

Global Best Practices in Failure Mode and Effects Analysis (Design - FMEA and Process - FMEA) as per AIAG - VDA Date : 23 - 24 & 29 - 30 September, 2021 Time : 1330 Hrs to 1745 Hrs ( Online Mode )

## INTRODUCTION

Failure mode and effects analysis (FMEA) identifies and reduces risks throughout the supply chain. Additional cost savings result from developing FMEA by means of FMEA data models, catalogs and basic FMEA. Design FMEA facilitates to consider entire life span of the product during design stage. It helps to reduce Engineering / Design time. Process FMEA is used to identify potential risks in processes, to evaluate their significance and to initiate suitable measures for their avoidance or detection in good time.

Keeping this in view, IMTMA is organizing an online training on "Global Best Practices in Failure Mode and Effects Analysis (Design -FMEA and Process - FMEA) as per AIAG - VDA". This program presents the decisive success factors for the development of system FMEA focussing both on Design FMEA and Process FMEA. Participants will be able to successfully participate in FMEA analysis as "Subject Matter Experts" and prepare for future work as an FMEA facilitator.

Module - 1 (Design FMEA) : 23 - 24 September 2021, 13:30 - 17:45 Hrs Module - 2 (Process FMEA) : 29 - 30 September 2021, 13:30 - 17:45 Hrs.

\*Note: Participants may register for individual modules as well. View detailed brochure - Design FMEA | Process FMEA

## **FOCUS AREAS**

- Objectives of FMEA with focus on Design-FMEA and Process-FMEA
- Definitions (risk, risk management ...)
- The FMEA as a tool for quality and inspection planning
- Stumbling blocks and their avoidance
- FMEA and product liability
- The seven steps of FMEA (AIAG/VDA manual, 1st edition 2019)
- Special features of the MSR FMEA (detection measures and system reactions in the field)
- Success factors in developing FMEA
- Reduction of FMEA development costs
- Harmonized evaluation catalogs (meaning, occurrence, detection)
- Action Priority (AP) instead of risk priority number (RPN)
- FMEA interfaces to other tools (including QFD, DVP&R, Control Plan)
- Building the system structure for designs and processes
- Building the functional structure for designs and processes
- Weaving of functional networks
- Building controls against failure modes for design and process throughout the structure
- Weaving of failure nets
- Evaluation of risks
- Design and Process optimization by developing avoidance and detection strategies
- Application areas of the FMEA
- Development/Moderation of FMEA -

Basics of FMEA Moderation, Task of Moderator, Moderation methods and visualisation techniques, Group dynamics & Dealing with conflicts, Project Tracking, FMEA maintenance and processing.

#### **CASE STUDIES FROM INDUSTRY**

- Tailor made FMEA for reliable performance of Off shore wind turbines for European customer
- Customised risk assessment system for Goodluck Industries, India.

#### **KEY FEATURES OF THE PROGRAMME**

- 1. Duration :
  - $\circ~$  For Module 1 & 2 : 16 Hrs over 4 days
  - $\circ~$  For Module 1 : 8 Hrs over 2 days
  - For Module 2 : 8 Hrs over 2 days
- 2. Professional seminar facilitation
- 3. Seminar documents (PDF download)
- 4. Certificate of participation
- 5. Plenty of opportunities to exchange experiences and knowledge

### **KEY TAKE AWAYS**

- · Capabilities to avoid Possible failures in products and processes
- Will be able to enhance the functional safety and reliability of products and processes
- Competitiveness in achieving the robust design, stable and capable processes.
- Capable to reduce the product modifications and reduce the costs
- Capable to reduce significantly the Internal and external failure costs
- Exoneration provided in claims for product liability.
- Capable to avoid the disturbances at the SOP
- Optimized communication at customer or supply chain
- Capable to prioritize product/process deficiencies
- Capable to minimize late changes and associated cost
- Able to emphasize problem prevention.

# FEE PER PARTICIPANT (PER LOGIN)

Rs. 35000/-+18% GST IMTMA Members/ Micro Companies/ Individuals/ Educational Institutions / Students/ IMTMA Non

**Members/ Others** 

USD 1400/-Overseas Participants

### **PARTICIPANT PROFILE**

- Product Design engineers
- Production engineers
- Process engineers
- Maintenance engineers
- Service engineers
- Quality engineers
- Assembly engineers
- Future FMEA moderators
- Interested managers from all specialist areas

# FACULTY

This programme will be delivered by **Mr. Winfried Dietz, Founder and Managing Partner, DIETZ Consultants, Germany.** Winfried Dietz has more than 30 years of practical experience as a FMEA consultant, trainer and coach specialising in implementing FMEA. Further areas of his interest and work are in APQP, 8D, PPAP and Functional Safety as well as their interactions. He has performed FMEA in a number of industries located at Europe, India, China, South America and USA bringing significant improvements in product and process reliability leading to better business results. In addition to automotive sector his interactions cover other sectors including Aircraft Industry, Railways, Medical Equipment, Chemical Process plants, Food Industry, Wind Turbine and Solar Industry, Pharmaceutical Industry.

### **For Registration Contact**

Amarendu Debnath Programme Coordinator +91 9977133067 gurgaontraining-an@imtma.in Ramesh P 9845277682 ramesh@imtma.in

### **Contact Address**

INDIAN MACHINE TOOL MANUFACTURERS' ASSOCIATION

Plot 249F, Phase IV, Udyog vihar,Sector - 18, Gurgaon - 122015 Tata no- +91-124-6463101 Tel : 0124 4014101 - 04 Fax : +91-124-4014108



**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.