



Value of Maintenance

By a show of hands or head nods, how many of you have had to defend your maintenance organization to those who feel it is an unnecessary component to the company? That outsourcing would be a more logical step to reduce costs and personnel; a reduction of force should be seriously considered and so forth.

No matter what the reason it can be an uphill battle to convince upper management and even some of the maintenance staff, that the department should be considered a 'top priority' business function and not a necessary evil. We are constantly asked to justify our costs, why we need to spend money to do something when the cost is nothing if we don't. It has always been easier to justify a cost if it is smoking, clanking or frozen.

You may remember our Nuts & Bolts article in April of 2010 when I used the air compressor example; I still believe it drives home the point so here it is again as a reminder:

Several years ago while I created a training seminar targeted towards an upper management audience. The course taught maintenance management fundamentals, showed ideas of how to assess their own organization, described how to get started, and developed the road map and plan to manage the process. Also included in the agenda was a discussion around the **Return Of Investment** for performing leading class maintenance. To do this effectively I used a simple example to illustrate the value of good maintenance and a second from a negative perspective.

- We took a \$50,000 air compressor with an expected life of 15 years with proper maintenance for its entire life. What would it cost us?
- Then we took the same air compressor and decided not to perform proper maintenance and the result was the compressor only lasted 5 years before it required replacement. What that compressor cost us?
- Then we took the second example and multiplied it by ten compressors. In other words, what would it cost the organization if we had ten \$50,000 assets that should last 15 years but because of poor maintenance habits they only lasted five years?

All of this information was put in a spread sheet with all of the calculations and components included like: depreciation, maintenance costs, estimated life, purchase price, and present value and future value of money. Here is the condensed analysis of the air compressor.

Good Maintenance Example

Compressor cost - \$50,000

Cost to maintain per year - \$500

Useful life – 15 years



Placing all of that info into the spreadsheet and calculating the depreciation the net cost to the organization over 15 years is \$40,500

Poor Maintenance Example

Keep in mind in the poor maintenance example we didn't take care of the compressor so we had to replace it after five years and then again after five years. That means we had to buy three compressors to make it to the 15 year expected life of the first compressor

So you had to spend \$150,000 to purchase compressors and with the lost opportunity of the extra \$100,000 and the earnings from the use of the \$100,000 the net loss to the company from poor maintenance is \$142,912.00. This is money the organization could have used for new products, capital expenditures, benefits for employees, or raises.

Now what if you have ten assets of a similar value? The net loss to the organization is \$1,429,126.54 and of that amount the lost earnings in \$429,126.54.

As you can see the dollars really add up in a hurry. Many of us been involved in situations very similar to this but often we never figured out or saw the losses because we didn't have the systems in place to help us track the costs, losses and asset information.

I can't print the whole spread sheet in the news letter but if you use the link below you can download or contact Anne Copeland at.....and she will send you a usable copy of the spread sheet so you can enter your own asset values and depreciation values.

I encourage you to download the spread sheet and plug in one of your assets of any value, take it to your financial manager and make sure the percentages, depreciation, and estimated earnings on capital align with your organization.

Take it to the next level because with a clear analysis of your organization you will not only discover some pitfalls you may have overlooked but you have the tools to make your case around the value of maintenance.

P.S. Good luck and be careful who you show your numbers to it might scare them more than you want.