

Process Plant and Equipment Up-time

The basic engineering tradesmen and operators need to keep plant reliability up and operating costs down.

From [Trade-School.Education](#) – Maintenance & reliability article for students and employees.

The Continuous Improvement Method of Thomas Edison

ABSTRACT

The Continuous Improvement Method of Thomas Edison. There is a good chance you can make astounding changes and achieve incredible performance improvements from your plant and equipment. It can be done with the method used by Thomas Edison to solve his problems and make his discoveries. Improvements in the order of 20% maintenance savings with 100% on-time achievement of production plans are possible. The method is that of continuous improvement. You start by proving it works for yourself first and then, once you are sure it works you introduce it to your people.

Keywords: continuous education,

We Miss Our Biggest Opportunity.

Many of us make the biggest mistake of our lives when we finish schooling. Whether it is when we finish high school, college or university, the mistake is thinking we no longer need to keep developing our knowledge. Instead of remaining proactive students we become reactive employees.

We mistakenly begin to use the ‘hard knocks’ of life and business as the only way to learn. No longer do we bother to use practical, purposeful education and training to fill the gaps in our knowledge. Unintentionally we start to hand-over the responsibility for business, mental, spiritual and interpersonal growth to circumstance.

The ‘school of ‘hard knocks’ is a poor teacher. It is a slow, expensive and random way of getting an education. By only learning through mistakes you will waste 80% of your life, time, money and efforts. It cannot be any other way. Great waste will be the result if one is just waiting about for something to happen and then reacting to it without knowing what is the proper thing to do!

Do what Thomas Edison did.

But this situation does not need to continue. You can do what every great leader, innovator and inventor does. They keep learning. They read, study and think about what they want to see happen in their lives, their businesses and with their discoveries. It is said that Thomas Edison became a great inventor without much schooling. But that is not the real story, it is a huge half-truth, a falsehood.

Edison may not have had much formal schooling, but he was a prolific reader. He would get hold of every book and piece of information he could get on the subject he was working on. He studied the subject endlessly, thought about it and around it, and then came up with an idea to try. No, he did not finish school - but he kept on getting educated. He took it upon himself to continue developing his mind and his knowledge. This is the way of all great people.

There is no schooling available that teaches ‘greatness’ as a subject. That must come from within each of us. And it is done by the continuous improvement of ourselves. It will work for anyone, anything and everything in our world.

Personal Continuous Improvement First

Now that you know one of the ‘great secrets’ you can put it to use for yourself. You do not need to go back to school, unless you want to. First it is necessary to decide on one thing you want to see happen in your life. Then you decide on one thing that you want to see improved at work. Write them down so they become real and you can point your finger at them. Just a few works to clarify your mind.

Your next step is to learn more about both topics – the one for your life and the one for your job. Get books on both subjects, go and talk to persons that know more than you on those topics, get educational videos and view them, go to seminars on the subjects, get subscriptions to relevant magazines. Get ideas of what to do to move forward from where you now are. When you get an idea start to implement it. Try a little bit of it, do a test and sample the effect. Continue with it if it works; modify it if it doesn’t work. This was what Thomas Edison did. It worked wonderfully well for him, and it will work for us.

You may realise you need to go back to ‘school’. But now that you know what you want to do and why you are doing it, it will make all the difference to your enthusiasm for study!

Then Continuous Improvement for Your People.

When you have proved that the process of continuous improvement works for you, you can then look at introducing it to your people. They are most likely in the same situation that you were in. Just waiting for things to happen to them. Now you can lead them to a better place.

To start them off, find a way to get them reading more about their jobs and their business. Nothing ‘heavy’! You cannot force them to learn. You can only lead them. Offer them opportunities to attend training. Get a knowledgeable person to have a 15-minute ‘tool box talk’ with them on the topic. One-by-one take them with you to the seminars you attend. Find creative ways to expand their knowledge on the thing you want them to know more about.

For example if you have chemical reactors in your operation, teach your operators and maintainers the chemistry of the reaction, teach them the metallurgy of the reactor, teach them about the critical factors that make for a good reaction, teach them about the machinery that

makes the reactor work. Teach them why things work as they do, why it is important to do things certain ways.

Once they know all about the reactor they will also have learnt 80% about everything else in the plant. The next lot of training and education will go much faster.

You want to develop your people's engineering and business understanding so that if 'hard knocks' hit their equipment or the business demands become heavy, they don't waste time, money and effort doing pointless things, but will instead focus on the important, high pay-off actions.

When you see anyone of your people make a standout performance – encourage it. Give them the opportunity to learn more about it.

Personal and Team Victory.

As you go about expanding your people's minds and knowledge they will 'discover' the best ways to run the plant and their part of the business. With your support and direction they will find the ideal ways to do their work with least cost, time and effort. They will be victorious in the battle for high performance and efficiency.

When your people get to that level of expertise you can then stand back, take pride in the good work you have done through them and go onto the next thing you want to improve.

Mike Sondalini