

Failure Mode & Effects Analysis (FMEA)

Date: 11 to 12 September, 2025

Venue: IMTMA Technology Centre, Hosur Industries Association,

INTRODUCTION

∐in today's competitive market environment, the industry has realized the fact that servicing unreliable products is a very costly proposition. To a large extent, reliability is built into the product during the design and development phase. Failure Mode & Effects Analysis (FMEA) is an essential ingredient of reliability engineering and is a very powerful and effective technique used for improvement in design, assembly, materials engineering, servicing etc., in a diverse range of manufacturing activities. FMEA can be effectively applied in case of new developments, new technologies and components/assemblies or products which have inherent problems showing up in practice.

'Failure Mode & Effects Analysis' (FMEA) is an "error prevention" oriented and proactive methodology that tries to pre-empt the occurrence of errors; reduce their significance (even if they were bound to occur) and in unavoidable circumstances, to increase the chance of error detection, so that the process could then be suitably controlled. FMEA is an aid for continuous improvement which fits into a PDCA (Plan-Do-Check-Act) pattern of activity. Whenever changes in product or processes or vendor / supplier are envisaged or effected, FMEA is redone to evaluate their effects.

FOCUS AREAS

- Introduction to FMEA Concepts as per new AIAG & VDA Hand book for FMEA
- Benefits of FMEA
- Purpose of revision of FMEA manual
- Brief on revision details
- New Frame work
- When to adopt new methodology? Transition Strategy
- Seven step methodology for Process Failure Mode and Effect Analysis
- Planning & Preparation
- Structure Analysis
- Function Analysis
- Failure Analysis Risk Analysis
- Optimization
- Result Documentation
- PFMEA & DFMEA Linkage to Control Plan
- Cause & Effects Analysis • Design FMEA - Example & Case Study and changes as per AIAG &VDA handbook
- Process FMEA Example & Case Study and changes as per AIAG &VDA handbook

KEY TAKE AWAYS

- Overview of the major changes, improvements and benefits of the AIAG & VDA Handbook for FMEA
- Concept of FMEA as a risk management and preventive quality assurance technique
- How to carry out Design FMEA and Process FMEA in industries
- How to carry out Process FMEA in industries
- Linkage between PFMEA and DFMEA
- New Format for PFMEA and DFMEA
- "FMEA: A live document. How to use FMEA everyday for problem solving."

PARTICIPATION FEE

Rs. 10450/-

+18% GST

IMTMA Members/ Micro Companies/ Individuals/ **Educational Institutions / Students/ IMTMA Non Members/Others**

USD 415/-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 programme will benefit practicing engineers and senior technical personnel involved in the functions of Design and Development, Process Planning, Product Engineering, Application engineering, Quality Assurance, R&D, Manufacturing, Servicing etc., and other related areas from Machine Tool, Automobile & auto ancillaries, Tool rooms, Defence and Railway establishments, General Engineering and other Capital goods manufacturing industries. In order that the participation is effective and beneficial, it is recommended that participating companies depute a multi-disciplinary team of 2 or 3 people from the above functions. Participants should have knowledge of related products and processes.

FACULTY

This Program will be conducted by Mr. B S Mohan.

Mr. B.S Mohan, an engineer by profession, was associated with Bosch for over 27 years, as part of the quality department responsible for introduction, sustenance of Quality standards and quality tools in all Bosch plants across India. Prior to that, he was responsible for engineering and manufacturing gear pumps, process planning of elements, machine planning & procurement, New project coordination and Project management for electric power tools. In his last assignment at Bosch, he was the Quality head of the Automotive Electronics Plant at Bangalore.

He has earlier worked with Tata Motors for over 6 years and was responsible for Process planning of transmission components & assembly and Process planning of dies, jigs and fixtures.

He currently provides training on various quality aspects such as VDA 6.3, Systems audits as per IATF 16949, 8D problem solving, FMEA, SPC, MSA, Basic quality tools, Tooling management, APQP, PPAP and Project management.

For Registration Contact

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