



Atmus Filtration Technologies

# Supplier Handbook

(Customer-Specific Requirements)

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## TABLE OF CONTENTS

|   |           |
|---|-----------|
| <b>A. Introduction.....</b>   | <b>4</b>  |
| <b>B. Purpose.....</b>  | <b>5</b>  |
| <b>C. Scope.....</b>  | <b>5</b>  |
| <b>D. Atmus Supplier Code of Conduct.....</b>                               | <b>6</b>  |
| <b>E. Quality System Requirements .....</b>                                 | <b>7</b>  |
| 1. Registration Verification.....   | 9         |
| <b>F. Acronyms and Definitions.....</b>                                     | <b>9</b>  |
| <b>G. Quality Management System and its Processes (4.4).....</b>            | <b>12</b> |
| 1) Conformance of Products and Processes .....                              | 12        |
| 2) VDA Requirements.....  | 13        |
| <b>H. Actions to address risks and opportunities (6.1).....</b>             | <b>13</b> |
| 1) Preventive Action .....  | 13        |
| 2) Contingency Plans .....  | 13        |
| <b>I. Planning of Changes (6.3).....</b>                                    | <b>13</b> |
| <b>J. Resources (7.1).....</b>  | <b>14</b> |
| 1) Measurement Systems Analysis .....                                       | 14        |
| 2) Calibration/verification records .....                                   | 14        |
| 3) Internal Laboratory .....  | 15        |
| 4) External Laboratory .....  | 15        |
| <b>K. Competence (7.2).....</b>   | <b>16</b> |
| 1) Competence--on-the-job training.....                                     | 16        |
| <b>L. Documented Information (7.5) .....</b>                                | <b>16</b> |
| 1) Record retention .....   | 16        |
| <b>M. Customer Communication (8.2.1) .....</b>                              | <b>16</b> |
| <b>N. Review of the Requirements for Products and Services (8.2.3).....</b> | <b>17</b> |
| 1) Customer-designated special characteristics.....                         | 17        |

|  |           |
|--|-----------|
| 2) Labels and Direct Part Marking .....  | 18        |
| <b>O. Design and Development of Products and Services (8.3) .....</b>                | <b>18</b> |
| 1) Design and Development Controls (8.3.4).....                                      | 20        |
| 2) Prototype Program .....   | 20        |
| 3) Product Approval Process.....   | 20        |
| <b>P. Design and Development Outputs (8.3.5) .....</b>                               | <b>23</b> |
| 1) Manufacturing process design output.....  | 23        |
| <b>Q. Control of Externally Provided Processes, Products and Services (8.4).....</b> | <b>24</b> |
| 1) General (8.4.1).....  | 24        |
| 2) Supplier Selection Process (8.4.1.2) .....  | 24        |
| 3) Statutory and regulatory requirements (8.4.2.2) .....                             | 25        |
| 4) Development of Products with Embedded Software (8.4.2.3.1).....                   | 25        |
| <b>R. Information for External Providers (8.4.3) .....</b>                           | <b>26</b> |
| <b>S. Control of Production and Service Provision (8.5.1) .....</b>                  | <b>26</b> |
| <b>T. Preservation (8.5.4) .....</b>   | <b>26</b> |
| <b>U. Control of Changes (8.5.6).....</b>  | <b>27</b> |
| <b>V. Release of Products and Services (8.6).....</b>                                | <b>27</b> |
| 1) Annual Layout .....   | 27        |
| <b>W. Customer Notification (8.7.1).....</b>   | <b>27</b> |
| <b>X. Performance Evaluation (9) .....</b>   | <b>28</b> |
| <b>Y. Monitoring, Measurement, Analysis and Evaluation (9.1) .....</b>               | <b>28</b> |
| 1) Monitoring and Measurement of Manufacturing Processes .....                       | 28        |
| 2) Application of Statistical Concepts.....  | 29        |
| <b>Z. Customer Satisfaction (9.1.2) .....</b>  | <b>29</b> |
| 1) Supplier Relationship Management Scorecard .....                                  | 29        |
| 2) Controlled Shipping.....  | 29        |
| <b>AA. Internal Audit (9.2) .....</b>  | <b>29</b> |
| 1) Quality management system audit.....  | 29        |
| 2) Manufacturing process audit.....  | 30        |
| <b>BB. Nonconformity and Corrective Action (10.2).....</b>                           | <b>30</b> |

1) Problem Solving .....33  
2) Warranty Management Systems .....33  
3) Continual Improvement .....33  
**CC. Forms ..... 34**  
**DD. References..... 34**  
**EE. REVISION LOG ..... 36**

## A. Introduction

### **Our Purpose: Creating a better future by protecting what is important.**

We create and innovate every day. With a forward focus, we never sit still. We realize the world is bigger than us, and we aspire for a better future for our shared humanity. Our products protect our customers' equipment and their livelihoods.

We protect what is important to our people, our planet, and our customers.

### **Our culture is shaped by our core values:**

- **Build trust** in every relationship every day.
- **Be inclusive** by embracing our differences and building a community where everyone feels valued.
- **Have courage to speak up, act and shape the future.**
- **Show caring** by engaging with kindness and consideration for the wellbeing of others.

### **How we do it.**

- **Technology Leadership**

At Atmus, we couple technology leadership with deep industry knowledge. Our team draws on a 65-year history focused on filtration and media technologies. We have a broad IP portfolio with over 1,300 worldwide active or pending patents and patent applications and approximately 400 worldwide trademark registrations and applications.

- **Customer Focus**

Our technical team works closely with our customers to develop and apply filtration technologies that help them improve their operations. Our customer-focused approach combined with our technology allows us to deliver customized solutions for our end-users, which creates long-lasting partnerships with our customers.

- **Global Footprint**

We maintain a global manufacturing footprint, with highly capable manufacturing facilities on six continents. Atmus has nine manufacturing sites, and 10 for our joint ventures, allowing us to maintain proximity with our customers on a global scale. All nine of our manufacturing facilities have obtained either ISO 9001 or ISO/TS 16949 quality management certifications.

- **Premium Products**

Atmus' Fleetguard brand provides premium products that deliver the performance our customers need and the reliability they expect. With over 27,000-part numbers, we offer a broad line of high-quality filtration products for nearly all makes of vehicles and equipment in our core markets.

Atmus relies on our direct material suppliers to help us deliver products that protect our customers' equipment and their livelihoods. Zero defects are the goal for Warranty, OEM, and In-plant PPM from our direct material supply base. Atmus direct material suppliers should focus on fixing product quality issues when they arise and driving the cultural change needed to achieve zero defects.

## **B. Purpose**

Bought-out finished and direct-purchased material are critical to Atmus finished products. Therefore, it is essential to have clear, documented requirements and interaction processes between Atmus and its direct material suppliers.

This document communicates Atmus' Customer Specific Requirements and expectations to the Atmus direct material supply chain.

## **C. Scope**

This document applies to all suppliers of direct material to Atmus plants and facilities globally. For the purpose of this document, Atmus / Atmus Filtration Technologies shall mean and include Atmus Filtration Technologies, its affiliates, including without limitation its joint ventures and subsidiaries hereinafter referred to as "Atmus / Atmus Filtration Technologies" in this SupplierHandbook.

Suppliers who are IATF 16949:2016 certified shall use this document as a supplement to their IATF 16949:2016 certification for Atmus Filtration Technologies

Suppliers who are ISO 9001:2015 certified shall use this document as a supplement to their ISO 9001:2015 certification for Atmus Filtration Technologies

This document defines certain customer-specific requirements (CSRs) for Atmus Filtration Technologies

The English language version of this document shall be the official version for purposes of third-party registration.

Sanctioned translations of this document shall:

- Be for reference only.
- Reference the English version as the official language.
- Include Atmus in the copyright statement.

This Handbook is a controlled document. The latest revision will be accessible on the Atmus Supplier Portal (<https://atmus.com/supplier-portal>). It is the supplier's responsibility to ensure compliance with customer-specific requirements by periodically monitoring the website for updates.

The supplier shall comply with any customer specific requirements applied to Atmus by its customers.

If supplying parts to one of the Atmus facilities that require ISO 14001:2015 certification, suppliers will be notified and required to submit proof of certification to ISO 14001.

It is impossible to cover every conceivable situation with a blanket statement or definition. If a situation occurs that is not covered by the Atmus Supplier Handbook, the Atmus Supplier Quality Engineer SQE is the main point of contact for getting questions answered and situations resolved. The Atmus SQE has the authority to request data beyond the stated requirements in the Atmus Supplier Handbook if it is deemed pertinent to protect the interests of Atmus.

The supplier shall use the AIAG reference manuals for APQP, SPC, PPAP, FMEA and MSA processes. Exceptions may apply for suppliers of direct materials used in industrial filtration markets. The assigned Atmus SQE will determine if exceptions may apply.

The supplier shall appoint a ‘quality contact.’ This individual will be the prime path for communication of handbook requirements to the supplier’s organization.

## **D. Atmus Supplier Code of Conduct**

Atmus values our global partners who share our purpose of creating a better future by protecting what is important. Our decisions and actions are rooted in our purpose and our core values: Build trust. Be inclusive. Have Courage. Show caring. Together, we can achieve our purpose through our shared commitment to conducting business fairly, legally, and ethically.

