

Failure Mode and Effects Analysis (FMEA)
Date: 25 to 26 September, 2023
Venue: IMTMA Technology Centre, Bengaluru

### **INTRODUCTION**

We often read about numerous high-profile examples of product recalls. Such recalls happen due to poorly designed products and / processes. These failures are discussed with manufacturers, service providers & suppliers and are being depicted as incapable of providing a safe product. In order to avoid such situations, Failure Mode and Effects Analysis, or FMEA is used to anticipate failure during the design / manufacturing stage by identifying all of the possible failures in a design or manufacturing process.

FMEA is not a substitute for good engineering. Rather, it enhances good engineering by applying the knowledge and experience of a Cross Functional Team (CFT) to review the design progress of a product or process by assessing its risk of failure. Historically, the sooner a failure is discovered, the less it will cost. If a failure is discovered late in product development or launch, the impact is exponentially more devastating. FMEA is one of many tools used to discover failure at its earliest possible point in product or process design.

Keeping this is view, Indian Machine Tool Manufacturers' Association (IMTMA) is organizing a 3 day interactive programme on "How to become an effective FMEA Practitioner as per combined AIAG & VDA Version".

#### **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 AnalysisRisk Analysis
- Optimisation
- 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
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## **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 every day for problem solving."

### **PARTICIPATION FEE**

Rs. 9000/
+18% GST

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

Members/ Others

USD 360/-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 programme will be conducted by Mr. M. C. Ramakrishnan, Former Vice President - Quality, Bosch Limited.

**Mr. Ramakrishnan** is an industry expert with over 40 years of experience in the field of quality tools like Six Sigma, SPC, MSA, Poka - Yoke etc. He is a trained ISO 9001 and TS 16949 auditor, trained six sigma black belt as well as an FMEA moderator. He has championed a number of Quality Improvement projects at Bosch. He was associated with Bosch's campaign and pursuit for 5S, Poka Yoke, SPC, MSA & TPM initiatives.

## **For Registration Contact**

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