

What is Your PHILOSOPHY OF QUALITY?

by Laurence Claus, NNi Training and Consulting, Inc.



What are your thoughts about quality? At one level this would seem to be a simple question to answer, but I speculate that if we asked that question of a large group of individuals, we would get a multitude of different answers. To most individuals, quality is subjective and may look very different at one moment than it does at another. Take, for example, the scenario of dining out. If the food is delivered to your table with a sloppy presentation, you may consider it to be of lesser quality than a dish that was presented well, even though the flavors and taste are still excellent. In this case, the quality decision is being made more on appearance than performance. Or compare your perception of a fine dining restaurant to a fast food joint. Each may provide excellent service and tasty food, but which is considered better quality? In this case, quality is based on reputation. Consider a different scenario, however, and think about a product you consider being top quality. What do you think of this product if it doesn't perform well or the way it was intended? In other words, it looks and feels like it should be top quality, but it doesn't live up to its reputation.

These examples and many others we could envision simply illustrate the understanding we have about quality. We have expectations in our mind of what a product or service should look like and perform like, and when they fail to do so, they drop down a notch or two in our view of their quality. We trust our intuition and know when we are experiencing something of the highest quality and when we are not. Dr. Edward Demming, renowned quality expert, defined quality very much in these same terms and felt that quality is defined by the satisfaction of the customer.

So, what are some of the common perceptions (and perhaps misconceptions) about quality?

- It looks good, so it must be good quality.
- It uses high quality materials, so it must be good quality.
- It comes from a low cost country, so it must be poor quality.
- Quality is a tangible result and not a philosophy.
- We can "discover" poor quality products amongst the good quality ones.
- It costs a lot or comes from a reputable company, so the quality must be good.

Each of these perceptions may be true, which is why we mainly shape our thinking

about quality along one of these lines. However, anyone who has gained some life experience can probably also cite times where these points actually represent misconception. Therefore, it is hard and maybe even impossible to define quality on any of these points alone.

Let's take a closer look at how these perceptions can perhaps become misconceptions:

"It looks good, so it must be good quality"

If you have ever walked into a fast food restaurant, stared at their menu board for a little while and made a selection based on the pictures illustrating the menu choices, and then been served something that doesn't remotely resemble the picture or doesn't taste like you expected, you know that just because it "looks good" doesn't mean the quality is there. In a similar vein, have you ever bitten into a delicious-looking apple, only to find it mealy and unappetizing?

"It uses high quality materials, so it must be good quality"

Kobe beef has the reputation of being the best beef in the entire world. These cows are pampered in every way to provide the finest cuts of beef around, and if you have ever encountered a cut of Kobe beef on the steakhouse menu, it is priced to reflect this. However, even the most beautiful and potentially tasty cut of Kobe beef can be ruined if it is overcooked and were served to you with the consistency of shoe leather. Providing products with high-end compo-

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nents is certainly an excellent start, but it is not the exclusive determinant if a product or service will be high quality.

“It comes from a low cost country, so it must be poor quality”

Unfortunately, this misconception is prevalent, and although sometimes deserved, not always. Just because something says “Made in (you insert the name)” does not necessarily mean it will be poor quality. A number of years ago, the Emerald Ash Borer finally made it to my region of the country and began killing all of the ash trees. I lost over 100 trees on my property and had stacks of logs needing to be split into firewood. I went to one of the local home improvement superstores and purchased a hydraulic log splitter that they had on sale for a price I couldn’t pass up. Now I knew this log splitter came from a low cost country and had low expectations about its longevity. I figured, though, that if it lasted long enough to split my pile of wood I would be satisfied. Well, years and many thousands of split logs later, it still runs reliably and without any problems. This is not to suggest that it is actually better than a purchase of a domestic machine, but it serves as a personal example to me that just because a product might come from a low cost country, does not mean that it is automatically poor in quality.

Additionally, countries that are in the position of being considered low cost and poor quality often have great incentive to get better. Take, for example, the words “Made in Japan.” If you had asked a westerner in the early-to-mid-1950s what this phrase suggested to them, the clear answer would have been low cost, poor quality, junky. However, if you ask somebody today what this phrase means to them, you will undoubtedly get the exact opposite response.