To support this philosophy, Atmus has a Supplier Code of Conduct (“SCoC” or “Code”) that applies to all businesses that provide products and/or services to Atmus and its subsidiaries, joint ventures, divisions, and/or affiliates. The Atmus SCoC is built around six principles and helps Atmus ensure that it is doing business with other companies around the world that share its values for ethical and sustainable practices.

1. Act ethically and use good judgment in everything you do on behalf of the company
2. Understand and follow all principles set forth in this Code
3. Seek guidance and ask questions if you are unsure about a situation or decision
4. Report any suspected violations of the law or our Code, unless prohibited to do so by local law
5. Do not retaliate against anyone who raises a concern in good faith
6. Participate in required training and survey requests in a timely manner

Consistent with these commitments, Atmus requires its suppliers to acknowledge and adhere to the Supplier Code of Conduct. Atmus policies and procedures related to these standards are presented on the Atmus Supplier Portal (<https://atmus.com/supplier-portal/supplier-code-conduct>) and, as appropriate, in this Atmus Supplier Handbook.

Suppliers are responsible for ensuring that all principles and expectations of the SCoC are cascaded and adhered to, within their own operations and by their own direct suppliers and partners within their supply chain.

Atmus recognizes that legal and cultural requirements vary in a global business environment and

expects that all suppliers follow the applicable laws of their country and territory. At the same time, the SCoC sets forth certain universal requirements that suppliers must follow such as the provisions banning child or forced labor, use of counterfeit parts, providing a safe workplace, and respecting rights of employees, agents, subcontractors, and part time workers.

If you have any ethical concerns or compliance issues, we encourage you to report them promptly through our confidential reporting line (<http://www.atmus.com/ethicsline>). We are committed to addressing all questions and concerns so that we can continue to build our partnership.

The provisions of the Supplier Code of Conduct are in addition to, and not in lieu of, the provisions of any legal agreement or contract between a Supplier and Atmus or any of its subsidiaries, joint ventures, divisions, or affiliates.

Atmus reserves the right to update, alter, or change the requirements of its Supplier Code of Conduct, and Suppliers shall accept such changes and act accordingly.

### **Enforcement of Supplier Code of Conduct**

Atmus suppliers are advised that they may be subject to survey, audit, and part mapping by Atmus and/or by third parties on behalf of Atmus to verify compliance with the following provisions. Non-compliance or misrepresentation of compliance by a supplier may result in sanctions, including, but not limited to, termination of their agreements with Atmus or cancellation of Purchase Order issued by Atmus for default.

Since Atmus does business around the world, it has translated the code and response letter into 14 languages so that the intentions and expectations are clear.

For more information on the Supplier Code of Conduct or to complete the Supplier Code of Conduct Response Letter, visit the Atmus Supplier Portal <https://atmus.com/supplier-portal/supplier-code-conduct>.

## **E. Quality System Requirements**

A quality system is an integral part of a successful quality program. It is not, however, a guarantee of quality products and processes. A quality system establishes disciplines. Only when the disciplines are in place and effectively executed will the benefits be realized. Functioning quality systems lead to sustained improvements within an organization.

ISO 9001:2015, IATF 16949:2016 and this document defines fundamental quality system requirements for suppliers contracted by Atmus to provide production parts, service parts, components, and engines. These requirements shall be included in any scope of registration/certification to ISO 9001:2015 and/or IATF 16949 issued by an ISO/IATF-recognized and ISO/IATF-contracted certification body for the ISO 9001:2015 and/or IATF 16949 certificate to be recognized as satisfying Atmus' requirement for third-party registration/certification.

All ISO 9001:2015 and/or IATF 16949:2016 requirements and the requirements of this document shall be addressed in the supplier's quality system.

Unless explicitly specified, these requirements are not linked to the CSRs of any other management



system standard required by Atmus. A nonconformance to a CSR of one standard does not imply that a nonconformance to another CSR exists. Specifically, a supplier who is not fully certified to ISO 14001 shall not receive a nonconformance from their IATF 16949 Certification Body.

This document is not applicable to organizations supplying tooling and equipment to Atmus tooling and equipment suppliers to Atmus shall be third-party registered to ISO 9001:2015.

**Third-Party Registration**

All Suppliers providing production parts to Atmus shall be third-party registered to ISO 9001:2015 through an IATF-recognized Certification Body.

**QMS Certification Requirements**

| Entity | ISO 9001:2015                 | IATF 16949:2016              | Exceptions           |
|--------|-------------------------------|------------------------------|----------------------|
| Atmus  | All Direct Material Suppliers | All Applicable Suppliers (2) | By Approval Only (1) |

NOTE 1: Atmus will allow no exceptions for suppliers who ship products for Atmus automotive products. While Atmus would like all suppliers to be ISO 9001:2015 registered, exceptions may be allowed for suppliers of non-automotive, industrial market products. The minimum acceptable quality system registration for a new supplier to Atmus is ISO 9001:2015 unless written approval of exception is given by the applicable Atmus Supplier Quality Leader.

NOTE 2: All suppliers of automotive product shall progress toward IATF 16949:2016 certification.

NOTE 3: Given that Atmus serves many different markets, Atmus may use suppliers in non-automotive, industrial market applications who are not registered to ISO 9001:2015. All suppliers must have systems in place to ensure they meet Atmus quality, cost and delivery needs as outlined in this handbook.

**1. Registration Verification**

Suppliers shall submit proof of registration by sending a digital copy (PDF, JPG, etc.) of their current registration certification to their SQE contact. This email should also identify or confirm the contacts and contact information to be used for Atmus Quality Management System (AQMS) system or any questions or issues pertaining to ISO 9001:2015 and/or IATF 16949:2016 certificates.

**Notification of ISO 9001:2015 and/or IATF 16949:2016 Registration Status Change**

Suppliers shall notify Atmus of any change in the ISO 9001:2015 and/or IATF 16949 registration status via email to their SQE contact. Such changes include, but are not limited to:

- Initial certification
- Recertification
- Transfer to certification to a new Certification Body

- Certificate withdrawal
- Certificate cancellation without replacement.

## F. Acronyms and Definitions


1. **AECD/AES** – Auxiliary Emission Control Device / Auxiliary Emission Strategy
2. **Automotive Product Change (APC)** – The Atmus process ensures ongoing support and continuous improvement of the product and service after APD is completed.
3. **Automotive Product Development (APD)** - The Atmus process for new product introduction. This is our process for commercializing technology for the market through the definition, design, development and introduction of products, services, and information for our customers. This process is the vehicle through which Atmus satisfies the requirements of APQP.
4. **Component Certification** – A process whereby the supplier certifies, in some cases with measurement data, that components are within specification. Requirements for Component Certification will be identified by the Atmus receiving plant.
5. **Compliance Data Exchange (CDX)** – A global data repository for product material/substance content used by all industries (typically non-automotive) for various reporting requirements.
6. **Atmus Design Control** – The component is designed, developed, and specified by Atmus. Suppliers are encouraged to participate in the design of these products to contribute their knowledge and expertise (e.g., process requirements, cost reduction opportunities, etc.). If a component is under Atmus design control, it is Atmus’ responsibility to address quality issues arising from the design.
7. **Atmus Seven Step Problem Solving** - A disciplined method for problem solving which emphasizes analysis for the true root cause and verification that the corrective action is effective in eliminating the root cause. The seven steps in the process are:
  - 1) Identify the Problem
  - 2) Determine and Rank Potential Root Causes
  - 3) Take Short Term Action and Containment
  - 4) Gather Data and/or Design Test
  - 5) Conduct Tests, Analyze Data, Identify Root Cause(s), Select Solution
  - 6) Plan and Implement Permanent Solution
  - 7) Measure, Evaluate and Recognize the Team
8. **Atmus Quality Management System (AQMS)** - This refers to the Atmus software system used by Atmus and suppliers to manage information related to nonconformances (MNCs, PNCs, SCARs), new product development (APQP, PPAP, Sources Releases) and performance monitoring (PPM, Disruption, SCAR responsiveness)
9. **Classification of Characteristics (C of C)** - The process of classifying product and process characteristics for the optimum utilization of engineering, manufacturing and supply base resources. In IATF 16949 terms these are Customer Designated Special Characteristics.

Note: Classification of Characteristics is intended to serve as a guide for the development of supplier process quality plans - not to relieve suppliers of the responsibility to produce all features to specification.

10. **Direct Material** - Components and assemblies used in Atmus' production and service processes that become part of the salable product. They are typically included as a Bill of Material item.
11. **Disruption Score** – The process at Atmus of assigning a numerical score to material non-conformances based on the significance of the disruption to Atmus and/or Atmus' customers.
12. **Drawing Quality Review (DQR)** - A detailed cross-functional review of each drawing which ensures that the component is producible to the specification, drawings are accurate and complete, and suitable for PPAP (when applicable), prior to final release of the drawings.
13. **DVP&R** – Design Verification Plan and Report
14. **EDI** - Electronic Data Interchange is a document standard which, when implemented, acts as a common interface between two or more computer applications in terms of understanding the document transmitted.
15. **FIRG** – Failure Incidence Review Group
16. **FMD** - Full material declaration
17. **Industrial Markets** – Filtration markets which will be applied to non-engine applications. Examples may include (but not limited to) bulk lube or fuel filtration, lube or fuel for industrial non-engine machinery/equipment, wastewater filtration or HVAC air filtration.
18. **In-plant Defect PPM** - The number of parts with supplier-caused defects found within an Atmus facility versus the number of parts received from that supplier by the Atmus facility, reported as parts per million (PPM) on a monthly basis.

