

## FMEA潜在失效模式及后果分析

### Failure Mode and Effects Analysis

### 课程简介

潜在失效模式及后果分析–FMEA是一个用来分析设计或流程，以确定潜在缺陷和改进机会的系统方法，可以被广泛运用于生产制造业以及产品生命周期的各个阶段。现在也被越来越多地应用于服务领域。本课程系统地讲解FMEA的方法和流程，包括设计失效模式及后果分析–DFMEA和过程失效模式及后果分析–PFMEA。

### 课程目标

- ★ 了解FMEA的目的
- ★ 认识FMEA的类型和收益
- ★ 学习FMEA的方法和步骤
- ★ 了解如何优化排序纠正措施，在最短的时间内，用有限的资源达成最大的改进

### 内容提要

- ★ FMEA的概述（定义、类型、原理、好处等）
- ★ 设计FMEA – DFMEA介绍及应用
- ★ 过程FMEA – PFMEA介绍及应用
- ★ FMEA的跟踪与改进
- ★ FMEA应用案例讨论

### 课程对象

- ★ 生产经理
- ★ 质量经理
- ★ 质量工程师
- ★ 设计工程师
- ★ 制造工程师
- ★ 负责流程标准化和持续改进的人员
- ★ 从事统计管理的人员

### 课程时间

1天共8学时

### Introduction

Potential Failure Mode and Effects Analysis (FMEA) is a structured technique to analyze a design or a process to determine potential failure and opportunities for improvement. It is widely used in manufacturing industries in various phases of the product life cycle and is now increasingly finding use in the service industry. This course provides step-by-step instruction of the FMEA process covering both Design FMEAs (DFMEAs) and Process FMEAs (PFMEAs).

### Objectives

- ★ Understand the purpose of FMEA tool
- ★ Recognize the types and benefits of a FMEA.
- ★ Learn the components and steps of a FMEA.
- ★ Learn how to prioritize the corrective actions to achieve the greatest improvement in the shortest time with limited resources

### Contents

- ★ FMEA Overview (Definition, type, mechanics and benefit)
- ★ Design FMEA introduction and practices
- ★ Process FMEA introduction and practices
- ★ Tracking and improvement
- ★ Case study of FMEA application

### Participants

- ★ Production managers
- ★ QA managers
- ★ QA engineer
- ★ Design engineer
- ★ Manufacturing engineer
- ★ Persons involve in the process standardization and continuous improvement
- ★ Persons involve in the statistical management process

### Duration

1 days/8 hours