Dana Off-Highway is now part of Allison

Allison Off-Highway

Drive and Motion Systems

Supplier Quality and

Development Manual

18-May-2026

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Our Purchasing Vision

At Allison Off-Highway Drive and Motion Systems ("Allison Off-Highway"), we believe in sustainable value creation and achieve this through an organized supply chain. We carefully select suppliers based on a variety of factors, including total cost of ownership, quality, reliability, and timely delivery. Building strong relationships with our suppliers is a key value for us. We aim to create long-lasting and sustainable relationships with a select group of suppliers worldwide, based on trust, high standards, and mutual benefits. Our formalized relationship management system enables us to collaborate with strategic suppliers to embed sustainable joint value creation through strong relationships.

As we continue to experience fast-paced growth in international markets, we face increased complexity. To achieve our goals, we need our suppliers to share the same vision and work with us to achieve mutual benefits. Leveraging the global economy helps us elevate our competitiveness and that of our suppliers. By reducing costs and adopting a stronger business model, we can align with customer values and increase market opportunities.

Introduction

Allison Off-Highway expects excellence from its suppliers in every aspect of their performance within the global vehicular supply chain. This Supplier Quality and Development Manual[1] (a.k.a. "Supplier Quality Manual" or "Quality Manual" or "Manual") sets forth Allison Off-Highway's expectations and requirements of its suppliers. Allison Off-Highway's business relationships with its suppliers are based on the requirements specified in this Manual, as well as the specific terms and conditions of the contract and/or purchase order (collectively, "Contract") related to your transaction(s) with Allison Off-Highway. In case of any inconsistency between this Manual and the Contract, the Contract will take precedence.

To meet the world-class expectations of our customers, Allison Off-Highway has established appropriate standards to ensure the safety, quality, and sustainability of our products, and the stakeholders impacted by our business. The requirements set forth in this Manual are required of every Allison Off-Highway supplier worldwide. These common requirements allow Allison Off-Highway to assess all suppliers based on equal expectations and performance standards.

[1] This version of the Manual supersedes all previous versions of the Manual and may be updated and modified by Allison Off-Highway on a periodic basis.

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A. Business Conduct

Allison Off-Highway is committed to doing business in an ethical manner and with respect for our people and the communities in which they live. We expect the same of our suppliers. In support of this objective, Allison Off-Highway has established a "Supplier Code to Business Conduct" which is part of every supply agreement between Allison Off-Highway and its suppliers. To access and review Allison Off-Highway Supplier Code of Conduct, please utilize the following Link Allison-Transmission-Supplier-Code-of-Conduct-SCoC or visit https://www.allisontransmission.com/suppliers.

B. Supplier Registration

All suppliers of production goods and materials must be registered to LiveSource https://oh.livesource.com/ to provide Allison Off-Highway with critical contact and organizational data. Registration is required for each Supplier location that does business with Allison Off-Highway. Suppliers should work with their Allison Off-Highway Buyer to register and receive the required log-in credentials and password. Once registered, the Supplier will be required to supply additional data in the system. Suppliers are expected to keep their data up-to-date and current including, but not limited to the following:

- All quality and environmental system registration certificates
- All applicable AIAG CQI assessment documents are to be on the latest version released by AIAG
- Current contacts for all key roles within the Supplier organization, and
- Supplier data card.

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1. Performance Objectives

Allison Off-Highway has the following performance objectives:

a) Quality
- Zero Quality Incidents
- Zero Customer Pass Through or Warrant Incidents
- Zero Quality Defects Per Million Parts (PPM)

b) Delivery
- 100% On Time

c) Lean Manufacturing and Lean Processing
- Best- In- Class Cost

d) Best-In-Class Technology

e) Well-executed product launches
- Supplier Driven APQP Process
- Achieve perfect PPAP approval on the first submission, delivered on schedule
- 100% Safe Launch Process Compliance

f) Business Conduct and Commercial Standards
- Suppliers Guide to Business Conduct
- Capacity / Contingency Planning
- Zero supply termination without prior Allison Off-Highway approval

g) Diversity Hiring and Sourcing Activities when required by Allison Off-Highway or the end customer.

