



Advanced Product Quality Planning (APQP)

One Day Executive Programme

Effective Quality Trainings:

1. Advanced Product Quality Planning (APQP)
2. Production Part Approval Process (PPAP)
3. Failure Mode Effects Analysis (FMEA)
4. Quality Function Deployment (QFD)
5. Design of Experiment (DOE)
6. Measurement System Analysis (MSA)
7. Statistical Process Control (SPC)
8. Control Plan

Advanced Product Quality Planning (APQP) is a quality framework used for developing new products in the automotive industry. It can be applied to any industry and is similar in many respects to the concept of Design For Six Sigma (DFSS). The APQP process is described in AIAG manual 810-358-3003. Its purpose is "to produce a product quality plan which will support development of a product or service that will satisfy the customer". It does this by focusing on:

- Up-front quality planning through product/process validation
- Evaluating the output to determine if Customers are satisfied and support continual improvement

The Advanced Product Quality Planning process consists of four phases and five major activities along with ongoing feedback assessment and corrective action as shown below:

| PHASES | Plan & Define Programme | Product Design & Development Verification | Process Design and Development Verification | Product & Process Validation | |
|---|---|--|---|---|---------------------|
| ACTIVITIES | PLANNING (Concept Initiation & Approval) | | | | |
| | | PRODUCT DESIGN & DEVELOPMENT (Program Approval) | | | |
| | | | PROCESS DESIGN & APPROVAL (Prototype) | | |
| | | | | PRODUCT & PROCESS VALIDATION (Pilot) | |
| | | | | | PRODUCT (Launch) |
| FEEDBACK ASSESSMENT AND CORRECTIVE ACTION | | | | | |

The purpose of APQP is to assist the Product Quality Planning Team in developing the appropriate communication forms to support meeting customer requirements, needs and expectations.

Programme Objectives

The programme provides an insight into:

1. Explaining the concept of APQP
2. Training and Developing the Quality Professionals/Executives to validate Product/Process
3. Developing the team to comply with the TS 16949 Standard requirements

The Programme is beneficial to

- Companies who are regularly developing/modifying product and/or processes
- Companies who are suppliers to Original Equipment Manufacturer (OEM)
- Companies who are applying to TS 16949:2002 certifications or are TS 16949:2002 Certified
- Companies who have adopted Process Quality Improvement tools in their business

Programme Contents

1. Understanding APQP :
 - a) What is APQP?
 - b) Objectives of APQP
2. What is Plan-and-Define Program?
3. How to do Product Design and Development?
4. How to do Process Design and Development?
5. How to do Product and Process Validation?
6. How to address Feedback, Assessment and Corrective Action?
7. Case studies and Exercises

Benefits of APQP

The Training will enable you to achieve the following:

1. A reduction in the complexity of product quality planning for the customers and suppliers
2. A means for suppliers to easily communicate product quality planning requirements to subcontractors
3. To direct resources to satisfy the Customer
4. To promote early identification of required changes
5. To avoid late changes
6. To provide a quality product on time at the lowest cost