



Failure Mode Effects Analysis (FMEA)

(Onsite – 2 Days, 8 Hour sessions – Optimum class size, 6 - 10 students)

Training Description:

The goal of this training is to introduce participants to Failure Mode Effects Analysis (FMEA), a methodology for analyzing potential problems early in the process. In this training, participants will learn about the requirements and how to implement two key types of FMEA's, a Design FMEA (DFMEA) and a Process FMEA (PFMEA). Participants will learn that by using an FMEA analysis, potential failure modes can be identified and the effect that these can have on an operation can be determined. Subsequently, action can be identified to mitigate these potential failures. This training includes discussions and examples about an FMEA analysis serving as a proactive versus reactive tool that allows organizations to analyze potential problems early in the process where it is easier to overcome issues. In this training, participants will learn that the FMEA analysis calculates a Risk Priority Number (RPN) and that a high RPN requires action to reduce this quantity to a suitable level. The FMEA training is delivered onsite and is intended for all levels.

Training Objective:

This training will introduce the FMEA tool and what is required to apply the tool within an organization. The goal is to use FMEA to be pro-active versus a reactive organization which will improve the Form Fit and Function (3 F's)/Safety- (DFMEA) and improve the quality of the product (PFMEA). Training will be reinforced by initiating an FMEA on the client's process (PFMEA) or product (DFMEA).

Skill Attainment:

The participant will understand the requirements of implementing the FMEA tool within your organization and how to apply the tool. The following topics will be taught during the class:

- Introduction to FMEA-pro-active tool/risk mitigation tool
- Hands on Exercise to Create a PFMEA
- Hands on Exercise to Create a DFMEA
- Types of FMEA's-DFMEA/PFMEA
- Challenges to Implementing FMEA within your organization
- Layout of a FMEA template
- Establishing Severity Ratings
- Industries Requiring FMEA to meet ISO standards
- Establishing Occurrence Ratings
- Establishing Detection Ratings
- Calculating RPN (Risk Priority Number)
- Setting a RPN Threshold value for Corrective Action



Agenda

- Introductions
- Defining Risk and FMEA Types
- Severity, Occurrence, Detection
- Calculating Risk Priority Number
- Action Planning and Re-evaluations
- Initiate an FMEA with Client