h) Compliance with Allison Off-Highway 's Supplier Code of Conduct

i) Full participation in the Technical Review Assessment (TRA) process is required prior to sourcing.

j) Achievement of Strong Supplier Scorecard Ratings
- Quality Performance
- Sustainability
- Cost
- Financial
- Partnership

The above objectives reflect Allison Off-Highway's commitment to excellence, which we expect our suppliers to embrace. Failure to successfully meet the requirements may require the activation of an improvement plan by supplier, periodically monitored by Allison Off-Highway, and if not effective, may result in New Business Hold or loss of business.

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2. Supplier Assessment Processes

2.1. Supplier Systems Assessment

The objective of Allison Off-Highway's Supplier System Assessment ("SSA") is to identify potential suppliers who have compatible and complimentary operational systems and controls, and to allow Allison Off-Highway to periodically evaluate current suppliers to ensure those systems and controls are being sustained. Allison Off-Highway's customers may have additional requirements beyond what is described below. Allison Off-Highway's suppliers and sub-suppliers are expected to satisfy these additional requirements when requested.

The purpose of the SSA is to identify potential performance or supply risks to Allison Off-Highway or its end customers prior to sourcing. Key system factors evaluated include quality, health and safety, environment process, logistics / packaging, APQP, design, change management, people, leadership, cost, special processes modules and AIAG Supplier Assessments critical to producing Allison Off-Highway products. The special processes modules (SPM) within the SSA include Casting (Iron & Aluminum), Aluminum High Pressure Die Casting, Functional Safety, Machining, Stamping, Tubing Mill, Forging, Formed Gears, Taper Roller Bearings, Steel and Aluminum Mill processing, Fasteners, Product Cybersecurity, PCBA, Connectors and Wiring Harnesses. AIAG Supplier Assessments are to be completed annually and include Heat Treat (CQI-9), Plating (CQI-11), Coating (CQI-12), Welding (CQI-15), Soldering (CQI-17), Plastic Molding (CQI-23), Casting (CQI-27), Brazing (CQI-29) and Rubber Processing (CQI-30). All AIAG CQI Assessments must be to the latest released version, that can be found at https://www.aiag.org/quality/special-process-assessments. Suppliers must ascertain an Approved Status to the base assessment, all applicable special process modules and upload all applicable AIAG Supplier Assessments to their profile page at http://oh.livesource.com to become an approved supplier to Allison Off-Highway.

Allison Off-Highway's Supplier Assessment Process applies to Tier 1 suppliers to Allison Off-Highway however Allison Off-Highway expects its Suppliers to enable Allison Off-Highway to conduct assessments of the Supplier's sub-suppliers upon request. Allison Off-Highway will evaluate when an audit is required for Steel Mills, Aluminum Mills, Raw Casting or any other process suppliers regardless of tier level, prior to sourcing.

Typically, SSA's are reviewed prior to sourcing. Suppliers whose Quality Performance, as shown in our Supplier Performance Feedback System, has conformed to Allison Off-Highway's performance targets, will be required to complete and submit a self-assessment. Self-assessments are re-evaluated on an annual basis.

2.2. Process Audit

Allison Off-Highway may conduct a process audit at its discretion to minimize risk to Allison Off-Highway and Allison Off-Highway's customers. The purpose of a process audit is to obtain a focused analysis of a single production line or product/part family. This is achieved by means of a thorough review of a supplier's capacity, special characteristic capability, process controls and associated documentation to ensure the Supplier's product(s) complies with Allison Off-Highway's drawings and specifications requirements and the required capacity.

