



International TPM Institute
The Hartmann Method

TPEM® and Operational Excellence

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When TPM turns into Operational Excellence, competitiveness increases automatically.

THE GOAL – THE PATH – THE SUCCESS ...

- The TPEM-Hartmann method for management
- TPM needs leadership
- Without new, expensive equipment (reduction of machine downtime by 60%)
- With optimum yields (Return on Investment: 300% or more)

LEAP INTO WORLD CLASS LEVELS

Today more than ever, it is a necessity to exploit the full potential of machines. But how much additional availability and efficiency is hidden in your machines? The precise, strategic TPEM® method, developed by Edward H. Hartmann and tailor-made to significantly increase machine productivity, is not merely focused on maintenance, and has been successfully implemented for the last 27 years in more than 50 countries. From manufacturing plants at Daimler, Bosch, Dunlop, Novartis, General Motors, Salzgitter-Mannesmann, Pfizer, Magna and Siemens to Ford, GM, Abbott, Kellogg's and many more.

What started with automotive manufacturers and suppliers is expanding today to all branches of industry and also to relatively small plants (<50 employees). Every company - from the automotive manufacturer to the food producer - can utilize TPEM to optimize machine productivity and the entire production process *profitably, measurably, successfully!*

TPEM, TEAMWORK AND RESPONSIBILITY

TPEM achieves these remarkable results by merging production and maintenance departments into one team. In addition, the employees are actively involved and responsible in the improvement process of their machines. While the concept is simple, the implementation is anything but that. TPEM has to be carefully planned and adapted to the specific requirements of individual machines and workforce. TPEM is a 20 % technical and 80% human challenge. We assist you with the implementation!

THE SECURE WAY TO TPEM SUCCESS

- TPM needs you and the entire management team
- Raise TPM to the highest world class level
- Which specific, measurable results can be expected
- How to incorporate preventive/predictive maintenance with TPM
- How operators can be involved in the program

With a TPM Award from the International TPM Insititue, Inc. TPM has achieved World Class Levels in your plant!

Equipment management with teamwork

TPM operates in the following four fields of action listed below. Thanks to the use of teamwork, very good results are achieved. Teams composed of production and maintenance staff know the losses and also the solutions to achieve their desired results. What is missing is an organization with a steering committee and a 100% committed TPM coordinator, as teams have to be managed competently.

TPEM – 5S

- Everything starts with utmost order & cleanliness
- TPEM not only permanantly improve the productivity of machines and plants, but also improves the workplace of the employees and the entire working environment of the machines and plants
- Order and cleanliness are very important for the workplace and the work environment!

TPEM – Equipment Management

- The focus is on plant management and especially on plant improvement
- Analysis of equipment downtimes
- Development of improvement measures using problem-solving techniques in group work
- Participation of operating personnel, maintenance staff and engineers (sometimes supervisors)
- Requires time to train for problem solving and team work
- Very cost effective and fast!

TPEM – Preventive Maintenance

- The focus is on preventive and predictive maintenance (PM / PDM)
- Most companies do not successfully implement PM
- Systematic procedures are required (PM lists, charts, etc.)
- Decide how much and what type of PM you can transfer to the machine operator
- Predictive maintenance (PdM) is usually "high-tech" work and should be performed by maintenance staff
- Shorter lead times

TPEM - SMED

- Short delivery times
- Reduction of storage capacities
- This results in frequent retrofitting of the equipment
- Set-up downtimes reduce machine productivity, which is why the procedure for reducing set-up times is very important
- The SMED method with the distinction between external & internal setups is an achievable goal

The successful TPEM ® route leads to the coveted TPM AWARD granted by the International TPM Institute, Inc.