



Lean Your Customer List: Part 2

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Customers are quick to scold and point out perceived waste in our plant operations, but when was the last time you evaluated your customers to see how much waste and lost revenue your customers create for your companies?

Despite having numerous ISO and supplier certifications, our shops continue to be audited by our customers' supplier quality personnel with an eye for identifying waste in our operations. While we can all agree that there are opportunities to improve our product and service provision, the question remains, who is identifying the waste and loss caused to our shops directly by customers?

At least half of the eight wastes of lean can be identified and assigned as customer-caused losses to a manufacturing shop's bottom line. Last month, we looked at three of them: waiting, inventory and overproduction. This month, we'll review over-processing and defects.

Over-Processing

Over-processing is defined as producing features with tighter tolerances than necessary to perform, or using materials with a higher grade than necessary for the product. This is an issue that can show up in a number of different areas. However, contract review is the best place to identify, and eliminate, over-processing before it becomes a cost to your shop. As a metallurgist, the first and most egregious example of over-processing is when I see a part specified from alloy steel that will not be heat-treated. The cold-drawn strength of the steel is determined primarily by the carbon content. The alloy only adds value by helping to achieve improved mechanical properties through heat treatment. If the part will not be heat treated, why buy alloy?

Critically examine features. Does the hole need to be that exact size? To create that hole, will a special drill or tool need to be made? Is a special tool more expensive than standard, readily available tooling? It is not just the tool that might need to be specially made. Also, special gages could be needed to assure compliance. The cost of waiting for those special tools and gages would also be assignable to the customer and accrue in the waiting step above. The same question holds for diameter and surface finish. Will an additional process to get diameter or finish into the required values be needed? How much does that add to the price of the part? Does that additional over-processing knock your shop out of contention for actually getting the job?

Critically examine tolerances. Do the tolerances need to be that tight? Overly restricted tolerances can increase lost pro-

duction time and create waste in several different ways. First, it leads to frequent interruptions of production to examine, adjust and remove tooling in order to assure conformance, as opposed to tolerances that will be easily held within statistical control because they better fit the process capability. What is the cost of having tolerances that are too restrictive? Ultimately, if the tolerances cannot be held under statistical control, your company's acceptance of the customer's demand increases your risk for nonconformance. Nonconformance equals defect, and that is another category of waste. How many feature tolerances with Cpk less than 1.66 has your shop accepted to get the job? How much lost productivity are you getting with increased delays for inspection, added inspection and extra tool changes? Who owns this in your contract review process? What is the cost of over-processing in your shop?

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Defects

While not every defect can be related to customers requiring overly restricted tolerances, when it comes to returned parts, that is usually the case. But there can be other defects inflicted upon your shop caused by the customer. Incorrect documentation from the customer is a defect that can have severe consequences for your business: wrong spec, wrong drawing, wrong release, wrong forecast or inaccurate forecast. Is the buyer exaggerating future releases to get you to commit to long lead time materials which will then sit in your inventory for most of the year while his or her demand never ramps up? I am not sharing anything new with these ideas you experience every day. My question is do you recognize and make your customer aware, if not accountable, for the waste they inflict upon your process?

It is easy to see that many of the practices inflicted upon our shops by our customers are significant sources of waste and lost revenue for our shops. Clearly, in difficult economic

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times, these wastes can grow to become significant issues to our profitability. But they are an ongoing source of poor financial performance, regardless of the state of the economy. We need to take action to reduce the customer-inflicted wastes that plague our shops and bottom lines. And, if we are honest in our intentions to seek the least waste for our entire supply chain, we should also review our practices to see if we are causing similar issues for our suppliers as well. We have covered just five of the eight wastes of lean in these articles. These can be significant sources of lost

revenue, increased cost and poor financial performance. Their root causes lie within your customers.

It is a new year. You are now newly aware of how these customer-created wastes are affecting your bottom line. Identify them. Rank them. Take immediate action. The next time your customer calls to come audit your shop. May I suggest you counter with an offer to review with them the wastes to your business that you have identified to be caused by them?

2 GREAT BLOGS!

YOURCAREERFACTS.COM
PMPASPEAKINGOFPRECISION.COM

Why Join PMPA? GROW!

To grow and profit today, you have to work smarter. You have to relentlessly eliminate waste. PMPA is the way to expand your knowledge and increase your capabilities in order to grow your business. Through daily interaction with PMPA staff members, you have access to our expertise on important industry issues. You're also able to tap the collective knowledge of your peers; those who have "been there" and "done that."

Through the meetings, resources and online connections, reports and more, we give you the tools to grow. We look at emerging markets and let you know what's hot and what's not. PMPA programs help you understand your markets so you can make sense of the issues. And, we provide relevant information to help you make informed decisions.

HOT TOPICS

PMPA members support one another through email Listserves, where they can solve problems, share advice, sell excess material and equipment, and learn about new developments and opportunities. Here is a list of topics that were recently discussed:

- Pieces expected to get out of drill in titanium
- Guidance on parts conveyors
- Honing on a Swiss
- IMDS questions
- ISO 2702 material
- Machining molybdenum
- X-Drill hole confirmation
- Source for spline rolling
- Preventive maintenance software
- Manufacturing aptitude test

PMPA CALENDAR

Below is the calendar of upcoming conferences and events scheduled for the 2016 program year. For the latest district/chapter meeting information, please view the Calendar of Events at pmpa.org/events/calendar. If you have questions about PMPA conferences or regional meetings, please contact Monte Guitar, director of technical programs, at 440-526-0300 or mguitar@pmpa.org.

2016 National Technical Conference
 April 9-12, 2016
 Amway Grand Plaza Hotel
 Grand Rapids, Michigan

2016 Annual Meeting
 October 21-25, 2016
 Westin Hilton Head Island
 Resort & Spa
 Hilton Head, South Carolina



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