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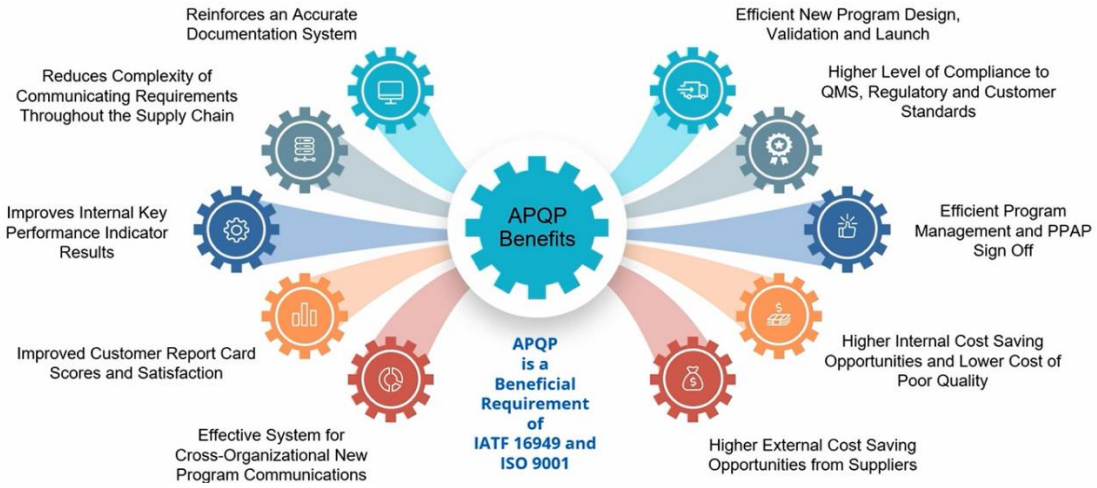
3. TRA and APQP Processes

Allison Off-Highway's Technical Review and Assessment (TRA) process exists to review and provide a clear understanding of Allison Off-Highway's expectations for all new purchased products, including clarification on part requirements and specifications, critical characteristics, and timing. By going through this process, potential risks to both Allison Off-Highway and our suppliers are reduced prior to a formal business award.

Suppliers must submit documentation demonstrating full compliance with all elements of the latest edition of the AIAG APQP Manual ("APQP Requirements") prior to new or significantly modified production products/services to Allison Off-Highway. The latest official version of the APQP Requirements is located at http://www.aiag.org.

To complete APQP process, the Supplier may be required to use the **e-APQP module** in the LiveSource portal. Suppliers that are unfamiliar with the e-APQP module should refer to the **e-APQP training manual** e-APQP Suppliers Manual.



3.1. Technical Review and Assessment (TRA) Process

The meeting will be hosted and led by the Allison Off-Highway Buyer and can be held at either the Allison Off-Highway or potential supplier location, or on a conference call. All relevant drawings and specifications must be provided to the supplier for their review prior to the meeting, by the buyer, who obtained them from the Product Engineer or relevant PLM system at the time the request for quotation was sent.

It is expected that the Supplier and Allison Off-Highway teams will devote enough time to the TRA to ensure the feasibility of the part design, leaving little to no open issues at the time a sourcing decision is made.

The output of the meeting is to assure Allison Off-Highway that the potential supplier has a clear understanding of Allison Off-Highway's requirements and can deliver products to those requirements at the quoted price. Additionally, suppliers should work through their process and timing and identify any problems or exceptions leading to a supplier change request. The buyer will then make the appropriate sourcing decision for a component, after each supplier quoting on that component has been involved in a Technical Review.

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There are multiple triggers that will cause a Technical Review to be completed. Those triggers are as follows, but not limited to:

- If the products being sourced are new part
- If the products are new to the supplier being considered for sourcing.
- If there are any customer attachment points or pass-through characteristics on the supplier product
- If new or proprietary technology to Allison Off-Highway is being used
- If the parts being sourced are defined as safety related components
- If the supplier being considered has a history of pass-through defects
- If the supplier is new to Allison Off-Highway
- If an existing Allison Off-Highway supplier and the current 6-month PPM is above the commodity target
- If the part or assembly is being sourced or resourced across international borders

The phased technical review was developed for parts that are new, unique, different, or difficult (NUDD) and require early development conversations for design for manufacturing, feasibility, technology, and cost feedback ahead of full design release. The commodity team will specify which phase TRA should be completed.

