

Training description

Core tools - an overview for internal auditors in automotive industry according to AIAG

Purpose of the training:

- Review of the requirements of AIAG reference manuals: APQP, FMEA, SPC, MSA, PPAP in the context of effective audits in the automotive industry.

Training program:

Advanced Product Quality Planning (APQP):

- that are the project phases,
- documentation of requirements in individual phases of the project,
- requirements for the control plan,
- linking the process flow diagram, FMEA and Control Plan - consistency of documents and the most important mistakes.

Failure Mode and Effects Analysis (FMEA):

- FMEA for product (DFMEA) and process (PFMEA) - differences and interactions,
- formulation of functions, requirements, defects, causes and effects of defects, identification of control measures in the production process, distinction between detection and prevention,
- identification of special characteristics in PFMEA,
- discussion of Severity, Occurrence, Detection and RPN - Risk Priority Number,
- improvement actions and risk assessment strategies: RPN, SOD, SO, SD.

Statistical Process Control (SPC):

- basic assumptions of Statistical Process Control of Production (SPC),
- basic statistical concepts - capability, stability, average, standard deviation,
- process capability indicators Cp, Cpk, Pp, Ppk,
- interpretation of process capability indicators Cp, Cpk, Pp, Ppk.

Measurement System Analysis (MSA):

- guidelines for numerical and attribute analysis - basic requirements,
- %GRR as a tool determining the correct functioning of the numerical control system,
- Kappa as a tool determining the correct functioning of the attribute control system,

Production Part Approval Process (PPAP):

- overview of required documents,
- customer evaluation status,
- when to submit PPAP,

- PPAP submission levels.

Benefits:

The participant will learn:

- What core tools elements according to the requirements of AIAG reference manuals: APQP, FMEA, SPC, MSA, PPAP should be implemented by the audited organization.
- How to confirm compliance in the process documentation for the FCh (process flow diagram) - FMEA - Control Plan.
- What are the most common mistakes in using APQP, FMEA, SPC, MSA, PPAP.
- What to pay special attention to when auditing core tools.
- How to interpret the presented audit evidence, such as MSA indicators or SPC control charts.

Recipients:

- IATF 16949 internal auditors,
- supplier auditors,
- quality department employees,
- people who want to refresh themselves with basic knowledge about core tools.

Qualification confirmation: After the training you will receive a certificate of participation.

Training duration: 2 days x 7 hours

Training price: In order to get an offer please send a request to:

agata.lewkowska@qualitywise.pl

It is possible to extend the offer with post-training consultations in the form of advisory services, advanced training, support for implementation projects and methods addressed during training.

You can find the date of the upcoming training [here](#).

Terms and conditions and registration forms you will find [here](#).

In case of further questions, training dates or dedicated training offer for your company do not hesitate to contact me.

Best regards,

Agata Lewkowska Ph.D.

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Related articles:

[Core tools – why they are so important?](#)