



An Introduction to Total Productive Maintenance (TPM)

What is Total Productive Maintenance (TPM) ?

.....It can be considered as the medical science of machines.

Total Productive Maintenance (TPM) is a maintenance program which involves a newly defined concept for maintaining plants and equipment. The goal of the TPM program is to markedly increase production while, at the same time, increasing employee morale and job satisfaction.

TPM brings maintenance into focus as a necessary and vitally important part of the business. It is no longer regarded as a non-profit activity. Down time for maintenance is scheduled as a part of the manufacturing day and, in some cases, as an integral part of the manufacturing process. The goal is to hold emergency and unscheduled maintenance to a minimum.

Why TPM ?

TPM was introduced to achieve the following basic objectives.

- Producing goods without reducing product quality.
- Reduce cost.
- Produce a low batch quantity at the earliest possible time.
- Goods sent to the customers must be non defective.
- Avoid wastage in a quickly changing economic environment.

Similarities and differences between TQM and TPM :

The TPM program closely resembles the popular Total Quality Management (TQM) program. Many of the tools such as employee empowerment, benchmarking, documentation, etc. used in TQM are used to implement and optimize TPM.

Following are the similarities between the two.

1. Total commitment to the program by upper level management is required in both
2. Employees must be empowered to initiate corrective action, and

3. A long range outlook must be accepted as TPM may take a year or more to implement and is an on-going process. Changes in employee mind-set toward their job responsibilities must take place as well.

The **differences** between TQM and TPM are summarized below.

Category	TQM	TPM
<i>Object</i>	Quality (Output and effects)	Equipment (Input and cause)
<i>Mains of attaining goal</i>	Systematize the management. It is software oriented	Employees participation and it is hardware oriented
<i>Target</i>	Quality for PPM	Elimination of losses and wastes.

TPM - History:

TPM is a innovative Japanese concept. The origin of TPM can be traced back to 1951 when preventive maintenance was introduced in Japan.

<i>Direct benefits of TPM</i>	<ol style="list-style-type: none"> 1. Increase productivity and OPE (Overall Plant Efficiency) by 1.5 or 2 times. 2. Rectify customer complaints. 3. Reduce the manufacturing cost by 30%. 4. Satisfy the customers needs by 100 % (Delivering the right quantity at the right time, in the required quality.) 5. Reduce accidents.
<i>Indirect benefits of TPM</i>	<ol style="list-style-type: none"> 1. Higher confidence level among the employees. 2. Keep the work place clean, neat and attractive. 3. Favorable change in the attitude of the operators. 4. Achieve goals by working as team. 5. Share knowledge and experience. 6. The workers get a feeling of owning the machine.

A One Day Seminar on.....

An Introduction to Total Productive Maintenance (TPM)

Today, with competition in industry at an all time high, TPM may be the only thing that stands between success and total failure for some companies. It has been proven to be a program that works. It can be adapted to work not only in industrial plants, but in construction, building maintenance, transportation, and in a variety of other situations. Employees must be educated and convinced that TPM is not just another "*program of the month*" and that management is totally committed to the program and the extended time frame necessary for full implementation. If everyone involved in a TPM program does his or her part, an unusually high rate of return compared to resources invested may be expected.

A One day seminar can only give an overview of the topic as full training of the subject material requires 5 Full Days of rigorous training.

The main objective of this seminar is to create awareness on the subject, so that the manufacturers of our region can benefit from these techniques.

Introduction of TPM ad its Techniques

- The Quality Challenge
- Just In Time (JIT)
- Cycle Time Reduction
- Set-up Reduction (SMED)
- Cost Reduction (Maintenance and Operations)
- The TPM Solution

The FOCUS of TPM.....The Equipment

- The Three Phases of Equipment Management
- Lowering Life Cycle Costs (LCC)
- Getting The Best from Your New Machines
- TPM Goals, the Three Zeros
- The TPM Organization (Line and Staff)

The Power of TPM

- Eliminating Equipment Downtime, Idling and Minor Stoppages
- Reducing Product Defects
- Productivity Improvement
- Controlling Maintenance Costs
- Employee Participation, Teamwork
- Return On Investment (ROI)

Measuring Your True Equipment Productivity

- Defining Equipment Productivity
- How to Identify and Measure Equipment Losses
- What is Overall Equipment Effectiveness (OEE)
(OEE) Goals: What should you expect from your Equipment?
- Setting Priorities for Your TPM Installation

Seminar Details

- ❖ It is very interactive and includes many activities and exercises to enhance the learning experience.
- ❖ It is spread over the period of One-full day consisting of 8 hrs (9am-5pm)
- ❖ It includes 2 tea breaks and a lunch break

Proposed Training:

- ❖ **Training Duration:** One full day (8hrs)

The training venue proposed is :

- ❖ **Pearl Continental Hotel or Avari Hotel, Lahore**
- ❖ Or any Hotel/Hall in your Area or in your **Chamber of Commerce.**

Training Cost:

Cost per Individual Participant is a total of:= Rs.8,500

Includes cost of:

- Certificates,
- Tea (twice),
- Buffet Lunch,
- Hotel Facility Charges,
- and Trainers Cost