3.2. Supplier APQP Process Initiation

To be able to use the e-APQP module in LiveSource, the Supplier organization and responsible APQP contacts must be registered in LiveSource. If supplier already has an existing account in LiveSource, the LiveSource administrator can registered the new user into their account.

The Allison Off-Highway Supplier Development Engineer (“SDE”) Project Coordinator will initiate the APQP in LiveSource to the Supplier’s organization. To initiate the APQP documentation, the Supplier must review the performance milestones and acknowledge them in the draft APQP document. Any potential delays identified by the Supplier must be reported in e-APQP Supplier Acknowledgement section of the draft APQP document. If e-APQP is not used, then any project delays to the project milestones must be clearly communicated as soon as the delay is known.

3.3. Supplier APQP Process Execution

The Supplier is required to follow the APQP process by completing all elements of the APQP document and publishing each section for SDE approval. All published APQP elements and associated tasks are reviewed to assure satisfaction of program requirements. Supplier’s published APQP data will be either approved or rejected by the Allison Off-Highway SDE. Rejected elements must be corrected by the Supplier and again published for approval.

If an APQP requirement is inconsistent with Allison Off-Highway specifications, then the Supplier must submit the Supplier Change Deviation Request.xls. Suppliers must receive Allison Off-Highway’s approval for requested change/deviation prior to shipping product to any Allison Off-Highway facility.

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3.4. PPAP and Supplier Safe Launch

After APQP elements are satisfactorily completed, the Supplier will submit PPAP documentation package in the LiveSource e-PPAP module or as designated by the Allison Off-Highway receiving plant. A PPAP request with the required PPAP level will be generated by the Allison Off-Highway receiving plant's purchasing or quality representative.

Upon PPAP submission in e-PPAP module, the Supplier will confirm that PPAP is submitted in the e-APQP module (when required). The Supplier will record PPAP approvals in the appropriate sections of e-APQP when granted in the e-PPAP module (when required).

Safe Launch is required at initial sample submission, including Prototype samples, regardless of part maturity level. Safe Launch process is included in APQP, and supplier shall conform to the Safe Launch requirements outlined in this Manual.

3.5. System Improvement

One of the goals of the APQP process is to improve Supplier's operating systems over time. The effectiveness of the APQP process is measured by Supplier's ability to meet the goal of successful launches. The efficiency of the APQP process (i.e. the effective use of resources) to successfully launch a new product will be improved, through suggestions and findings of its participants. At any stage in the APQP process, your organization may submit improvement ideas through your assigned SDE ("Supplier Development Engineer").

4. Allison Off-Highway Specific Requirements

4.1. Quality System

Allison Off-Highway's commitment to quality is the cornerstone of our supplier relationships. We view this as a partnership built upon trust, rigorous standards, and unwavering transparency.

All suppliers are required to achieve and maintain either IATF 16949 or ISO 9001 quality management system certification. Suppliers must provide documentary evidence of their certification status in their LiveSource profile, including any relevant AIAG Supplier Assessment documents, such as:

CQI-9 Heat Treat	CQI-15 Welding	CQI-27 Casting
CQI-11 Plating	CQI-17 Soldering	CQI-29 Brazing
CQI-12 Coating	CQI-23 Plastic Molding	CQI-30 Rubber Processing

The AIAG Self-Assessment documents must be included in the suppliers' internal audit programs and must be performed annually. Suppliers who are unsure about the applicability of specific CQI documents should contact their designated Allison Off-Highway representative for guidance.

Suppliers must immediately notify Allison Off-Highway of any changes to their third-party quality certification status, including notifications if a supplier's certification is withdrawn or cancelled. This ensures Allison Off-Highway maintains accurate records of supplier quality standing.

Suppliers are responsible for documenting their processes to ensure that all products, processes, and services supplied to Allison Off-Highway comply with current applicable statutory and regulatory requirements.

