



Reliability results

Part 1: How real companies make successful forays into the world of reliability

Rather than lecturing on a reliability topic this month, I thought you might enjoy learning about some successes in reliability improvement. Many companies have approached optimizing asset reliability as a journey that provides both rapid and long-term results. I've seen benefits beyond expectations by following a proven methodology for optimizing asset reliability.

Companies that followed this approach to proactive asset reliability reaped the benefits through higher capacity, reduced maintenance costs, increased asset utilization and availability, and lower risk of safety and environmental incidents. I've recently witnessed recent business cases for true proactive asset reliability that identified potential savings of \$200 million, \$75 million and \$12 million dollars. And these results are achievable within three years. They all are following the same approach to asset reliability with the target end state being optimal reliability at optimal cost.

Ron Thomas, equipment reliability consultant and project manager at Dofasco Steel, sums it up: "A proactive reliability process is a supply chain. If a step in the process is skipped, or performed at a substandard level, the process produces defects known as failures. The output of a healthy reliability process is optimal asset reliability at optimal cost."

The case studies I've seen show initiatives with a payback in one year to three years. Here are some of the results of following this known methodology:

A paper mill enjoyed a 5% increase in mill efficiency within two years. In addition, maintenance costs are beginning to decline and, most important of all, culture change is taking root. The plant has seen a marked reduction in emergency work and overtime. After quick success, the company expanded the reliability initiative to other paper mills, leveraging the work of the first mill.

After only three years of effort, a mining operation saw a capacity increase of 20% and zero downtime for a critical asset that had been controlling mine production for years.

Consider the steel mill that increased its asset utilization by 14% in just nine months. This translates into an increase in throughput of 5,600 tons per month. Maintenance

costs continue to drop as a result of fewer equipment failures and emergencies.

Finally, a discrete manufacturer increased asset life eight years to 12 years, which resulted in savings of \$19 million.

I attended a meeting recently where a VP of manufacturing for a candy company was excited about reducing equipment downtime and variance in downtime so quickly that it saved the plant from shutting its doors.

There are so many success stories that I don't have space here to mention all of them. They have one thing in common: they followed the same methodology to optimizing reliability. In my next column, I'll share this methodology with you, a methodology that has worked for companies ever since the late 1990s. In this methodology, everyone owns reliability and it's apparent they do so.

If you follow my suggestions, you'll hear coworkers become vocal about improved quality of life and openly question why the plant didn't implement this move years earlier. You'll be able to migrate your results to similar equipment across the plant or to multiple plants, thus leveraging the results.

If your facility needs to adopt a proactive asset reliability methodology, I recommend you visit a plant that has already done it. This will allow senior management to see proactive asset reliability in real life. Walk around, talk

to senior and floor-level management, operators and maintenance personnel. You'll see a world you might never have seen before. I tell people that witnessing a proactive reliability culture in operation is like seeing the future in person. To me, it was like going to Disney World for the first time.

If you are interested in visiting a reliability leader to see proactive asset reliability first-hand, or would like a copy of some great case studies in reliability, send me an e-mail at ricky-smith@comcast.net. I might be able to arrange only a limited number of company visits, so it will need to be on a first-come, first-served basis. ☺

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Part 2 will appear in the April, 2007, issue.

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