

Advanced Product Quality Planning (APQP) – Section 5

Suppliers shall have a Quality Manual specific to their company explaining “The Company Quality System.”

Each supplier shall establish, document, implement and maintain a quality management system and continually improve its effectiveness.

The supplier shall:

- A) Identify the processes needed for the quality management system and their application throughout the organization.
- B) Determine the sequence and interaction of these processes.
- C) Determine criteria and methods needed to ensure that both the operation and control of these processes are effective.
- D) Ensure the availability of resources and information necessary to support the operation and monitoring of these processes.
- E) Monitor, measure and analyze these processes.
- F) Implement actions necessary to achieve planned results and continual improvement of these processes.

The Quality Management System shall include:

- A) Documented statements of a quality policy and quality objectives.
- B) A Quality Manual.
- C) Documented procedures necessary to carry out the Quality Management System.
- D) Documents needed by the supplier to ensure the effective planning, operation and control of its processes.
- E) Records required as evidence that the Quality System is effective.

APQP:

For the APQP process the supplier are expected to follow the AIAG “**Advanced Product Quality Planning and Control Plan**” manual (Current Edition).

The following is to be used as a guide:

- 1) Planning and Define program.
- 2) Product Design and Development.
- 3) Process Design and Development.
- 4) Product and Process Validation.
- 5) Feedback, Assessment and Corrective Action.
- 6) Control Plan Methodology.
- 7) Product Quality Planning Checklists.
- 8) Analytical Techniques.

FMEA's:

The supplier is expected to follow the AIAG “**Potential Failure Mode and Effects Annalysis**” manual (Current Edition), in the development of FMEA's.

Process Flow Diagram's:

The supplier shall provide a Process Flow Diagram representing the current process flow. The format to be used will be agreed upon between Powers & Sons and the supplier.

Control Plan's:

The supplier is expected to follow the standard practice for Control Plan format. The format is from “**Advanced Product Quality Planning and Control Plan**” manual (Current Edition).

Requirements:

Powers & Sons must have on file the latest revisions for the following documents:

- 1) FMEA's
- 2) Process Flow Diagram's
- 3) Control Plan's

The **FMEA's** and the **Control Plan's** must be approved by Powers & Sons. The approved documents must be on file at Powers & Sons.

If any changes are made to any of the documents listed above, the document shall be submitted to Powers & Sons for approval. This may require a PPAP resubmission; see “**Production Part Approval Process**” (Current Edition) for resubmission requirements.

Note (Waivers):

Waiver from the PPAP process must be submitted in writing to Powers & Sons Purchasing Department. The waiver will be approved and / or disapproved and returned to the supplier.