Suppliers must also adhere to any Allison Off-Highway end-customer specific requirements.

Refer to the Off-Highway Product Group Specific Requirements **OFDTPD00007**: OH Global Specific

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Supplier Requirements (GQG-022) available from assigned Allison Off-Highway Supplier Development Engineer.

4.2. Supplier's Quality Manuals

This Manual is applicable to the entire supply chain and Supplier should maintain a Supplier Quality Manual for their sub-suppliers. Allison Off-Highway may review this manual at any time upon request and with appropriate confidentiality protection in place.

4.3. Engineering Specifications

Allison Off-Highway provides engineering specifications during new business quotations, current business updates, and within and on product drawings. Suppliers are responsible for communicating with Allison Off-Highway to ensure that they possess and fully understand all engineering specifications related to the products supplied to Allison Off-Highway.

4.4. Record Retention

All records related to the manufacture of products supplied to Allison Off-Highway must be retained for the life of the applicable vehicle program plus ten (10) years (15 years for safety-designated items) or such longer periods as may be required by Allison Off-Highway's end customer. These obligations are in addition to any other record retention obligations existing in the applicable supply agreement.

4.5. Special Characteristics

Any special characteristics defined on Allison Off-Highway drawings and/or in Allison Off-Highway engineering specifications shall conform to the "Allison Off-Highway **Special Characteristics"** requirements found in Special_Characteristics_Definitions.doc

Suppliers shall produce evidence that statistical process control is being continuously used in the manufacture of products it supplies to Allison Off-Highway, to ensure stable and capable processes.

4.6. Embedded Software and Related Hardware

For suppliers of product-related embedded software, or products containing embedded software, Allison Off-Highway requires that the Supplier establish and maintain a software/hardware quality assurance process. Additionally, the Supplier must also maintain, a software/hardware development capability assessment methodology and related documentation.

These quality assurance requirements also apply to related electronic hardware where it is involved with the functionality of the software. The above quality assurance requirements must also be implemented in cases where the electronic hardware is being developed by the Supplier for use with embedded software developed by Allison Off-Highway or other entities.

The above activities are in addition to any functional safety or cyber-security requirements separately communicated to Supplier by Allison Off-Highway.

During sourcing evaluations or otherwise, Allison Off-Highway may review and audit Supplier's processes and systems to determine if Supplier's practices satisfy the above requirements, and Allison Off-Highway's Software/Hardware Quality Assurance Standards which include conformance to CQI-34, AIAG Software Assurance Approval Process and/or A-Spice, and ISO 16262.

4.7. Product Safety

The Supplier shall maintain documented processes (including, where applicable, chemical

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management) for the manufacture of product-safety related products which shall include, but not be limited to the following, where applicable:

a. identification and notification to Allison Off-Highway of statutory and regulatory product-safety requirements.
b. when directed by Allison Off-Highway, special approval by Allison Off-Highway Quality is required for control plans and Failure Mode and Effects Analysis ("FMEA")s.
c. identification of product safety-related characteristics.
d. identification of and controls for safety-related characteristics of product at the point of manufacture.
e. reaction plans and an escalation process when acceptance criteria, such as product performance or product specifications are not met.
f. defined responsibilities, and process flow for information, including top management, and Allison Off-Highway notification.
g. training identified for Supplier personnel involved in product-safety related products and associated manufacturing processes as established by the Supplier and/or Allison Off-Highway and its customer(s).
h. low-down of requirements with regard to product safety throughout the supply chain, including Allison Off-Highway-designated sources.
i. product traceability by manufactured lot (at a minimum) throughout the supply chain, acceptable to Allison Off-Highway.
j. lessons learned for new product introduction.

NOTE: All changes in products or processes affecting products supplied to Allison Off-Highway must be evaluated for potential effects on product safety and approved by Allison Off-Highway prior to implementation in accordance with the Change Management section of this Supplier Manual.