“Quality is a tangible result and not a philosophy”

This statement is particularly relevant to fastener suppliers—both manufacturers and distributors. Although companies make serious and very intentional efforts to measure the level of perceived quality of their products, this does little more than supply a snapshot of where they are at a particular point in time. Enlightened entities, however, make efforts to develop their business phi-

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losophy to be all about quality and making a product that will continually please and satisfy their customer.

“We can ‘discover’ poor quality products amongst the good quality ones”

In the fastener manufacturing world, hundreds of parts can be made on a machine every minute. That means every day, the average manufacturer is making thousands and thousands of parts. In fact, some companies easily make several million parts every day from a single manufacturing site. That means that it is physically impossible to look at every part and verify its quality. Instead, companies must adopt inferential statistical methods that allow them to discover the outcome of their processes from a small, select set of samples.

“It costs a lot or comes from a reputable company, so the quality must be good”

Purchasing something because of its reputation or price tag does not necessarily guarantee quality. Anyone with enough life experience under their belt likely has several stories to corroborate this statement. The one that poignantly comes to my mind regards a range my wife and I purchased. A little over 10 years ago, we built the house we currently live in. When we got to the point of purchasing kitchen appliances, we got in the car and drove to the local kitchen appliance outlet. There we discovered that stoves came in a low-end price point and a high-end price point, but there were few options in an intermediate price point, the one we should have ideally been in. Due to the limited choices, the salesman would get me enamored with a high-end professional

range, which is ultimately what we purchased. Although this range has served us well and remains a showpiece in our kitchen, it has not been without its share of problems, many more than I anticipated receiving from a range in this high-end price point.

For today’s fastener supplier, quality comes down to philosophy and how one chooses to execute that philosophy. When I started in the industry over 30 years ago, the prevailing philosophy was that if parts were “in specification,” they were good quality. With this mindset one accepts that a part provides the same “value” and performance regardless of where in its tolerance limits it is made. In other words, with this philosophy, a part will be equally good at its upper or lower specification limit as it will be at the tolerance center. If the part has been engineered with a great deal of margin in mind, then this assumption is probably pretty good. However, if there is little or no margin to pass beyond the upper or lower limits, then this philosophy is likely flawed. If the only goal is to keep things within the specified limits then the most common means of execution is inspection. Just inspect enough parts to make sure that they are staying within the limits. As already pointed out in one of the earlier bullet points, using inspection to guarantee quality with the quantity of parts manufactured is likely an unrealistic or achievable goal.

As a result of the limitations of this traditional philosophy, 20 to 30 years ago, quality thinking began to change. Fastener manufacturers have increasingly begun to adopt a philosophy espoused by the Japanese quality guru Genichi Taguchi. Taguchi came out with his theory of the Taguchi Loss Func-

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tion, which essentially says that as a product begins to deviate from the target, its satisfaction value decreases. An excellent illustration of this philosophy can be made with fruit. Imagine that you have purchased a bag of avocados. When you purchase them they are very hard and impossible to eat. If you leave them sit around too long they turn soft and brown inside. Therefore, we understand that they have limits (tolerances) of when they are edible. Now imagine that on day five they become perfectly ripe. On this

day, if you eat the avocado you get the greatest amount of enjoyment from it. On day three it is soft enough to actually eat, but still somewhat hard and less enjoyable than on day five when it becomes perfectly ripe. Likewise, on day seven, it is still edible but just starting to get overripe, and again, less enjoyable than on day five. This example illustrates what Taguchi proposed—essentially that any product or service has an ideal target that provides the greatest amount of customer satisfaction. As we

move further away from this target, even if we are still “in specification,” that satisfaction level decreases.

When one adopts Taguchi’s philosophy it inherently changes how one executes quality. No longer does one try to inspect, but rather to identify and maintain a process that will provide an outcome as close to the desired target value as possible. Therefore, modern, progressive quality execution includes statistical tools and continuous improvement actions.

In summary, how do you think about quality? Perhaps you don’t think much about it at all. However, quality and customer service may have a greater influence on the success of your product and company than any other single factor. Warren Buffet once said, “It takes 20 years to build a reputation and five minutes to ruin it. If you think about that, you’ll do things differently.” For that reason alone, quality must be an integral and important part of your strategy and business execution. ■