NOTE: For suppliers with multiple production locations, each production location will be considered separately.

19. **International Material Data System (IMDS)** - A global data repository for product content used by the automotive industry and used to gather data for various reporting requirements.
20. **ISIR – Initial Sample Inspection Report** – document which may be used for part approvals for Industrial / Adjacent Filtration markets only, as an alternative to PPAP.
21. **KEPT** - Key Element Performance Tracking tool, one of the SQPM processes.
22. **LPA** - Layered Process Audit (refer to AIAG CQI-8 for specific details)
23. **MCM - Master CAD Model** - A master CAD model is a 3-D computer-based solid geometry model, which is a complete and accurate representation of the design intent for a produced item. For castings, forgings, and injection molded parts it includes parting line definition, draft geometry, and fillet/round geometry.
24. **MDS** - Material Data Sheet
25. **MQV** - Manufacturing Quality Verification – a process used by Atmus and Atmus' suppliers to reduce defects sent to customers by looking at FMEA findings and historical data, such as OEM defects, warranty, and customer touch points, and ensuring that steps have been taken to prevent these defects from reaching our customers. Steps can include design changes, process design changes and fail-safe.
26. **MNC** – Material Non-Conformance Report in AQMS
27. **OEM Defect** - Supplier caused defect that reaches an Atmus OEM Customer.
28. **Pass-Thru Characteristic (PTC)** – A part characteristic which is not controlled or functionally tested in the Atmus assembly process, and for which any issue would first be discovered by the

Atmus customer (typically as a customer touch point). PTCs are identified with this symbol: .

29. **PCC** – Production Capability Certification – Atmus verification that supplier production capability and readiness will meet full production timing and volumes; sometimes also known as run at rate. The intent is to identify manufacturing problems prior to full production that typically do not become evident until full production runs are initiated. The process is used to verify supplier capacity and the supplier’s ability to meet fluctuations in demand (+ 20%).
30. **Preliminary / Inspection Control Plan** – Detailed plan for increased inspection frequencies during the safe launch timeframe.
31. **Production Capability Certification (PCC Run)** – Test of capacity and quality run by the supplier with Atmus personnel present. Similar to “Run at Rate.”
32. **Packaging Specification Data Sheet (PSDS)** – Document used by suppliers to record packaging specifications including size, quantity, and overall pallet configuration.
33. **Record of Conformance (ROC)** – The approval document (Warrant) for source released parts.
34. **Supplier Corrective Action Request (SCAR)** – Formal document in the AQMS system requiring root cause analysis and corrective actions to be documented.
35. **Supplier Change Request (SCR)** – process suppliers are required to use to request approval of a change to a product or process.
36. **Supplier Design Confirmation Signoff (SDCS)** – Formal signoff between the supplier and Atmus that serves to document the supplier’s commitment to meet all requirements and expectations on the Atmus drawing, including but not limited to all specifications, notes/standards, Geometric Dimensioning and Tolerancing (GD&T) and testing requirements.
37. **Supplier Master Oracle SaaS** – The supplier master data system is used by all Atmus locations. All Atmus suppliers are required to register with Supplier Master Oracle SaaS.
38. **SIP** – Supplier Improvement Process, one of the Supplier Quality Performance Management (SQPM) processes.
39. **Six Sigma** - Statistically-based improvement process used throughout Atmus. Suppliers will be requested to participate where significant opportunities for improvement are identified.
40. **Source Release** – Process for ensuring the quality of non-PPAP approved components. Requirements include, but are not limited to: Record of Conformance, 3 Piece full dimensional layout, SPC or 100% inspection of special characteristics, material/performance test results and Prototype Data Report (PDR) requirements when requested. This is a batch approval process that must be completed prior to each shipment.
41. **SQPM** – Supplier Quality Performance Management is an escalation process used by the Atmus Supplier Quality function in the event a supplier has adverse quality trends and/or repeat non-conformance, and the supplier has failed to meet the agreed-upon continual improvement plan.
42. **SQE** - Supplier Quality Engineer
43. **Supplier Design Control** – The component is designed and developed by the supplier to meet an Atmus specification, performance requirement and technical profile. If a component is under the supplier’s design control, it is the supplier’s responsibility to address quality, product safety, reliability and durability issues arising from the design.
  - a. The supplier is responsible for completing Design Failure Mode and Effect Analysis, Design Reviews and specific product testing that demonstrates compliance to expected reliability and durability (life).
  - b. Supplier may be required to complete a Design Responsibility Agreement (DRA) to document the responsibility for part design, graphics, intellectual property and right to

use between Atmus and the supplier.

44. **Total Cost of Ownership (TCO)** - A cost modeling tool that systematically accounts for all costs related to a purchasing decision. TCO evaluates all costs, direct and indirect, incurred throughout the life cycle of an item, including acquisition and procurement, operations and maintenance, and end-of-life management.
45. **Verband der Automobilindustrie.(VDA)** - A German Automotive Standard which defines a process-based audit standard for evaluating and improving controls in a manufacturing organization's new product introduction and manufacturing processes.
46. **WIN** - What's Important Now, one of the SQPM processes.

## **G. Quality Management System and its Processes (4.4)**

### **1) Conformance of Products and Processes**

Suppliers shall ensure conformance of all products and processes, including service parts and those that are outsourced, to all applicable Atmus, statutory, and regulatory requirements.

Suppliers shall comply with all applicable product compliance requirements and regulations, including but not limited to emissions and emissions control, product safety, restricted substances, product disclosure and cybersecurity.

### **2) VDA Requirements**

VDA is required for some critical suppliers, and those critical suppliers may be required to submit proof of compliance as needed. The SQE would be the main point of contact for this purpose.

## **H. Actions to address risks and opportunities (6.1)**

A supplier shall include in its risk analysis, at a minimum, lessons learned from product recalls, product audits, prior product launches, field returns and repairs, complaints, scrap, and rework.

The supplier shall retain documented information as evidence of the results of risk analysis.

### **1) Preventive Action**

Suppliers shall determine and implement action(s) to eliminate the causes of potential nonconformities to prevent their occurrence. Preventive actions shall be appropriate to the severity of the potential issues.

The supplier shall establish a process to lessen the impact of negative effects of risk including the following:

- a) Determining potential nonconformities and their causes.
- b) Evaluating the need for action to prevent occurrence of nonconformities.
- c) Determining and implementing action needed.
- d) Documented information of action taken.
- e) Reviewing the effectiveness of the preventive action taken.
- f) Utilizing lessons learned to prevent recurrence in similar processes.

### **2) Contingency Plans**

Every supplier is expected to have a business continuity plan on file in the case of natural disaster and /or disruption. When there are potential risks that would impact on Atmus deliveries or services, we expect suppliers to inform the Atmus Sourcing Manager or SQE immediately.

## **I. Planning of Changes (6.3)**

Suppliers shall notify Atmus of any changes within their management structure within two weeks of the changes taking effect. This includes changes in ownership as well as any changes to contracts related to doing business with Atmus.

## **J. Resources (7.1)**

### **1) Measurement Systems Analysis**

Current calibration records are required for all gauges/measurement equipment used to inspect Atmus products. Measurement Systems Analysis (MSA) is required for any measuring equipment used to inspect the special characteristics identified on the Atmus drawing or as defined by the Atmus SQE. The Anova method, as detailed in MSA 4<sup>th</sup> edition is the preferred method for submittal to Atmus. MSA acceptance limits shall be as follows:

% Tol Ratio (Precision to Tolerance)

P/T Ratio is less than 10% is acceptable

P/T Ratio between 10 and 30% is marginally acceptable

P/T Ratio greater than 30% is unacceptable.

% R&R (Repeatability and Reproducibility)

R&R less than 10% is acceptable

R&R between 10% and 30% is marginally acceptable

R&R greater than 30% is unacceptable.

### **2) Calibration/Verification Records**

The supplier shall have a documented process for managing calibration/verification records. Records of the calibration/verification activity for all gauges and measuring and test equipment (including employee-owned equipment relevant for measuring, Atmus-owned equipment, or on-site supplier-owned equipment) needed to provide evidence of conformity to internal requirements, legislative and regulatory requirements, and Atmus-defined requirements shall be retained.

The Supplier shall ensure that calibration/verification activities and records shall include the following details:

- a) Revisions following engineering changes that impact measurement systems.
- b) Any out-of-specification readings as received for calibration/verification.
- c) An assessment of the risk of the intended use of the product caused by the out-of-specification condition.
- d) When a piece of inspection measurement and test equipment is found to be out of calibration or defective during its planned verification, calibration or during its use, documented information on the validity of previous measurement results obtained with this piece of inspection measurement and test equipment shall be retained, including the associated standard's last calibration date and the next due date on the calibration report.



- e) Notification to Atmus if suspect product or material has been shipped.
- f) Statements of conformity to specification after calibration/verification.
- g) Verification that the software version used for product and process control is as specified.
- h) Records of the calibration and maintenance activities for all gauging (including employee-owned equipment, Atmus-owned equipment, or on-site supplier-owned equipment).
- i) Production-related software verification used for product and process control (including software installed on employee-owned equipment, Atmus-owned equipment, or on-site supplier-owned equipment).

