

Process Failure Mode and Effects Analysis (PFMEA)

It costs far less to prevent a problem a problem than it does to fix it after it has been designed into the process. The Process FMEA is a structured, disciplined, risk management approach to identifying and prioritizing potential problems before they are embedded into the Process Design. This powerful hands-on 2-3-day seminar shows you how to perform a Process FMEA that gets results and saves you money. This course aligns with the requirements of Clause 6.1 – Actions to address risks and opportunities, under ISO9001:2015 and IATF 16949. *Note: Students will analyze and develop a PFMEA for a current organizational process of their choice.*

Hours: 8 a.m. – 4 p.m.

Length: 2 – 3 days

Course Objectives

Participants will learn:

- The importance of the PFMEA and how it can be used to error-proof a process
- The importance of maintaining the PFMEA after it is initially completed
- A systematic, consistent process for developing PFMEAs that will identify process weaknesses
- How to use the PFMEA to identify potential special characteristics

Who Should Attend:

Managers, team leaders, engineers, production operators, quality and contract professionals, procurement specialists and others who serve as members of the FMEA Development team.

Related Seminars:

- ISO 9001:2015
- IATF 16949
- ISO13485:2015
- Design FMEA
- APQP
- PPAP



Seminar Content

Risk Management and the FMEA

- The Nature of Risk
- The Failure Sequence
- The FMEA Process
- FMEA and APQP

FMEA Basics

- The Function of the FMEA
- FMEA Structure
- Who is the Customer?
- Who is the Team?
- The FMEA as a Living Document

Mapping the Process

- The Importance of Understanding the Process
- Process Mapping
- Identifying the Micro-Flow
- Workshop: Mapping your Process Flow

Identifying Failure Modes

- Systematically Identifying Potential Failure Modes (Errors)
- Workshop: Identifying Failure Modes

Identifying Effects

- Systematically Identifying the Effects
- Ranking the Severity

- Workshop: Identifying and Ranking Effects
- Using the FMEA to Identify Special Characteristics.

Identifying Causes

- Systematically Identifying the Causes
- Ranking Cause Occurrence
- Workshop: Identifying and Ranking Causes

Identifying Controls

- Prevention vs. Detection
- Workshop: Identifying Prevention and Detection Controls and Ranking Detection Controls

Calculating the Risk Priority Number (RPN) and Severity/Occurrence (SO) – Criticality Number

- Calculating SO
- Calculating RPN
- Using the Rankings to Prioritize Risk Reduction

Risk Reduction Actions

- Reducing the Risk Through Prevention
- Reducing the Risk Through Detection
- Re-evaluating Risk after action Taken