Written by MT Staff
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Some months ago I was working in the building products industry. The company for which I worked saw a need for their maintenance managers to have a better understanding of equipment asset management and reliability. We contracted for training through a well-known training company. The instruction was very good and we all gained much knowledge from the training.

However, there was one comment made by the instructor of the training company that left me scratching my head. During one of the training sessions a student asked the instructor how far we needed to go with reliability. His answer was “How far do you want to go? How much can you afford?”

I am now in business doing training in asset management and predictive maintenance technologies and I frequently hear similar statements concerning reliability.

Many times I have maintenance managers tell me that the reliability talk all sounds good but their companies can’t afford to spend big bucks on reliability. Sometimes their comments are something like, “It would cost us too much to get there.”

Another comment that I frequently hear is, “We aren’t ready for reliability. We have other maintenance issues that we need to take care of first.” These last two statements are like saying “we need to get well before we visit the doctor.”

I see these comments as a fundamental misunderstanding of the value of pursuing reliability. Trying to determine how much reliability you can afford or how much it would cost to get your assets to a certain level of reliability is the wrong approach. A proper way to look at the issue is to look at your goals and let these goals decide the needed levels of asset reliability.

If we look first to our goals, the fundamental question is no longer “How much reliability can we afford?” The question now becomes “How much reliability do we need to reach our goals?”

Suppose we have a goal to increase company profits by a certain percentage. What is the reliability level that we require of our equipment assets in order to reach this profit goal? When looked at in this light it is easy to see that reliability doesn’t have a cost. Reliability is an investment that generates profits.

I am not saying or even implying that there won’t be some up front costs incurred in improving plant reliability. Improvement costs will be largely determined by the added reliability required and the condition of the equipment assets when the improvement initiative is implemented.

If only a small increase in reliability is needed to meet profit goals and the assets are already in fairly good condition, the costs may be small. If a large increase in reliability is needed and the equipment is in very poor condition, the costs may be much larger.

Some companies don’t have the discipline or courage to get over the “hump” of the initial investment in order to reap the big rewards of good equipment reliability. These companies are the ones whose people say “We tried reliability but it doesn’t work with our processes because we are different.”

A good counter to my argument that reliability doesn’t cost would seem to be in the area of redundancy. Redundant equipment can sometimes add a certain amount of reliability to a process. This redundancy comes with the added cost of purchasing two assets to perform the function of one.

Let’s suppose that your company would like to add a back-up pump to a production process in order to increase the reliability of the process. There is no denying that the additional pump and its installation will cost money. You are adding the pump to increase reliability, so reliability costs money, right? If the costs incurred by adding the back-up pump are more than the increase in profitability due to the increased reliability, you probably didn’t need to add the pump. The reliability wasn’t needed.

We don't pursue reliability because it's fun or because we are told that reliability is the way to go. Nor should we pursue reliability to achieve best in class or the much talked about world class status. We pursue reliability in order to meet our profit goals.

How much reliability do we need? We need just enough to meet our profit goals.

How much reliability can you afford? If reliability costs you money, you don't need reliability.—Bill Hillman

Bill Hillman, CMRP, is managing partner of Asset Management Specialists Co. His equipment asset management career spans 30 years in the steel industry and 6 years in the wood products industry, the last 20 of which has been in predictive maintenance. He has been certified in lubrication, infrared, vibration, ultrasonic, and magnetic particle testing technologies.