Manufacturing Technology Training
An IMTMA initiative

Design Failure Mode Effect Analysis (DFMEA)
Date : 22 to 23 April, 2026
Venue : IMTMA Technology Centre, Pune

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, catalogues and basic FMEA. Design FMEA is used to identify potential risks in the design phase, to evaluate their significance and to initiate suitable measures for their avoidance or detection in good time.

DFMEA facilitates to consider entire life span of the product during design stage. It helps to reduce Engineering / Design time.

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

FOCUS AREAS

- Objectives of FMEA with special focus on Design-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 catalogues (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
- Building the functional structure for designs
- Weaving of functional networks
- Building controls against failure modes for design throughout the structure
- Weaving of failure nets
- Evaluation of risks
- Design optimization by developing avoidance and detection strategies
- Application areas of the FMEA

CASE STUDIES FROM INDUSTRY

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

KEY FEATURES OF THE PROGRAMME

- Duration: 8 Hours over 2 days
- Professional seminar facilitation
- Seminar documents (PDF download)
- Certificate of participation
- 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.

PARTICIPATION FEE

Rs. 4999/-
+18% GST
IMTMA Members/ Micro Companies/ Individuals/ Educational Institutions / Students/ IMTMA Non Members/ Others

USD 200/-
Overseas Participants

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

PARTICIPANT PROFILE

Specialists for planned FMEA, Product Design engineers, Assembly engineers, Maintenance engineers, Quality engineers, Servicing engineers, Future FMEA moderators, Interested managers from all specialist areas.

FACULTY

This programme will be conducted by **Mr. Charudatta Atre**.

Mr. Charudatta Atre is a Qualified Mechanical Engineer and industry expert with more than 30 years of experience the field of Quality, Lean Management, Six Sigma, Lean Six Sigma etc. Mr. Charudatta is qualified Master Black Belt in Lean Six Sigma. He has conducted several training programs, work shops in topics related to Lean Management, Six Sigma, Lean Six Sigma etc. Mr. Charudatta Atre is former Associate Vice President of Quality with Kalyani Maxion Wheels Pvt Ltd. He has also served in TUV SUD South Asia, Saint Gobain Sekurit Ltd.

For Registration Contact

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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.