



## CERTIFICATION COURSE on

# FMEA and RCFA

**Make your Operations Reliable!**

in collaboration with **dss<sup>+</sup>**

**19 – 22 July 2022 : 0900 – 1300 hrs : Virtual Platform**

## Introduction

### **Failure Modes and Effects Analysis (FMEA):**

Pre-empt failures, failure effects and develop countermeasures to improve Asset Reliability.

Failure Modes and Effects Analysis (FMEA) is a powerful tool to help anticipate and prevent failures by identifying, evaluating and mitigating failure mechanisms. An effective FMEA process can help organizations avoid process upsets, improve equipment Reliability and prevent defects in equipment, product and services. FMEA is also used to drive risk reduction related to failure of assets, covering both potential Safety and Business risks. FMEA is implemented both in the design as well as in the process stage of an asset, with the following anticipated benefits:

- Address critical failure modes in early design phase and make necessary corrections in equipment or process design
- Reduce impact and likelihood of failures that can have an impact on business, health & safety of organization
- Establish proactive maintenance of equipment and control measures
- Reduced scrap or rework
- Fewer customer complaints
- Improved product and services

### **Root Cause Failure Analysis (RCFA):**

Effective investigation of equipment failures to systemically enhance Asset Reliability.

Even with the most robust of maintenance strategies, equipment will fail. Often, their failure has an adverse effect on the process as well as on other components /equipment. Root Cause Failure Analysis (RCFA) is a tool used to determine the physical, human, and systems root causes causing a failure. An effective and fact-based RCFA process is integral to an organization's journey towards continuous improvement and can be applied to either chronic or sporadic failures.

## Topics Covered

### FMEA

- Introduction to Failure Mode and Effects Analysis
- Implementing and sustaining FMEA outcomes
- Introduction to Maintenance Strategies
- System thinking and selection

### RCFA

- Introduction to Root Cause Failure Analysis
- Overview of the eight-step RCFA process
- Overview of key tools for conducting RCFA's
- RCFA implementation: Roadmap, common challenges and resolution mechanisms

Each of the sessions above will be interspersed with multiple interactive exercises and real-world examples from multiple industries to help participants tailor the application of these learning to their specific context.

### **Course Benefits**

This Interactive Course on FMEA and RCFA is designed to help managers to understand and learn core concepts

### **Who Should Attend**

This course will be beneficial for Engineers & Managers from

of FMEA and RCFA and their application to improve reliability of equipment or systems, while in operation.

At the end of Course the participants will have an improved understanding of FMEA and RCFA as the key tools to improve reliability of their assets.

### **Faculty**

#### **Milton Ghosh**

Consultant in Operations Excellence Practice - **dss+**

- Maintenance
- Operations
- HSE
- Quality
- Materials
- R&D

Field service personnel will also benefit from this Course.

#### **Vivek Sharma**

Consultant in Operations Excellence Practice - **dss+**

### **Participation Fee**

**CII-Member:** Rs 26550 (incl. 18% GST)

**Non-Member:** Rs 29500 (incl. 18% GST)

#### **Discount:**

3 or more registration from the same company can avail 10% discount from the participation fee.

### **Note**

- There is no examination conducted after the training.
- Certification of Participation from CII & dss+ will be provided to all the participants.
- Participation fee is non - refundable / non-adjustable against any other programme of CII. However, change in nomination(s) is / are accepted.

We invite you to take advantage of this unique opportunity by joining / nominating the concerned colleagues to attend this course.

Best Regards,

Mrinal Ashesh

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