4.8. Production Part Approval Process (ePPAP)

Allison Off-Highway requires all Suppliers to conform to the latest edition of the AIAG Production Part Approval Process Reference Manual, located at http://www.aiag.org and/or the latest edition of VDA2 PPA Manual, as per final customer specific requirements. For Automotive products, requested levels are level 3 AIAG / level2 VDA2. For Off-Highway products, suppliers must submit PPAP documentation according to specification OFDTPD00007: OH Global Specific Supplier Requirements (GQG-022). All submissions must be in the English language, unless otherwise specified in the governing supply contract. PPAP submission is at the Supplier's expense.

The PPAP may be required to include a Run@Rate analysis of 8 hours or as agreed upon by the Allison Off-Highway receiving plant quality. The analysis must include required changeovers and unplanned downtime. In a Run@Rate analysis lacking changeovers, scrap, or unplanned downtime, the supplier must reduce the available production time to reflect expected losses, using historical changeover, scrap, and downtime data from similar processes. Suppliers must ensure that required volumes can be supported within existing production equipment and facility resources.

Where specific packaging requirements are not specified in the applicable Contract or on the Allison Off-Highway product drawing or engineering specification, Suppliers must document their proposed packing method on the Supplier Packaging Form Rev.2.xls or using such specific format as agreed upon by the receiving Allison Off-Highway plant or end customer. The packaging plan must satisfy the APQP/PPAP requirements and be included as part of the Supplier's PPAP submission. The packaging specification must be approved by Allison Off-Highway receiving facility Quality Manager.

Suppliers must submit a current PPAP to all Allison Off-Highway facilities and any new Allison Off-Highway receiving sites, receiving previously PPAP approved carryover parts. If revalidation submission has been validated within one year, those elements may be included in the PPAP submission. The Supplier furnishing the carryover part will be advised when this requirement applies by the respective Allison Off-Highway Facility.

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Suppliers of products being PPAP'd for the first time and shipped to multiple Allison Off-Highway facilities must submit the complete PPAP to the Allison Off-Highway facility designated on their Purchase Order. IMDS submission may be required, and all communication shall reference the IMDS code provided by the Allison Off-Highway's receiving plant. The additional Allison Off-Highway receiving locations will contact the Supplier if a separate PSW is required.

If a supplier is authorized by Allison Off-Highway to ship the same product from multiple manufacturing sites, Supplier must submit PPAP from each manufacturing site and obtain the PPAP approval of each of the Allison Off-Highway Receiving Facilities, in addition to Allison Off-Highway Engineering and Allison Off-Highway's end customer where applicable.

Allison Off-Highway reserves the right to request the submission of a new PPAP at any time.

4.9. Safe Launch Early Containment

Safe Launch Early Production Containment requires a pre-launch control plan that represents increased inspection frequencies and redundant checks for targeted features compared to the supplier's production control plan and raises the confidence level to ensure all products shipped will meet Allison Off-Highway's requirements. The pre-launch control plan will also serve to validate the production control plan. The pre-launch control plan should take into consideration all known critical conditions of the part as well as potential areas of concern identified during PPAP. The purpose of Safe Launch early containment is to:

- Validate the supplier's production control plan
- Protect Allison OH's assembly and manufacturing centers and service part warehouses from quality non-conformances
- Ensure any quality issues that may arise are quickly identified, contained and corrected at the supplier's location
- Increase involvement and visibility of the supplier's top management

The supplier shall work with the Allison Off-Highway SDE to define the duration of the Safe Launch containment and the characteristics that will be inspected. The Safe Launch plan shall be documented in the Allison Off-Highway quality system as part of the APQP and PPAP submissions. The supplier shall designate a separate area in their facilities for the Safe Launch containment activity.