### 3) **Internal Laboratory**

The supplier's internal laboratory facility shall have a defined scope that includes its capability to perform the required inspection, test, or calibration services. This laboratory scope shall be included in the quality management system documentation. The laboratory shall specify and implement, as a minimum, requirements for:

- a) Adequacy of the laboratory technical procedures.
- b) Competency of the laboratory personnel.
- c) Testing of the product.
- d) Capability to perform these services correctly, traceable to the relevant process standard (such as ASTM, EN, etc.); when no national or international standard(s) is available, the Supplier shall define and implement a methodology to verify measurement system capability.
- e) Atmus requirements, if any.
- f) Review of the related records.

NOTE: Third-party accreditation to ISO/IEC 17025 (or equivalent) may be used to demonstrate the supplier's in-house laboratory conformity to this requirement.

### 4) **External Laboratory**

External/commercial/independent laboratory facilities used for inspection, test or calibration services by the supplier shall have a defined laboratory scope that includes the capability to perform the required inspection, test, or calibration, and either:

- The laboratory shall be accredited to ISO/IEC 17025 or national equivalent and include the relevant inspection, test, or calibration service in the scope of the accreditation (certificate); the certificate of calibration or test report shall include the mark of a national accreditation body; or
- There shall be evidence that the external laboratory is acceptable to the customer.

NOTE: Such evidence may be demonstrated by customer assessment, for example, or by an Atmus-approved second-party assessment that the laboratory meets the intent of ISO/IEC 17025 or national equivalent. The second-party assessment may be performed by the organization assessing the laboratory using an Atmus-approved method of assessment.

Calibration services may be performed by the equipment manufacturer when a qualified laboratory is

not available for a given piece of equipment. In such cases, the organization shall ensure that the requirements listed in sub-section Internal Laboratory have been met.

Use of calibration services, other than by qualified (or Atmus accepted) laboratories, may be subject to government regulatory confirmation, if required.

## **K. Competence (7.2)**

### **1) Competence: on-the-job training**

Each location shall have a sufficient number of trained individuals such that computer applications necessary for direct support of Atmus manufacturing can be accessed during scheduled Atmus operating times, and other applications can be regularly accessed during normal business hours. The specific computer applications required will vary with the scope of a supplier site's operations. For manufacturing sites, the required quality applications include, but are not limited to:

- AQMS (APQP, PPAP, SCR, SR, MNC, & SCAR)
- Supplier Portal
- IMDS

NOTE: Atmus SQEs have supplier training available to suppliers as needed. Contact your SQE for more information.

## **L. Documented Information (7.5)**

### **1) Record retention**

The supplier shall maintain PPAP records for the life of the product plus one year. Supplier inspection and test records shall be maintained for three years minimum or as directed by your SQE.

## **M. Customer Communication (8.2.1)**

The supplier shall establish a connection for electronic communication with Atmus through the Atmus Supplier Portal. Suppliers shall ensure that contact information in all Atmus electronic systems is current.

The supplier shall have the ability to communicate electronically with Atmus to address APQP, PPAP, SCAR, MNC, Source Release, RFQ, Scorecard, Survey and Supplier Change Requests.

## **N. Review of the Requirements for Products and Services (8.2.3)**

Atmus new product introduction processes, known as Automotive Product Development (APD) and Industrial Product Development (IPD) contain some Atmus-specific requirements not explicitly defined in APQP. Suppliers shall complete these APD/IPD-specific requirements which can be part of APQP.

### **1) Customer-designated special characteristics**







Initial Process Studies shall be completed according to the table below and documented in the Initial Process Study section of PPAP (or Initial Sample Inspection Report (ISIR) only when applicable for industrial markets).



- The Initial Process Study shall conform to the AIAG PPAP and SPC manual.
- Parts from each unique production process, e.g., duplicate assembly line and/or work cell, each position of a multiple cavity die, mold, tool or pattern shall be measured, and representative parts tested.

Long Term Process Studies (on-going SPC analysis) shall be completed according to the table below and provided to Atmus upon request.

- The long-term process study shall conform to the AIAG SPC manual.
- Determine Capability Index (Cpk) or Performance Index (Ppk) for the long-term process study.

| Characteristic                    | Symbol  | Interpretation  |
|-----------------------------------|---|---|
| Safety Critical                   |    | <p>Atmus requires a Performance Index, Ppk, greater than or equal to 1.67 as acceptance criteria for initial studies at the time of PPAP.</p> <p>On-going SPC analyses (Long Term Process Studies) demonstrating an index of 1.33 minimum over time.</p> <p>Control plan documentation to ensure SPC results are monitored and maintained. Suppliers should evaluate and implement fail-safes as elements of their control plan.</p>  |
| Critical                          |    | <p>Atmus requires a Performance Index, Ppk, greater than or equal to 1.67 as acceptance criteria for initial studies at the time of PPAP.</p> <p>On-going SPC analyses (Long Term Process Studies) demonstrating an index of 1.33 minimum over time.</p> <p>Control plan documentation to ensure SPC results are monitored and maintained.</p>  |
| Major                             |  | <p>Atmus requires a Performance Index, Ppk, greater than or equal to 1.67 as acceptance criteria for initial studies at the time of PPAP.</p> <p>On-going SPC analyses (Long Term Process Studies) demonstrating an index of 1.33 minimum over time.</p> <p>Control plan documentation to ensure SPC results are monitored and maintained.</p>  |
| Significant Minor                 |  | <p>Initial study per PPAP request (minimum of 30 pieces recommended) demonstrating conformance to specification and Ppk of 1.0 minimum.</p> <p>For attribute data, the entire PPAP capability run (typically 300 pieces) must conform to specification.</p> <p>Control plan item to demonstrate conformance to specification over time.</p> <p>NOTE: On-going SPC is not required for a significant minor; however, a sufficient control plan check should be in place to demonstrate conformance to specification over time (e.g., go/no go checks).</p>   |
| Minor                             | None  | <p>Conform to Specification per standard PPAP requirements (typically 3-piece layout).</p> <p>If an initial study is requested by the SQE, an index of 1.0 or greater must be demonstrated.</p>   |
| Key                               |  | <p>The decision for requiring SPC/capability data is to be determined by the cross-functional team and if needed, will be classified as Key (Major) or Key (Minor).</p> <p>Control plan item to demonstrate conformance to specification over time.</p>   |
|                                   |   | <p>NOTE: On-going SPC is not required for a key; however, a sufficient control plan check should be in place to demonstrate conformance to specification over time (e.g., go/no go checks).</p>   |
| PTC (Pass-through Characteristic) |  | <p>Initial study per PPAP request (minimum of 30 pieces recommended) demonstrating conformance to specification and Ppk per C of C requirement (see above). Must demonstrate a Ppk of 1.0 minimum during initial study if not marked with a C of C symbol (i.e., Critical, Major, 6S Triangle or Key symbol).</p> <p>Control plan item to ensure a defect will not reach the Atmus customer. A failsafe or 100% verification is required for any PTC identified with an "X" in the Supplier Check column of the PTC Table on the Atmus drawing. The Atmus SQE reserves the right to add additional features, not specified as PTCs on the drawings, to be identified as such in a control plan.</p> |

While statistical studies are specified on special characteristics, this does not mean that the other characteristics on Atmus engineering drawings may be ignored. All characteristics must meet the

specification and it is in the supplier's best interest to understand their capability on ALL features. All Significant Minor (A.K.A. Six Sigma) characteristics are to be studied using a minimum 30-piece sample size and must demonstrate a capability or performance index of 1.0. Six Sigma characteristics must also have a control plan item assigned to demonstrate conformance to specification over time.

In addition to the special characteristics called out on the drawing, the Atmus SQE may specify additional characteristics for process control purposes.

Suppliers may develop their own special characteristics symbols for internal use. If supplier-specific special characteristics are developed, suppliers shall document the equivalence of the internal symbols with Atmus symbols and reference the equivalence when internal symbols are used in communications with Atmus.

## 2) **Labels and Direct Part Marking**

Suppliers must familiarize themselves with the part marking and identification requirements on the drawing all applicable Atmus engineering standards, and any industry standard documents referenced within them. Additionally, suppliers must have traceability of Product Safety-critical Characteristics identified by Atmus or by the supplier. Suppliers must ensure 100% readability by the receiving Atmus plant(s) during APQP and PPAP, and that they have traceability of each component within their facility's database. Suppliers are required to verify bar codes 100% for readability on all production products. It is recommended that individual bar codes be verified at packaging to failsafe part count and shipping labels. Part marking and verification of readability will be part of the PPAP (or ISIR) process. Part markings that are unreadable or missing when parts are received at an Atmus plant will be handled as non-conforming material.

## **O. Design and Development of Products and Services (8.3)**

Each supplier participating in the New Product Introduction (APD) project must be able to provide evidence of meeting the Atmus APQP checklist requirements for their component. APQP is applicable to APD components, the revision of existing product designs and to source changes (moving a component from one supplier to another). Some APQP elements need not be re-developed in every case. If the supplier and the Atmus SQE determine that an APQP element is not affected by the change, no action is required other than documenting the consideration. If an element is affected by the change, prior work is updated accordingly.

