

SPC consulting group

PFMEA AIAG-VDA

PROCESS FAILURE MODE AND EFFECTS ANALYSIS

Objective:
To understand how to use and develop the FMEA process in order to identify and reduce risks in products and processes.

Prerequisites:
- Basic knowledge of the process of product design and/or manufacturing processes

Duration:
16 hours

Introduction
- Purpose and Description
- Objective and limits
- Integration of FMEA in the company
- Project Planning
- PFMEA Methodology

Execution of the Process FMEA (PFMEA)
- 1st STEP: Planning and Preparation
  + Project Identification and Boundaries
  + Project plan
  + Process FMEA Header
- 2nd STEP: Structure Analysis
  + Process Flow Diagram
  + Structure Tree
- 3rd STEP: Functional Analysis
  + Function
  + Requirement(s) (characteristics)
  + Visualization of functional relationships
- 4th STEP: Failure Analysis
  + Failure
  + The Failure Chain
  + Failure Effects
  + Failure Mode
  + Failure Cause
  + Failure Analysis
  + Relationship DFMEA – PFMEA
- 5th STEP: Risk Analysis
  + Current Prevention / Detection Controls
  + Evaluations
  + Severity
  + Occurrence
  + Detection
  + Action Priority (AP)
- 6th STEP: Optimization
  + Purpose
  + Assignment of Responsibilities
  + Status of Actions
  + Assessment of action Effectiveness
  + Continual Improvement
- 7th STEP: Results Documentation
  + Purpose
  + PFMEA Report

Sample FMEA Form Sheets
- Standard PFMEA Form
- Alternative Forms D / E / F / G

Practice – Conducting a PFMEA