have identified many of them because we did not know the process well enough.

Lean is a culture issue. The extent to which a company can become Lean is limited to the extent that it can develop the right culture (expose and solve problems utilizing all people). It starts with changing Management thinking, which translates into different expectations, which translates into different behaviors at the Gemba. We tell them we are going to be hard on the problem, easy on the person. We tell them we are going to look for problems with Machine, Material and Method and fix those before we blame the Man. Have you watched our customer videos? Just click here to watch our clients describe the results of partnering with LMSPI.