The Atmus SQE will engage a supplier for APQP activity with required task completion dates at the appropriate time in the product/process development cycle.

Atmus requires suppliers with projects deemed high risk to participate in the Atmus Safe Launch process. This may apply to new components, changes from one supplier to another, and to some component design or process changes. Suppliers expected to complete this activity will be notified by their Atmus SQE. Safe Launch includes, but is not limited to:

**Production Capability Certification (PCC Run)** – test of capacity and quality run by the supplier with Atmus personnel present; like “run at rate.”

**Source Release** – a process for ensuring non-PPAP approved parts meet quality

requirements.

**Safe Launch Control Plan** – detailed plan for increased inspection frequencies during the safe launch timeframe.

Suppliers are required to use Atmus electronic systems for submission of APQP, PPAP, (or ISIR) and Source Release documentation. Documentation submission requirements will be defined by the Atmus SQE.

Atmus has developed a formal APQP review process. This review process brings the supplier's management, Atmus plant management, engineering, purchasing, and others together at various stages of the APQP process to review the status of APQP activities associated with a specific component. Atmus suppliers shall participate in the Atmus formal APQP process as requested by their Atmus SQE contact.

The requirement of APQP is crucial to the development of new products and processes, the revision of existing products and processes, and moving components from one supplier to another. Its single most important tenet is that quality does not just happen, it must be planned. Quality must be in the design of the product as well as in the development of the process that will produce the product. Three key outputs of APQP are the Process Failure Mode and Effects Analysis, Control Plan, and PPAP. Suppliers are expected to be knowledgeable of and follow the APQP process.

As a supplier to Atmus, awareness of at least two APQP processes happen in conjunction with one another:

- a) Atmus initiates an APQP process internally in the development of new products (through APD) and/or special projects.
- b) As a supplier of a component or assembly to the new Atmus product, the supplier shall initiate an APQP process of its own when engaged by Atmus. The supplier's level of involvement will vary depending on where the responsibility for design control resides for the component or assembly that the supplier will be supplying.

Note 1: Atmus New Product Introduction Process, known at Atmus as Automotive Product Development (APD), contains some Atmus-specific requirements not explicitly defined in APQP. You will be made aware of the additional requirements as you are engaged in the APD process by the Atmus SQE. Required task completion dates will be assigned and monitored by the Atmus SQE.

Note 2: Suppliers are required to utilize the APQP process. The level of oversight from Atmus will vary depending on the risk level determined by Atmus' SQE.

Note 3: Suppliers providing prototype components to Atmus as part of an APD program are required to comply with source release requirements prior to shipment of any material to Atmus.

Note 4: Suppliers introducing new products for Atmus Industrial Product Development (IPD) in industries adhering to AIAG requirements are required to utilize the APQP process. For industries not adhering to AIAG requirements, utilization of the APQP process will be at the Atmus SQE's discretion.

#### 1) **Design and Development Controls (8.3.4)**

The supplier will support the Atmus DVP&R process. To drive reliability into the product upfront, the supplier commits to have zero open FIRG issues at the start of production as specified in the

program schedule and/or quality issues at component introduction. Products should be quoted based on technical profiles or based on supplier application guidelines, and those limits must be included in the quote. Testing parameters that establish the application guidelines must be included in order to determine technical compatibility with Atmus applications and the technical profile.

Additional testing to meet Atmus technical validation requirements is the responsibility of the supplier. The supplier must document any critical parameters and specifications, including product safety-critical characteristics, not listed on the technical profile. The supplier and Atmus will verify acceptance of the technical requirements by signing the technical profile document and Supplier Design Confirmation Signoff (SDCS) form prior to supplier tooling kickoff.

## 2) **Prototype Program**

Suppliers shall use the Atmus Source Release (or ISIR) process for prototype parts. It is the supplier's responsibility to ensure that Atmus has approved the Source Release (or ISIR) before any parts are shipped to a manufacturing location.

## 3) **Product Approval Process**

Suppliers shall comply with Production Part Approval Process (PPAP), current edition and Service Production Part Approval Process (Service PPAP), current edition.

Suppliers must have the ability to submit PPAP documentation electronically. Documentation submission requirements will be defined by the Atmus SQE.

Atmus must be notified of pending changes using the Atmus Supplier Change Request process (SCR). If a Product Safety-critical characteristic is involved, this must be noted on the Atmus Supplier Change Request. Informed decisions are then made on the impact of the changes and whether a full, partial, or no PPAP submission is required. It is the supplier's responsibility to ensure that Atmus has approved the PPAP (or ISIR) before any parts are shipped to a manufacturing location.

### **Atmus-Specific PPAP Information:**

- a. Where the PPAP manual states "...contact the customer" that person is the SQE at Atmus.
- b. The Submission Level (1 through 5) required by Atmus is defined by the SQE for each PPAP submission.
- c. Both production and service parts shall meet all Atmus engineering design record and specification requirements.
  - i. Service parts samples submitted as part of a PPAP must be run from tooling intended for service volume production. All service PPAP submissions shall provide evidence of a packaging approval using the Atmus PSDS template with the submission.

Note 1: A Level 5 submission may include supplier site activity such as a Process/Product Audit or other means of verifying the capability of the production system in addition to the onsite completion of the PPAP.

Note 2: Per the AIAG manual, the supplier must complete all elements of a PPAP regardless of the submission level chosen, unless specifically waived in writing or via electronic system by Atmus SQE.

Note 3: In cases where PPAP volumes are exceptionally low, a “Special Level 4” PPAP may be utilized. Suppliers must get approval from the Atmus SQE to use this variation.

Note 4: “Off-the-Shelf” Components: A part that is sold to the general public direct from the manufacturer or through a distributor network and is not being modified in any way to suit Atmus-specific needs. These parts may be commercially available as a catalog item.

- ii. A Level 1 PPAP will be submitted by the supplier to Atmus using the Atmus PPAP system to signify the supplier has appropriate controls in place for production of the part. Any inspection/test data relevant to product dimensions or part function are to be retained on-site by the supplier and available for review by Atmus upon request. Atmus SQE has the right to request additional data as part of a PPAP where there are questions regarding off-the-shelf rule applicability.
- d. Three sample parts are the default requirement for dimensional verification during PPAP with some customers requiring more than three samples. The Atmus SQE will notify the supplier if more than three sample parts are required.
- e. Our customers require material data sheets (MDS) to be submitted in order to understand the substances contained within the products they purchase from Atmus. Therefore, it is critical that suppliers provide MDS information when submitting PPAPs. Supplier MDS information will be reviewed against international material regulations to ensure components do not contain restricted or banned substances (which exceed allowable limits).

Note 1: Atmus’ drawings state specific Engineering, Material, Process, Inspection standards and product notes that are required to enable the supplier to manufacture the part. Compliance with these standards and notes shall be confirmed in writing by the supplier during the PPAP process. The supplier may use the dimension report/ISIR and material/performance documents to record their compliance statements.

Note 2: When specified on the drawing, a Master CAD Model (MCM) may become a source for product definition. Verification of features only defined by the MCM must be agreed with the SQE. Engineering approval for the MCM measurements is required.

Preservation, Part Identification, and Packaging parameters shall be included in the Process Flow Diagram, PFMEA, and Control Plan.

When a PPAP submission for a part has not been made to Atmus in the last 24 months, the requirement for the next PPAP, regardless of the change to the part or process, is a complete PPAP submission which shall include updated dimensional data, Control Plan, PFMEA, Material Data Sheets (such as IMDS submissions for components used in on-highway applications), and updated Process Capability data at a minimum, as well as any other information requested by the Atmus SQE.

**Atmus PPAP Run Size Expectation:**

When annual usage is over 3600 pieces, a 300-piece run, with 100 of the 300 pieces collected and measured in sequential order for statistical analysis is required. High-volume PPAPs will not be

fully approved without sufficient data. The Atmus SQE and the supplier will agree to the requirements per these instructions. A 30-piece machine study is NOT appropriate for PPAP approval.

Note 1: Parts from each unique production process, e.g., duplicate assembly line and/or work cell, each position of a multiple cavity die, mold, tool or pattern shall be measured, and representative parts tested.

#### **Low and Ultra-Low Volume PPAP Rules:**

When estimated annual usage is less than 3600 pieces, AIAG PPAP rules apply with the following Control Plan specific requirements: 1) The supplier shall document in their Control Plan that they will either: perform 100% inspection and record the results or conduct an initial process study with a minimum of 30 production pieces and maintain SPC control charts of the special characteristics during production, and 2) that they will conduct first-piece full layout inspection to verify set-up. 100% inspection or SPC Control Charts for special characteristics and set-up records containing the first-piece inspection data shall be maintained per AIAG PPAP Record Retention requirements. The Atmus SQE may require Pre-control as defined by Atmus on any identified special characteristics.

In cases where annual usage is less than 360 pieces and statistical analysis of data impractical (e.g., normal manufacturing runs of less than 30 pieces) the supplier, upon agreement with the Atmus SQE, may use a Special Level 4 PPAP. This variant of the AIAG PPAP process is a Level 4 PPAP that requires submittal of the following elements: Design Record, Process Flow, Process FMEA, Control Plan, Dimensional Results, Material/Performance Test Results, Measurement Systems Analysis, and Part Submission Warrant. In addition, the supplier shall document in their Control Plan that they will perform 100% inspection of special characteristics and record the results and conduct first-piece full layout inspection to verify set-up. 100% inspection for special characteristics and set-up records containing the first-piece inspection data shall be maintained per AIAG PPAP Record Retention requirements. Special Level 4 PPAPs are intended only for those components with such low volumes that statistical information is invalid.

