

## INTRODUCTION

Failure Mode and Effects Analysis (FMEA), a core tool that enables identifying potential failure modes, assesses the risk of those failure modes and establishes action priorities to mitigate the highest priority risks.

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 and suppliers and are being depicted as incapable of providing a safe product. Failure Mode and Effects Analysis, or FMEA, is a methodology aimed at allowing organizations to anticipate these potential failures during the design/manufacturing stage by identifying all of the possible potential 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 in view, Indian Machine Tool Manufacturers' Association (IMTMA) is organizing a 9 hours interactive online programme on "Failure Mode and Effects Analysis as per combined AIAG & VDA Version".

# **FOCUS AREAS**

- Introduction to FMEA Concepts and to new AIAG & VDA Handbook for FMEA
- Reliability
- Failure analysis vs FMEA
- Cause & Effects Analysis
- FMEA Methodology
- Design FMEA Examples & Case Studies and changes as per AIAG &VDA handbook
- Process FMEA Examples & Case Studies and changes as per AIAG &VDA handbook
- Group Exercises (Participants will be divided into groups and each group will prepare and study an example of FMEA)
- Developments & Benefits of FMEA
- Using FMEA for Risk assessment

## **KEY TAKE AWAYS**

#### After undergoing the programme, the participants will be able to

- Overview of the major changes, improvements, and benefits of the AIAG & VDA Handbook for FMEA
- Concept of FMEA as 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."

# FEE PER PARTICIPANT (PER LOGIN)

Rs. 8500/-+18% GST IMTMA Members/ Micro Companies/ Individuals/ Educational Institutions / Students/ IMTMA Non **Members/ Others** 

USD 340/-**Overseas Participants** 

Group Concession : 10% for 3 to 5 and 30% for 6 and more delegates being nominated from the same company

## **PARTICIPANT PROFILE**

This course is ideal for those who are responsible for product development, operations management, quality control, and engineering including department managers, supervisors, quality representatives, engineers and administrative staff who have a focus on business improvement, performance and profitability.

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

Mr. M. C. 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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#### **Contact Address**

#### INDIAN MACHINE TOOL MANUFACTURERS' ASSOCIATION

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**REGISTRATION :** Prior registration with an online advance payment is must. Number of participants is limited and will be accepted on 'First Come First Serve' basis. A Certificate of participation will be issued to participants.