

PRO Business Advice

Fixing Manufacturing Problem Unknown

Outside help in the form of engineers from sister facilities, contractors, temps and consulting companies can help manufacturers turn around their underperforming operations.



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> When a problem is identified in the manufacturing process, it's important to be proactive and address it quickly.

his article is directed primarily to those manufacturing managers, plant managers, company owners, or vice presidents who want *more*.

You want more products produced each day, more products shipped, more profit, more efficiency, more capacity, more productivity, more floor space, more people, more inventory, more time, more temps, more shifts, more ____? (You fill in the blank.)

These are common wants that most manufacturers share worldwide. Depending upon how experienced you are, or how sophisticated your company's data collection and reporting systems are, some of these wants may be legitimate. Or, they could be perceived needs based on unknown problems. If the improper wants/ needs are fulfilled, they could actually become expensive Band-Aids, concealing the actual underlying problems that may, in reality, be *unknown* or unclear to you and your team.

Many times, the true manufacturing problems are indeed hidden from view due to the manager's constant familiarity with their processes, or lack of experience/ training in the principles of problem identification and process improvement. Sometimes the real issues may be intentionally unacknowledged simply due to the fear that any change will mess up what operations they have going on now. But hopefully, at some point, someone will admit that you have problems that need to be fixed.

Problems Manifest in Many Forms

These problems may manifest themselves in any number of ways as touched on above, such as:

• A rise in overall costs (or a reduction in profits) as seen in the financial reports from accounting.



- Higher-than-normal scrap rates being reported.
- More product is being set aside (quarantined) for sorting or 100 percent inspection.
- Poor labor efficiency or other productivity measuring metrics. ٠
- The plant's inability to consistently meet daily production quantities.
- Missed or late shipments.
- A sustained period of or increase in overtime.
- An increase in employee injuries. •
- An increase in absenteeism.
- An increase in employee turnover.
- An increase in work in progress (WIP) and/ or raw material inventories.
- Clutter in the shop and the general appearance of disorganization.

These examples are just some of the indicators that may signal that you have a problem or a number of problems.

What to Do

Obviously, the thing to do is to find and assign qualified people to the task of assessing your operations — from top to bottom — so as to identify the problems and then recommend the corrective action.

I would recommend that this be done in at least a two-part process. First, there should be recommendations for any and all short-term, low-cost, quick-to-implement solutions that would provide immediate relief.

Second, a list of recommended long-term solutions should be developed that may require more study, equipment evaluation, quotes, option evaluations, and team review/ buy-in. Many times these recommendations may be the more permanent and possibly more costly solutions, which may require budgeting for future expenditures.

Management typically tries to use the resources it has on-hand, which it should. Many times this process involves meetings with supervisors and asking them what they need, what they think is wrong, or what issues they have. Sometimes engineers are sent out to look at a particular machine, operation or area to see what they think the problem could be and to make recommendations for improvement.

Supervisors are usually too quick to ask for more people - more operators to reduce the overtime, more people to sort and inspect, and more operators or temps to produce more. Many times this may be needed as a short-term fix, but rarely is it an economical or

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wise long-term solution (unless the product demand increases).

Sometimes good things are found and corrected this way, but it usually does not take long for these attempts to play out without significant long-term solutions. fessionals) that can be dispatched to the manufacturing plants to act as internal consultants to help identify problems and offer corrective actions. This is good because they may have seen and fixed the same problem you have at one of the other plants.

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After attempting to use your in-house resources, I would recommend looking outside for help. The old cliché "a fresh set of eyes" is still true. Bringing in someone from outside of your facility usually will not be influenced by in-house politics, biases, friendships, operations-familiarity, or repercussion fears.

I would offer the following suggestions:

Corporate or Sister Facilities

Larger companies that have a "corporate office" or those that may have several manufacturing facilities located away from each other can be a great resource to draw from.

The corporate office may have corporate engineers or other expert resources (materials/supply chain, quality, accounting proIf there is no corporate structure to draw from, many times sister facilities can share their employees much in the same way. For example, one facility may send a manufacturing engineer to another facility for a week to provide a fresh set of eyes to help the resident manufacturing engineer see and correct problems. This process can be repeated as needed from one plant to another using any of the existing employed professionals. This can be a very low cost way to go.

College Students or Co-ops

Many companies use paid co-ops or college interns much in the same way. These folks can be found through the colleges and universities and can be a win-win for both the students and the companies that employ them.

Usually, with students, there are little to no preconceived notions or manufacturing history to pull from, so there are no biases to cloud their thinking. However, for the same reason, they may accept the way you are doing things as the way it is supposed to be and not recognize the poor methods, bad layouts, and inefficient process flow for what they really are.

Careful selection and hiring of these students will improve your odds. They also typically need heavy supervisory oversight or the assignment of simple tasks in order to achieve the benefit from their employment. Once in a while you can find a real gem, someone who you will want to hire full time.

Contractors/ Temps

Contractors and temps can be a good option, as they are typically seasoned professionals who have been around the block a few times and can hit the ground running, requiring very little supervision or orientation. What we are talking about here includes professionals such as quality engineers, industrial engineers, production supervisors, manufacturing engineers, materials/ purchasing folks and others. You hire them for a fixed hourly rate for short-term requirements, interim or special projects, such as investigating and identifying your plants problems and offering viable solutions.

The advantage is there are no benefits to pay and they can be released or replaced at will with no obligation.

Consulting Companies

The use of a consulting company may be the best of all worlds. Although there may be a bit higher initial cost, there is more obligation to show improvement and more incentive to provide real cost reductions and savings to you, the client company. Typically, the initial consulting costs are paid back in spades over the next year, making it a very good financial investment.

Employees from a sister facility will still be employees when they return home; co-op students have no real stake in anything because they will not be back anyway; and independent contractors also know that they will only be there for a set time and may or may not do their best, depending on the individual contractors work ethic, how much supervisory oversight/ accountability there is, and the selection process you used when hiring them.

A consulting company, on the other hand, will always start with an operations assessment to identify and articulate the observed problems and then recommend solutions within a written report. This is always done using the most experienced people and many times it will include a principal or partner.

Given that the client company will receive a copy of the written assessment report, you have the option of taking the report and implementing the recommendations yourself and at your own pace.

If the client company decides to utilize

the consulting company to assist in implementing any or all of the recommendations in the assessment report, the consulting company will select and assign the right professionals with the right skill sets for the tasks and constantly monitor the project progress to ensure an efficient, complete and proper project implementation. A good consulting company will make sure management remains appraised all along the way and is included in the process to ensure success. Nothing is actually implemented unless agreed to by the company, so there is no chance for surprises.

Final Thoughts

However you decide to proceed, it is important that you take action immediately – as soon as you realize that you have a problem or that you have some of the problems previously described. If the problem is an isolated issue, get on it and correct it. If you inherit a plant that is in trouble (or you wake up one day and realize you have something going on but you can't pinpoint it or if it seems overwhelming), I suggest seeking help by considering the options listed previously.

I believe it to be very unwise to leave things the way they are and hope things get better.

They won't.

The often-used key phrase to consider here is something called *continuous improvement*. You always want to be proactive and in a constant state of problem identification and improvement. Prevention is always cheaper than the cure, but do not let that dissuade you from taking action.

In conclusion, do not let manufacturing problems – known or unknown – continue to exist in your plant!