The significant production run shall consist of at least one month production quantity of the demonstrated capacity (e.g., annual capacity = 2100 pieces, PPAP run size = 175 pieces).

#### **Interim PPAP**

Interim approval of a PPAP shall only be used on an exception basis. The Atmus SQE will review the supplier PPAP submission and decide if an interim approval is allowed using the Atmus guidelines. All interim approvals will require a detailed action plan to resolve the issues that prevented full PPAP approval and an expiration date. Suppliers shall not ship parts under expired interim approval. It is the supplier's responsibility to track interim expiration dates and contact the Atmus SQE if extension is required. Material covered by an interim approval that fails to meet the agreed-to plan can be rejected.

#### **ISIR (Initial Sample Inspection Report) Rules:**

For Industrial Markets where PPAP may not be the standard, Atmus may allow the use of ISIR for part approval. This will be at SQE discretion. This will not apply to automotive or on-engine applications. Suppliers are expected to submit using the Atmus ISIR template. Suppliers are still



expected to submit using the required Atmus Quality Management System (ETQ).

## **P. Design and Development Outputs (8.3.5)**

### **1) Manufacturing process design output**

PFMEAs and control plans are required for prototype, pre-launch, and production phases.

## **Q. Control of Externally Provided Processes, Products and Services (8.4)**

Atmus requires that Atmus Tier 1 suppliers allow and facilitate Atmus visits and audits of Sub-Tier suppliers as requested.

Suppliers are encouraged to apply the principles outlined in “CQI-19 AIAG Sub-Tier Supplier Management process guidelines” to all their sub-tier suppliers. Atmus reserves the right to require that the supplier apply the principles outlined in CQI-19 to address issues identified in the supplier’s sub-tier supplier development and management process.

Atmus Tier 1 supplier shall be solely responsible for all aspects of sub-tier supplier management unless specific arrangements are otherwise defined in the contract.

### **1) General (8.4.1)**

Quotation Criteria - When submitting a quotation, the following criteria shall be addressed:

- a.) Clear understanding and agreement on the product specifications, requirements, and applications. The supplier is encouraged to seek participation in the Drawing Quality Review (DQR) process to ensure full understanding of Atmus print requirements including special characteristics and engineering standards.
- b.) Internal capabilities sufficient to manufacture products with controls to meet all requirements at consistent, acceptable, quality and performance levels.
- c.) Recommendation of any changes that will prove advantageous to product quality, performance, price, and delivery.
- d.) Notice of any exceptions to be included with quotation bid.

Any tooling, gauges etc. provided by Atmus shall be controlled within the supplier’s system (e.g., for calibration requirements). Any production and prototype tooling owned by Atmus, or its customers located on the premises of a supplier must be properly protected from any loss or damage, properly tagged, maintained, and documented. Atmus may ask at any time for documentation related to customer tooling. Supplying or selling products made from customer tooling to any other customer is prohibited.

- **Supplier Selection Process (8.4.1.2)**

For potential suppliers to Atmus, the selection team from Atmus will assess the supplier against specific requirements including quality, Total Cost of Ownership (TCO), technical, regulatory, financial, warranty commitment, target cost and future cost reductions.

Potential suppliers will be asked to complete a New Supplier Assessment as a prelude to a site visit by

the selection team. During the site visit, qualified members of the selection team will perform a New Supplier Assessment. The selection team will be comprised of representatives of engineering, manufacturing, purchasing, quality, and finance. The New Supplier Assessment looks at many of the supplier's systems in detail with the objective of determining which areas need to be improved prior to launching an Atmus product at that facility.

Process/Product audits of related products being run on the process proposed for Atmus may be included as part of the Supplier Selection Process.

Suppliers which sell \$5 million or more to Atmus in a country of import shall have a resident technical resource to handle sorting, screening, and issue resolution. Suppliers which sell less than \$5 million to Atmus in a country of import shall use a third party for these types of activities at the supplier's expense. Special arrangements can be made between the Atmus plant and the supplier at the request of the Atmus plant or Atmus purchasing. In some cases, suppliers which sell less than \$5 million to Atmus in a country of import may be required to have a resident technical resource.

### 3) **Directed Buy Components (8.4.1.3)**

In cases where Atmus Purchasing directs suppliers to purchase components or services from sub-tier suppliers, the Tier 1 supplier is responsible for all aspects of sub-tier supplier management unless specific agreements are otherwise defined in the contract. This includes, but is not limited to, APQP launch activity, PPAP approval, sub-tier supplier conformance to requirements, and quality issue resolution.

## 4 **Statutory and regulatory requirements (8.4.2.2)**

Many customers of Atmus require material content to be reported. Additionally, many regulations require visibility to a product's material/substance content. Material content shall be provided prior to PPAP (or ISIR) submission to enable the Atmus Technical Compliance Organization to approve material data sheets (MDS) and provide approval notification. The request may come directly from the Atmus Technical Compliance Organization and/or through IMDS (International Material Data System) or similar material compliance industry systems. The product material content must be submitted as an FMD (Full Material Disclosure) MDS via IMDS (Atmus IMDS ID 242886) for automotive parts or via CDX (Atmus CDX ID 36297) for non-automotive parts. When submitting the MDS, the supplier shall provide their six-digit Supplier Master Oracle SaaS Supplier ID code so that the data is properly mapped to the product in the Atmus internal system. Should a supplier be unable to submit data in CDX for a non-automotive part, they may request an alternate reporting format (Anthesis, BoMCheck, etc.). Use of IMDS for non-automotive parts is restricted and is allowed if and only if the part is common to both automotive and non-automotive. (Refer to the IMDS Terms of Use for details).

The supplier shall submit evidence of compliance in Section 19 of the PPAP.

The supplier shall obtain written approval/exemption for authorized use of listed substances from Atmus Technical Compliance prior to shipping parts to Atmus. The Declarable Substance list, Anthesis reporting template, Quick start guide and Training on materials compliance requirements can be found on the Atmus Supplier Portal (<https://atmus.com/supplier-portal/materials-disclosure-requirements-and-guide>) Any questions should be directed to the Atmus Technical Compliance Team at:

[Filtration.Material.Compliance@atmus.com](mailto:Filtration.Material.Compliance@atmus.com)



### **Conflict Mineral Reporting:**

Atmus is obligated to report annually to the United States Securities and Exchange Commission (SEC), disclosing the use and sources of conflict minerals in our products. Conflict minerals are Tin, Tungsten, Tantalum and Gold, also known as 3TG.

We ask on a yearly basis that suppliers of metal and electronic components use the latest Conflict Materials Reporting Template (CMRT) to report the required company-level and smelter data for all uses of the designated minerals and for any materials, components or products supplied to Atmus.

#### **5) Development of Products with Embedded Software (8.4.2.3.1)**

IATF 16949-certified suppliers of components with embedded software

Automotive product-related software or automotive products with embedded software shall be in conformance with IATF 16949 8.3.2.3. Atmus recommends the use of Capability Maturity Model Integration (CMMI), Automotive SPICE or equivalent. Evidence of compliance will be submitted as an APQP element, when applicable.

### **R. Information for External Providers (8.4.3)**

Cascade and communicate all Atmus quality requirements throughout the organization's supply chain.

### **S. Control of Production and Service Provision (8.5.1)**

The control plan shall include all requirements noted in IATF 8.5.1.1 and:

- a) Controls related to packaging, preservation, cleanliness, and labeling
- b) Customer branding standards, as applicable

### **T. Preservation (8.5.4)**

Preservation and packaging are critical elements that aid in the protection of our products from point of origin to the final point of use. All products are required to have a shelf-life protection from corrosion and deterioration at a minimum of 6 months for production products and minimum of 18 months for aftermarket-service products as per Atmus packaging standards.

The supplier is expected to review and shall meet the Atmus packaging requirements as defined in the Atmus packaging standards "Global Packaging Standard-Production Parts." The Supplier shall provide all packaging proposals in alignment with these standards to the Atmus Sourcing Manager using the Atmus Packaging Specification Data Sheet (PSDS) template. The supplier is to complete a PSDS for each individual part number and it shall be submitted with the request for quote for Atmus internal review and approval. For individual parts with multiple packaging design solutions, a PSDS must be approved for each (e.g., expendable, returnable and aftermarket). Additionally, the PSDS approval is required prior to shipment of production and/or aftermarket-service product to an Atmus facility. Detailed requirements of the PSDS template are covered in the Atmus Packaging Standards. All packaging design change proposals for existing products require the supplier resubmission of a PSDS to the Sourcing Manager for Atmus internal review and approval.

