

## Online Training Program On Automotive Core Tools (SPC, MSA, FMEA, APQP, APQP)

Date: 7th to 9th October 2020, Time: 9.30am to 5.30pm



### Course Features

IATF 16949:2016 requires Competence of Personnel in Core Tools for Product and Process Development, Manufacturing Process Controls, Manufacturing Process Auditors, Product Auditors, Second Party Auditors and Internal System Auditors. This program is specially designed keeping in mind above requirement to fulfil competency in Core Tools. It also includes new AIAG-VDA FMEA 2019 1st edition.

### Course Objectives

To develop understanding on :

- ♣ Provide a basic understanding of the Core Tools used in New Product Development as well as for ongoing process control for existing products
- ♣ How to conduct SPC & MSA and interpret results
- ♣ Focus on New product Development Assurance through APQP and PPAP
- ♣ Focus on the use of Process Management to achieve standardization and improvement using Process Flow Diagrams, Process FMEA, Process Control Plans, SPC and MSA
- ♣ Linkage with IATF 16949:2016
- ♣ Changes in FMEA and the new standards
- ♣ Develop understanding with 7 step methodology of FMEA and using new tables including table for Action Priority

### Who should attend ?

- ♣ Internal Auditor & 2nd Party Auditors
- ♣ Engineering, Quality, Production, Process Engineering, PPC
- ♣ Supplier QMS Development Professionals
- ♣ Supervisors, Engineers and Managers actively involved in Product and Process Design & Development
- ♣ Production Executives involved in Quality & Quality Management System activities

### Issue of Certificate

Certificate of successful attendance shall be issued to all the delegates who attend entire duration of the course.

**Duration** : 8 Hours including break of 1 hour

**Registration Fee** : Rs.5000 + 18 % GST

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**To Register and Pay : [Click Here](#)**

**Registered & Head Office-**

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### Course Contents

- ♣ Statistical Process Control :
  - Introduction
  - Concept of sigma
  - Precision and accuracy
  - Concept of variation
  - X-bar, R Chart
  - Control limits
  - Out of control condition
- ♣ Measurement System Analysis :
  - Introduction to measurement System Analysis
  - Accuracy and Precision
  - Sources of variability and uncertainty
  - Bias, linearity, stability, repeatability, and reproducibility
  - Analyzing measurement system for continuous data
  - Evaluation of effectiveness, miss rate and false alarm
  - Analyzing attribute measurement system
  - Evaluation of kappa
- ♣ Process Failure Mode and Effect Analysis & Control Plan :
  - Introduction to FMEA , Purpose & Definition
  - The New FMEA Worksheet
  - FMEA for system, sub system and part
  - Seven step methodology of FMEA
  - Guideline for severity, Prevention, Occurrence and action priority
  - Development of control plan
  - Prototype, Pre launch and production control plan
  - Review of FMEA & control plan
- ♣ Production Part Approval Process
  - IATF 16949 requirement of product approval
  - Product approval process
  - Level of submission
  - Submission warrant
  - Retention of PPAP documents
  - PPAP approval
- ♣ Advanced Product Quality Planning
  - Introduction to APQP
  - Purpose and benefit of APQP
  - Phases of APQP
  - 21 steps needed for an APQP process



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