

Video: An Introduction to TPM Principles

As the technology used to create goods has advanced, it has revolutionized many industries. While increasingly complex automated machines have many benefits, they also carry with them their own unique set of challenges.

Equipment of greater complexity carries with it greater risk of costly breakdowns, defective products, and dangerous accidents, unless proper measures are taken to avoid such problems.

This is why TPM is such a valuable tool. TPM stands for Total Productive Maintenance.

It is a comprehensive, company wide approach that seeks not to simply fix problems when they arise, but instead to create a system that keeps equipment in optimal conditions at all times.

The relationship between operators and their machines is a primary focus of this effort. Through education and training, operators acquire a greater understanding of the equipment they use everyday, and are able to take greater command of maintenance activities. This improves conditions for both the operators, and their equipment.

Collaboration between these knowledgeable operators and other departments, such as Specialized Maintenance and Engineering, contributes to the creation of a company wide effort toward increased equipment effectiveness.

It is important to remember that the goal of increasing equipment effectiveness is not simply to produce as much as possible, as fast as possible. TPM actually works best when it is incorporated into a Just-In-Time production system; one that only produces what is needed, when it is needed, and in the quantity needed based on customer demand.

TPM ensures that equipment is available to produce what is needed, whenever it is needed, without defects, breakdowns, or accidents.

Once the necessary quantity is produced, any extra time in the workday can be spent on improvement activities, such as Kaizen Workshops or ongoing TPM activities.

TPM is a challenging endeavor. It most often takes around 4 years to become fully implemented. Although it requires a long term company wide effort, the positive transformation that TPM brings about is well worth the investment. [U](#)