These packaging standards, PSDS template, and instructions for completing the PSDS are available for download through this Atmus Supplier Portal link: <https://www.atmus.com/supplier-portal/packaging>

## U. Control of Changes (8.5.6)

Process/ Product Supplier Change Control (including Embedded Software changes)

- a. The supplier shall notify the Atmus SQE of any proposed process or product changes as described in the AIAG PPAP manual table 3.1.
- b. The supplier shall obtain approval for all process and product change requests from their Atmus SQE prior to implementing a change. **Proposed** changes shall be approved using the Atmus Supplier Change Request Process (SCR). Suppliers must submit any SCR a minimum of 12 weeks prior to the planned implementation date of the proposed change. Informed decisions are then made on the impact of the changes and whether a full, partial, or no PPAP submission is required. **It is the supplier's responsibility to ensure that Atmus has approved the PPAP (or ISIR) before any parts are shipped to a manufacturing location.**
- c. Changes to the supplier's direct material supply base require the supplier to submit a Supplier Change Request (SCR). Upon approval of the Supplier Change Request the supplier may be required to submit a PPAP (or ISIR) by the Atmus SQE.
- d. The supplier shall gain approval from the Atmus SQE using the Supplier Change Request process when **any** alternate process is to be used.
  - i. NOTE: An alternate process is one that is different than the process used during PPAP/ISIR
  - ii. NOTE: Rework or salvage processes not approved during the initial PPAP process shall be treated as a process change.
- e. Products produced on alternate processes may be subject to increased inspection and test requirements as agreed with the SQE.
- f. Supplier Change Requests must be formally submitted a minimum of 12 weeks prior to the proposed change implementation date. SCRs (Supplier Change Request) not requested 12 weeks prior to the implementation may cause disruption to Atmus production and customer shipments that could result in additional supplier-related costs. However, approval lead time may exceed 12 weeks based on the complexity of the change, validation requirements, and Atmus customer approval.

## V. Release of Products and Services (8.6)

### 1) Annual Layout

To ensure continuing conformance to all Atmus requirements, an annual layout, including all sub-components, shall be performed when requested.

## W. Customer Notification (8.7.1)

The Supplier's Non-Conforming Material Process shall include immediate customer notification if a nonconforming product may have shipped.

- If a supplier notifies Atmus that nonconforming product has been shipped, the MNC will charge the supplier with the actual # of defects that were already used in production. The unused parts will not count as defects toward the supplier.
- Nonconforming products which have an approved waiver/deviation resulting from pro-active communication from the supplier (prior to use of any parts by Atmus plant) will not count as defects toward the supplier.
- If there is not pro-active communication about nonconforming products that are accepted/used under waiver/deviation this will count as defects toward the supplier.

## **X. Performance Evaluation (9)**

Atmus will monitor the quality performance of the supplier primarily through PPM, OE Defect, Disruption Score, and SCAR timeliness. Atmus will report these measures to the supplier. Zero PPM is the goal. Failure to meet this goal may result in corrective action activity as described in the Non-Conforming Material section of this document. Atmus will set interim goals (targets) for suppliers who cannot immediately meet the zero-defect goal. These targets will be reduced each year with the expectation that these suppliers will eventually meet the zero PPM goal.

Atmus will monitor the reliability performance of selected suppliers' components (especially suppliers with design control) through warranty claims, service campaign and temporary repair practice. Atmus will report these measures to the supplier.

- a. The supplier must have the ability to submit failure investigation electronically.
- b. The supplier shall monitor and participate in reducing field warranty claims. It is important to control problem resolution time in their processes.
- c. In the event of reliability/product compliance, including but not limited to, safety omissions, issue results in a recall, the supplier shall work with Atmus to urgently remediate the problem.

## **Y. Monitoring, Measurement, Analysis and Evaluation (9.1)**

The supplier shall allow on-site verification activities as required by Atmus and Atmus' customers.

The supplier shall allow on-site Process/Product Audits and System Assessments when requested by Atmus.

The supplier shall allow and facilitate visits by Atmus personnel to their suppliers for purposes of audit, PPAP review, APQP review, review of corrective action effectiveness, or any other reason related to the quality of components produced for Atmus.

The supplier shall allow direct communication with their manufacturing facility as well as any sub-tier supplier's manufacturing facilities on quality issues.

### **1) Monitoring and Measurement of Manufacturing Processes**

The supplier shall maintain routine quality data (e.g., quality indices updates, reliability test results, any data collection defined in control plans, etc.) that are required by the Atmus Engineering drawing, agreed to in the APQP/PPAP elements of the Cycle, or established as part of a corrective action plan. Such data shall be made available to Atmus upon request and provided within one (1) business day of such request.

The supplier shall perform and maintain results for any required Functional Reliability Verification

(FRV) testing that is identified on the component drawing by a functional reliability specification. Functional Reliability Verification is intended to be ongoing and conducted by the supplier during the life of a component or sub-assembly to assess the ongoing capability of the component or sub-assembly to meet a functional reliability specification. Verification methods include fail-safe, in-process checks, process control, dimensional checks, and test-to-failure audit.

## 2) **Application of Statistical Concepts**

- a. Suppliers are encouraged to adopt Six Sigma as a formal improvement process, particularly when aimed at improving quality or reducing costs.
- b. Suppliers shall use statistical tools for managing and improving processes wherever possible. Statistical tools may include, but are not limited to, Statistical Process Control (SPC).

## **Z. Customer Satisfaction (9.1.2)**

### 1) **Supplier Scorecard**

Atmus Purchasing and Supplier Quality use the Supplier Scorecard to evaluate customer satisfaction with selected external production and service suppliers. Atmus stores, analyzes, and reports supplier performance data collected from other sources within Atmus.

The Supplier Scorecard reports performance in three categories:

- Quality Management
- End Customer Quality
- Delivery

### 2) **Controlled Shipping**

Atmus may, at its discretion, require the supplier to participate in Controlled Shipping/Consequential Management activities. This may include third-party containment/component certification processes that are provided at the supplier's expense. These actions will be implemented at the direction of Atmus Supplier Quality Leader. These activities will be monitored at a senior level at Atmus and require the active participation of senior management at the supplier.

If a supplier is placed on Controlled Shipping Level 2, they are required to notify their Certification Registrar as part of the containment process.

## **AA. Internal Audit (9.2)**

### 1) **Quality management system audit**

Supplier shall conduct an Internal Quality Management Systems audit at least once per year.

### 2) **Manufacturing process audit**

- a. Layered Process Audits
  - i. All Suppliers should implement a Layered Process Audit program to promote continuous improvement within their facility.  
Suppliers should refer to AIAG CQI-8: Layered Process Audits for guidance on

establishing an LPA program. If you are supplying parts to one of the Atmus facilities that require LPA program that includes Process Control Audits as well as Error Proofing Verification audits, you will be notified, and Supplier shall refer to AIAG CQI-8: Layered Process Audits for guidance on establishing an LPA program.

b. Special Process Assessments

- CQI-9 Special Process: Heat Treat System Assessment, latest edition
  - CQI-11 Special Process: Plating System Assessment, latest edition
  - CQI-12 Special Process: Coating System Assessment, latest edition
  - CQI-15 Special Process: Welding System Assessment, latest edition
  - CQI-17 Special Process: Soldering System Assessment, latest edition
  - CQI-23 Special Process: Molding System Assessment, latest edition
  - CQI-27 Special Process: Casting System Assessment, latest edition
  - CQI-29 Special Process: Brazing System Assessment, latest edition
- i. Suppliers shall complete assessments for all applicable Special Processes
  - ii. This requirement shall apply to any sub-tier suppliers that perform these processes for the direct supplier to Atmus.
  - iii. Evaluation shall be by self-assessment. The self-assessment shall be conducted annually at a minimum but may be repeated as needed. The self-assessment may be conducted as part of the supplier's internal quality audit or conducted separately. The self-assessments are to be retained on-site but made available for review by Atmus upon request.
  - iv. Suppliers to certain businesses at Atmus may be required to comply with ISO-3834 Standard Quality Requirements for Welds. Where customers require this level of weld control, the Atmus SQE will notify the supplier of the expectation. Use of this standard supersedes the requirement for AIAG CQI-15.

## **BB. Nonconformity and Corrective Action (10.2)**

Suppliers are required to use the Atmus Quality Management System (AQMS)

- a) If quality problems are experienced with a product provided by a supplier, Atmus' corrective action process may escalate through several phases depending on the adequacy and timeliness of the supplier's response and the effectiveness of the actions taken. It may also go straight from problem notification to Senior Management depending on severity and urgency.

Note 1: Reworked or repaired material is considered non-conforming unless prior approval of these processes was granted by the Atmus SQE and appropriate Atmus Engineering resources.

