



[AA Electric LinkedIn Article](#) written by, engineer, Richard Brillhart

Yes, it really can be easy!

By now you have probably read tons of material talking about **Reactive Maintenance, Preventive Maintenance, and Predictive Maintenance**. If you're like me, you probably feel exhausted with all of the numbers and graphs that get tossed at you about this. I'm going to try and make this easy for all of us.



Okay, So, I need to throw out a few numbers...

Unplanned Downtime Costs, can sneak up on all of us until we look at the bottom line, it's a real problem. If you have a large corporation you can see up to \$500,000.00 or more in downtime cost per hour if your production stops. Let's say you have a smaller company. How about \$25,000.00 / hour. Let's see if there is a way to keep this at bay.

Reactive, Preventive, and Predictive Maintenance, are the three big styles of maintenance you've heard about for keeping your facility alive. Let's see what these really mean. Here is where you may want to stop reading, but wait I promise it won't be too mind-numbing.

Think about your car and its oil change.

Do you wait until you start hearing knocking coming from under the hood to get your oil looked at? Of course not! This would cause many more unnecessary problems. That in a nutshell is **Reactive Maintenance**.



Most of us read the manual and see that we should change our Oil every ~3,000 to ~7,500 miles. What makes the difference? You read the manual further and it talks about driving styles and conditions. What are your conditions? Don't really know? Congrats, you're like all of us. **Preventive maintenance** is like your car's manual, how many runtime hours do you need to go before shutting down for service? If it's your company you will want to keep errors on the low side to make sure. So, Oil changes every 3,000 miles it is! I talked with one facility and they changed their conveyer motors on a regular basis, based on runtime. That motor could be perfectly fine, but changing it was less costly than the downtime it might cause.



Back to our car discussion. If you drive your car 20,000 miles per year and pay \$87.00 per oil change you would spend around \$580 per year with changes every 3,000 miles. Want to push it to 7,500 miles? You would be at \$232 per year, that's almost \$350 in your pocket. However, would that cost you an engine repair down the road??? Wouldn't it be great if you had an OIL LIFE % indicator in your car? Now we have that! My new car has an Oil Life % indicator that looks way more than just mileage and gives me a Life %.

Drop down to 15%, start making appointments, down to 10%, make a beeline to the shop. That in a nutshell is **Predictive Maintenance**.

With Predictive Maintenance, you monitor the condition of your equipment and make decisions based on those conditions. Plants are looking at things like **Oil and Lubricant analysis**, **Bearing Temperature**, and **Equipment Vibration** to make decisions on maintenance schedules.

Equipment Vibration is becoming a major player in the Predictive Arena. You have probably seen these Systems advertised. The downside is most of these systems do a great job sensing and monitoring Vibration and Temperature, but they leave the guesswork and calculation to you! Now, we're back to the 3,000 or 7,500-mile issue.

Most Systems also give you an alarm to tell you when your system is starting to fail but isn't that back to the Knocking Engine problem? To me, it's kind of like closing the barn door after the horses have run away.

Here's the part you've been waiting for...

We developed **Vibe-Sight** to make **Predictive Maintenance** easy. Our Goal with Vibe-Sight is to do all of the hard work gathering the data and analyzing it to determine the health of your system. We are basically giving you your Oil Life % indicator for your factory floor. Vibe-Sight monitors vibration and Temperature and its changing conditions. Using **Predictive Analytics**, we give you a **System Health %** and Halo indicator. If you see it start to drop down below 30%, just like our car example, you prep for a planned outage for maintenance. This means you can keep your factory floors healthy as Vibe-Sight will be there to have your back, aka no more waiting till the knocking comes! One advantage is that Vibe-Sight will even alarm and tell you via email if your Health is getting too low.



[Vibe-Sight](#)

Some systems send your data up to a cloud for you to develop your own Machine learning. Others just alarm. Vibe-Sight leverages the superior quality of Banner Engineering's Vibration sensors along with our proprietary **Predictive Analytics** to provide you with a **Self-Contained, Fully Integrated solution**. Just plug Vibe-Sight in, connect your Sensors, and you're tracking your equipment's Health!

Vibe-Sight Brings EASY to Predictive Maintenance.

Contact AA Electric at 1-800-237-8274 or websales@a-aelectric.com for more information on Vibe-Sight.

Visit our website at a-aelectric.com