Manufacturing Technology Training
An IMTMA initiative

# Machine Breakdown Analysis
# Date : 25 September, 2025
# Venue : IMTMA Technology Centre, Pune

## INTRODUCTION

Machine breakdown analysis is important for several reasons, as it plays a crucial role in ensuring the efficient and reliable operation of machines. Analyzing machine breakdowns isn't just about fixing what is broken. It is about optimizing the entire production process.

What are the reasons to do the analysis?

The Machine Breakdown Analysis helps us to minimize the Downtime so as to be able to increase the Overall Equipment Effectiveness. Reduction in downtime helps save a lot of cost on spares, consumable and man-hours.

Since the reduced downtime makes a lot of man-hours available for taking up new improvement projects, it helps to increase the reliability of the equipment significantly. It helps in reduced quality defects and cost of rework.

Improved machines become more safe themselves and for the humans working on them.

With the advent of IoT, the Internet of Things, it has become very easy to collect and collate various parameters from the machines. These parameters can be current, pressure, flow, vibration etc. By analyzing the trend of these data, appropriate corrective and preventive actions can be taken to further reduce the down time and improve OEE.

By making the machine available for more time for production, the actual run time of the machines can be optimized, thereby reducing the consumption of electricity and other resources.

## FOCUS AREAS

- Chronic and sporadic failures
- Collation of Machine Breakdown data for analysis
- Vision and Mission
- Three main causes and five contributing factors for breakdown
- Five measures to challenge zero breakdown and link to 5 TPM Pillars
- Managing action plan for breakdown analysis and solution categories to prevent recurrence through Root Cause Analysis
- Types of FMEA and importance of EFMEA for Maintenance

## KEY TAKE AWAYS

- Understanding the difference between chronic and sporadic failures to identify appropriate corrective and preventive actions
- Applying the technique of Root Cause Analysis to be able to undertake Short and Long Term Corrective Actions.
- Once applied, how to use the RCA technique to convert it in the mechanism of taking Preventive Actions
- How to use the Cause and Effect Diagram and 5 Why Analysis to identify various Root Causes
- How to apply the findings of EFMEA, the Equipment Failure Mode and Effects Analysis to be able to take preventive actions.

## PARTICIPATION FEE

**Rs. 6600/-**
+18% GST
**IMTMA Members/ Micro Companies/ Individuals/ Educational Institutions / Students/ IMTMA Non Members/ Others**

**USD 260/-**
**Overseas Participants**

**Group Concession : 10% for 3 to 5 and 20% for 6 and more delegates being nominated from the same company**

## PARTICIPANT PROFILE

This course is ideal for the Maintenance Managers, Manufacturing Engineering Managers and Utility Managers who are involved in selection, installation, commissioning, using and maintaining various equipment / machines running on our shop-floors.

## FACULTY

This programme will be conducted by **Mr. Shacheendra Bapat.**

**Mr. Shacheendra Bapat** is a B.E. in Electronics and Telecommunication from Pune University and an industry expert with over 30 years of experience in Automotive Manufacturing industry. He has conducted several training programmes on Automation, Maintenance, Safety and Productivity related subjects. Mr. Bapat is former Asst. General Manager – Manufacturing and Head of Maintenance at GM’s Talegaon Vehicle Assembly Plant.


### For Registration Contact
**Santosh Singh**
**Programme Coordinator**
9021442692
santosh@imtma.in
**Back End Operations**
9742626488
enquiry@imtmablr.com

### Contact Address
**INDIAN MACHINE TOOL MANUFACTURERS' ASSOCIATION**
12/5, D-1 Block, MIDC, Chinchwad,
Pune-411019
Board Line : +91 7066030531 / 532


imtmatrainning.67038796@hdfcbank

**REGISTRATION :** Prior registration for participation is necessary. Number of participants is limited and will be accepted on ‘First Come First Serve’ basis. A Certificate of participation will be issued to participants.
**Important Information :** Participation fee includes, course material, working lunch and tea / coffee. Interested companies are requested to register online by clicking on 'REGISTER' button and by filling up the nomination authority and participant's details in specified form.