

Production Equipment Maintenance—Have you considered outsourcing?

Plant management today faces a myriad of challenges when trying to develop and implement strategies for successfully maintaining production equipment. As plants implement advanced manufacturing practices such as “lean” and “quick response” manufacturing, machines must be ready to run when production needs them. Traditional approaches to these challenges have included hiring a new maintenance manager, buying some training for the maintenance crew, buying a new Computerized Maintenance Management System (CMMS), developing a preventive maintenance program, or one of many other approaches aimed at getting more productivity from the maintenance organization. These traditional approaches generally focused on improving maintenance using strictly internal resources, supporting the mindset: *The only way to get things done right is to do it myself*. The good news is that management now has more options available to help them address complex maintenance challenges.

The challenges of maintenance improvement

A plant’s ability to address the following challenges will impact their ability to produce a quality product at a low cost and deliver to the customer on time:

1. People

As we all know, the pool of available skilled maintenance technicians is very shallow and the existing maintenance workforce is aging and nearing retirement. This reality, coupled with the fact that most apprentice programs have been shuttled and training programs curtailed, has created a shortage of maintenance technicians that is nearing critical proportions. Finding, training and retaining skilled maintenance people is one of the top challenges facing maintenance organizations today.

2. Maintenance leadership

Effective maintenance organizations must have leadership that is able to plan, both strategically and tactically. This leadership must Production Equipment MAINTENANCE by Steve Welch, Vice President Advanced Technology Services (ATS) Have you considered outsourcing? be able to create an environment of change not commonly found in most maintenance teams. Maintenance leadership must be able to convince the team that they need to think and work differently than they have in the past. Maintenance needs leadership that is driven by results, not activity. Where is this leadership going to come from?

3. Procurement and management of maintenance supplies

Most manufacturing companies view spare parts as very expensive, difficult to manage, and usually way out of control. Maintenance parts and supplies constitute up to 60% of maintenance spending yet most plants do not have effective plans to reduce the cost and number of parts that are consumed.

4. Tools and technology

Effective maintenance has changed significantly in recent years. Maintenance today is far more a technology based activity than it is a repair activity with need for a far greater emphasis on predicting and forecasting maintenance needs. I am convinced that no plant can perform effective maintenance without a Computerized Maintenance Management System (CMMS). If you do not measure maintenance, you will not be able to improve maintenance. It is that simple. With the remote monitoring capabilities of today’s controls, catastrophic failure can be a thing of the past.

5. Processes

If it’s true that 85% of all problems are process related and 15% are people related, then why do we focus 85% of our efforts on people improvement and 15% of our efforts on process

improvement? Maintenance people, despite traditional stereotypes, are hard working employees who really care about doing a great job for their company. Maintenance organizations fail, not because of people, but because those people lack the systems, process, methodologies and disciplines to be successful. Maintenance activity, without effective processes, will not work.

6. Cost

How does a maintenance organization effectively address all of the challenges of maintenance and do it in a cost-effective way? Maintenance must be able to demonstrate a measurable return on investment and must be able to justify its existence by showing how effective maintenance reduces machine downtime, reduces overtime needed to hit production schedules, improves on-time delivery and improves the quality of the product. However, maintenance usually does not know how to rationalize their participation in the savings.

Addressing all of these maintenance challenges on an individual basis would be difficult at best. However, if maintenance is going to be really effective, all of the challenges must be dealt with and brought to best in class status.

The new outsourcing paradigm

Outsourcing is the newest tool available to managers to try help them bring about effective change in the way maintenance is performed. In past years, the term “outsourcing” was spoken in hushed tones and only in the privacy of executive meetings. However, in recent times, outsourcing has, more and more, been looked upon as simply one of the tools available to management when developing strategic initiatives. According to Larry Bossidy, Chairman of Honeywell Corporation, “Not too many years ago, to outsource was to admit mistake, error, incompetence. Now, outsourcing is viewed as intelligent, as a recognition of the new dynamics of business.” Outsourcing should not be feared by maintenance managers and supervisors, but embraced as a potential and viable approach to addressing the challenges of maintenance. Outsourcing must be at least considered, when evaluating possible approaches to addressing maintenance issues.

Is outsourcing right for you?

When trying to determine if outsourcing is the right tool for you, two questions must be answered:

1. *Should you try to address the challenges of maintenance internally?*, and;
2. *Are you capable of addressing the challenges of maintenance?*

The question of addressing maintenance improvement internally is really all about core competencies. Has your company analyzed and defined the core competencies of your organization? Traditionally, core competencies have been defined as the activities an organization does well or the activities that are important to an organization. I challenge both these definitions and suggest that core competencies are only the activities that an organization must do with internal resources in order to create or maintain a competitive advantage in the marketplace. Core competencies require investment and focus on the part of an organization. If an activity does not create recognizable value to your customers, value that they are willing to pay for, then I believe that activity is not a core competency and will not receive the focus necessary for continuous improvement. It is important to note that companies can and do perform core competencies very poorly and perform non-core competencies very well.

Regarding the question of capability to address maintenance improvement internally, several critical issues must be evaluated. The first issue is whether the required critical mass and skill sets are available for internal improvement. These skill sets include technical skills, leadership skills, process skills, and a continuous improvement mindset. The second issue deals with time. Do you have enough time to accomplish improvement in all areas of maintenance that require focus? These areas include people, leadership, parts and supplies, tools and technology, and maintenance processes. Not addressing all of these challenges will doom an improvement initiative to failure. The final issue you must consider is whether management will provide the

required tools for a successful internal improvement initiative. These tools include the money, people, resources and cooperation that you will need to be successful.

Benefits of outsourcing maintenance

There are a variety of good reasons why you should consider outsourcing maintenance on your production equipment. The first is the speed in which you can bring about change in your maintenance organization. All maintenance challenges can be addressed simultaneously. Secondly, you can enhance the current level of service that your maintenance team is providing. Change can be initiated rapidly. Third, you can focus key management time on core business issues. You may give up some short-term control of maintenance activities, but gain greater control of maintenance results. Additionally, you immediately gain access to all of the most advanced maintenance technologies available. Finally, you allow your maintenance team the ability to work with people who eat, drink, and sleep maintenance. Your team gains exposure to maintenance professionals who possess significant experience in transforming weak maintenance teams into high performance groups. The opportunity for personal and career growth is significantly enhanced as the outsource company assimilates your maintenance team into their organization.

It is important that all manufacturing companies at least consider outsourcing as a potential solution for them. To blindly dismiss outsourcing, without completing the appropriate due diligence, would be ignoring a powerful tool that is available for performance improvement. Next month, I'll discuss some of the issues to investigate when considering outsourcing maintenance. *Contact Steven Welch, Advanced Technology Services at 309.693.4138, or through swelch@advancedtech.com.*