- b) Atmus will notify the supplier when a nonconformance has occurred. At the time of notification, the supplier will also be advised if a corrective action response is required.
  - i. When an MNC is issued to the supplier, it is Atmus' expectation that the supplier takes immediate action to contain any additional defects. The supplier is expected to take appropriate corrective action to prevent additional defects from being produced or reaching

- any Atmus site. Atmus SQEs may check supplier's actions taken as part of the Atmus Process/Product audit process.
- ii. The MNC gives the supplier the opportunity to document actions taken and Atmus suggests that the supplier document these actions. In some cases, an Atmus plant may request that the supplier respond to an MNC. If a response is requested, the supplier is expected to comply.
- c) If a SCAR (Supplier Corrective Action Request) is issued, the following must take place:
- i. Suppliers are expected to submit evidence of problem-solving tools used during root cause investigation of the issue.
  - ii. Suppliers are required to take immediate containment actions to enable Atmus facilities to operate and protect Atmus from further non-conforming products.
    - i. The supplier shall submit documented containment results within 24 hours of notification of non-conformity.
    - ii. The supplier's containment process must cover all areas of potential defects including:
      - 1. Supplier's manufacturing location
      - 2. All potential transportation links (e.g., supplier to ship, ship to warehouse, warehouse to Atmus, etc.)
      - 3. All warehousing operations from the supplier through the Atmus facility
      - 4. The notifying Atmus facility and any other potential Atmus facilities
      - 5. The AIAG inventory containment form shall be submitted to Atmus Inc to document containment that has taken place at all inventory locations.
  - iii. Containment and short-term action shall be in place within 48 hours of finding the defect.
  - iv. Root cause and a long-term action plan shall be submitted within 10 working days of receipt of SCAR.
  - v. Long term action plan in place within 30 days of finding the defect. Past-due SCARs will be escalated to Atmus management for further review.
    - i. Timeliness of suppliers' responses to these due dates are measured and included in the Supplier Scorecard.
  - vi. All SCAR responses will be reviewed by the Atmus SQE for adequacy.
    - i. Atmus reserves the right to institute third-party sorting/certification of product at the supplier's location if a Supplier Corrective Action is inadequate or in the case of a recurring defect. Any charges accrued associated with the activities conducted by the third party will be at the supplier's expense.
  - vii. PFMEA and Control Plan are to be reviewed and relevant revisions made as part of the problem-solving process. The expectation is that these documents will be submitted as part of the completed SCAR response. Proprietary process documentation requires evidence that the review has been completed by the Atmus SQE. Process changes as a result of the problem-solving process are expected to be submitted to Atmus for review using the SCR process and PPAPs completed where required.
- d) Repetitive nonconformance, adverse quality trends, or other issues may escalate the corrective action process to include, but not be limited to:



- i. Formal Process/Product Audit of the supplier's facility by Atmus Supplier Quality, looking for systemic issues.
- ii. Focused problem-solving activity with agreed measures and targets and routine progress reporting into Atmus.
- iii. Submission of capability information on selected characteristics
- iv. Submission of Paynter Charts tracking defects and Step 3 and Step 6 action monthly
- v. Participation in 6 Sigma projects
- vi. Participation in a formal Atmus SQPM Process, which includes Focus, SIP, WIN and KEPT process.
- vii. Participation in Controlled Shipping/Consequential Management activities, which may include third-party containment/component certification processes that are provided at supplier's expense. These actions will be implemented at the direction of Atmus Purchasing Supplier Quality Leader

These activities will be monitored at a senior level at Atmus and require the active participation of senior management at the supplier.

- e) The final escalation of the corrective action process, if required, is a meeting of the supplier's highest management with appropriate Atmus' Plant, Purchasing or Corporate senior management. The supplier must be prepared at this meeting to commit resources to resolve the issues. Failure to follow through with these commitments would initiate re-sourcing activity by Atmus.
- f) Atmus monitors supplier-caused disruption costs to Atmus and its customers. Costs associated with supplier-caused disruptions will be recovered from the supplier. Typically, these costs could arise from:
  - i. Nonconforming material detected within Atmus or by its customers.
  - ii. Supplier-caused warranty issues.
  - iii. Line stoppages at Atmus or its customers due to supplier issues
  - iv. SQE works beyond normal planned activity.

Examples of supplier disruption related charges Atmus entities may recover include, but are not limited to scrap, rework, engine damage, tear down/re-test expenses, premium freight, assembly disruptions/work stoppage, administrative expenses, etc.

Administrative expenses are determined based on the Atmus entity: business unit type, location (country), and the location of which the non-conformance was found in the Atmus entity's process.

### 1) **Problem Solving**

Suppliers with high value, chronic or repeat quality issues are expected to participate in any Atmus-driven problem-solving initiative.

### 2) **Warranty Management Systems**

Suppliers shall use CQI-14: Automotive Warranty Management, latest edition to integrate warranty into their quality management system.

### 3) **Continual Improvement**

Suppliers are expected to implement Atmus Manufacturing Quality Verification (MQV) tool as part of their continual improvement process when directed by their SQE or as part of APQP. MQV is a

tool for identifying past and potential defects and ensuring that those defects cannot reach Atmus or its customers. Atmus uses MQV as an APQP tool and as a tool to drive continual improvement.

For electronics components, suppliers are expected to evaluate the manufacturing process for the application of Process Average Testing (PAT). This should be discussed with the Atmus SQE for appropriate application of PAT.

Atmus expects suppliers to monitor the outputs of their quality system and continually improve in quality, service, and cost. This philosophy should be fully deployed throughout the supplier's organization. Continual improvement in product characteristics means optimizing at a target value and reducing variation around that value. This assumes that product characteristics currently meet specifications. Atmus customers have high expectations of the quality of the Atmus products and to meet these expectations we are equally demanding of our supply base.

Suppliers are expected to apply continual improvement techniques to non-product characteristics that impact quality, service, and cost such as machine downtime, floor space utilization, first-time PPAP approvals, testing methods, process flows, etc. Lean manufacturing methods are a proven way of achieving these improvements and are encouraged by Atmus.

SQPM is an escalation process used by the Atmus Supplier Quality function in collaboration with other cross-functional teams (Plant Quality, Purchasing, Corporate Quality, etc.) in the event a supplier has adverse quality trends and/or repeat non-conformance, and Supplier has failed to meet the agreed upon continual improvement plan. SQPM process includes Focus, SIP, WIN and KEPT. If a supplier is formally assigned to one of the SQPM processes (Focus, SIP, WIN or KEPT), SQE will notify the supplier. The respective supplier quality team should work with Atmus SQE to develop the improvement plan based on areas of improvements. Suppliers shall graduate from Focus, SIP, WIN, or KEPT processes by implementing, documenting, and meeting the agreed graduation targets, improvement plan/glidepath and obtaining a signoff from Atmus. SQE will escalate the supplier to the next escalation process if the supplier fails to meet the graduation targets or agreed-upon improvement plan. The supplier shall participate in Controlled Shipping/Consequential Management activities, which may include third-party containment/component certification processes that are provided at supplier's expense. These actions will be implemented in the direction of Atmus Supplier Quality Leadership and will be monitored at a senior level at Atmus. Supplier's senior management must actively participate in any quality improvement efforts.

## **CC. Forms**

Many forms utilized by Atmus are referenced through PPAP, APQP, etc. Of all those referenced forms, the one that is required to be used without modification is the Part Submission Warrant (PSW) illustrated in PPAP. Other referenced forms (e.g., the control plan in APQP), are preferred to be used without modification; however, supplier-modified forms are acceptable provided all information contained on the reference format is included.

Other forms utilized by Atmus may be Atmus-required (e.g., Advanced Quality Planning Status Report) or Atmus-preferred (e.g., SCAR Worksheet). The Atmus SQE will answer supplier questions on whether a form must be used without modification (Atmus-required) or if the form may be



substituted with a form meeting the intent (Atmus-preferred).

## DD. References

References cited by this document are the latest versions available at the date of publication. When a cited document is revised after the date of publication, the newer version shall apply.

### A. References cited in these Customer-Specific Requirements

- Automotive Industry Action Group (AIAG) North American Automotive Quality Core Tool Manuals Current Editions.
- Chrysler, Ford, General Motors Advanced Product Quality Planning and Control Plan (APQP): Second Edition July 2008.
- Chrysler, Ford, General Motors Production Part Approval Process (PPAP), Fourth Edition, March 2006.
- Chrysler, Ford, General Motors Failure Mode, and Effects Analysis (FMEA), Fourth Edition, June 2008.

### AIAG Quality Manuals

- CQI-8: Layered Process Audit Guideline, 2<sup>nd</sup> Edition
- CQI-9 Special Processes: Heat Treat System Assessment, 3<sup>rd</sup> Edition
- CQI-11 Special Process: Plating System Assessment, 2<sup>nd</sup> Edition
- CQI-12 Special Process: Coating System Assessment, 2<sup>nd</sup> Edition
- CQI-14: Automotive Warranty Management, 3<sup>rd</sup> Edition
- CQI-15 Special Process: Welding System Assessment
- CQI-16: ISO/TS 16949:2009 Guidance Manual
- CQI-17 Special Process: Soldering System Assessment
- CQI-19: Sub-tier Supplier Management Process Guideline
- CQI-23 Special Process: Molding System Assessment
- CQI-27 Special Process: Casting System Assessment, latest edition
- CQI-28 Traceability Guidelines, latest edition

### Software Process Assessment

- Capability Maturity Model Integration (CMMI)
- VDA-Automotive SPICE (Software Process Improvement and Capability Determination)

### ISO Standards

- ISO 9001:2015 “Quality Management Systems – Requirements”

### International Automotive Task Force (IATF) Publications

- IATF 16949:2016 “Fundamental quality management system requirements for automotive production and relevant service parts organizations”

- Automotive Certification Scheme for IATF 16949; Rules for achieving and maintaining IATF recognition; 5<sup>th</sup> Edition for IATF 16949, 1 November 2016.

Purchasing and Supplier Quality Documents and Applications

- Supplier Portal ( <https://atmus.com/supplier-portal> )
- AQMS
- Supplier Scorecard
- MQV (Manufacturing Quality Verification) Tool
- Atmus Suppliers Guide to Prohibited and Restricted Substances

## EE. REVISION LOG

| Page | Description     |
|------|-----------------|
| ALL  | Initial release |