4.9.2. Safe Launch Plan Development:

The supplier shall establish a Safe Launch plan that contains the following elements:

- Identification of staff personnel responsible for ensuring the development and implementation of the verification process
- Safe Launch entry date, exit criteria and exit date as defined by Allison Off-Highway
- Containment stations which must be off-line; separate and independent checks from the normal manufacturing process and should be located at end of process. In-process containment stations may be utilized and must be documented and approved by the Allison Off-Highway SDE
- Additional inspections, testing and dimensional checks required at the Safe Launch containment station based on Special Characteristics, critical measurement points, high risk characteristics or issues identified during product and process development
- Trained personnel related to the standardized work performed at the Safe Launch containment stations
- An audit process of the Safe Launch containment utilizing levels of management (layered audit), including site leadership, to ensure conformance to the pre-launch control plan
- The subcontractor (tier two) shall be included in the validation process

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- Data submission to the Allison Off-Highway SDE for all Special Characteristics and critical measurement points
- An overall visual inspection of the part for gross manufacturing defects and general workmanship (e.g., surface defects, cast defects, discoloration, omitted part features, etc.)
- Increased frequency of sample size from that stated in the production control plan
- Verification of packaging and label requirements, including service and accessory part requirements, which may include country of origin labels on parts
- Verification of the effectiveness of error proofing
- Immediate implementation of containment and irreversible corrective action when a single non-conformance is discovered in the Safe Launch containment area or at the receiving location

4.9.3. Safe Launch Required Documentation:

The supplier shall document:
The pre-launch control plan using the control plan format that is referenced in the AIAG APQP reference manual. The pre-launch control plan is not a substitute for the production control plan but is an addition to the production control plan and is used to validate it.
Inspection work instruction for the Safe Launch containment station to ensure standardized work.
Evidence of execution and validation of the control plan utilizing the OFDTFCD00020 Supplier Safe Launch Activity Worksheet or another format agreed upon by the Allison Off-Highway SDE.
The SDE shall determine and communicate the required reporting frequency for the OFDTFCD00021 Supplier Controlled Shipping Chart. The data must be readily available at any time for review upon the SDE/SQE request.

4.9.4. Duration of Safe Launch:

Safe Launch must be implemented for a period of time or quantity of parts as agreed by the Allison Off-Highway SDE. At a minimum, Safe Launch will remain in effect the next three (3) production runs, as well as all service parts

Safe Launch inspection is mandatory for 100% of all parts required during the Safe Launch period. Based on documented acceptable performance, which includes no issues identified at Safe Launch or at Allison Off-Highway, the Allison Off-Highway SDE may approve a reduction of the 100% inspection requirements after manufacturing validation builds at Allison Off-Highway. This must be documented and approved by the Allison Off-Highway SDE.

4.9.5. Safe Launch Identification:

To indicate compliance with the Safe Launch requirements, attach to each shipping label on two adjacent sides of each package, signed or initiated by the staff person accountable for ensuring proper implementation of Safe Launch.

4.9.6. Safe Launch Exit Criteria:

The supplier will be eligible to exit Safe Launch after validating the effectiveness of the Process Control Plan and shipping the number of pieces required to meet production requirements as specified by Allison Off-Highway for the Safe Launch period with no problems identified in the Safe Launch or at Allison Off-Highway. If the supplier is unable to meet the exit criteria or the supplier's Safe Launch plan continues to identify nonconformances, the supplier shall continue the necessary containment measures to insulate Allison Off-Highway until the quality concerns have been resolved to the satisfaction of both the supplier and Allison Off-Highway, and the supplier's production control plan is validated.

If a problem is identified in Safe Launch or at Allison Off-Highway, the duration restarts after corrective action is implemented, and Safe Launch must remain in effect for the specified amount of time as originally designated. If the Safe Launch plan continues to identify non-conformances, it must be kept in place until process controls and capabilities have proven effective, and the production control plan is validated.

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Final exit of Safe Launch will be completed by written acceptance of the final submission of the OFDTFCD00020 Supplier Safe Launch Activity Worksheet and OFDTFCD00021 Supplier Controlled Shipping Chart or another document originally agreed upon by the Allison Off-Highway SDE/SQE.

4.9.7. Safe Launch Consequences Of Shipping Non-Conforming Material

Failure to execute Safe Launch or shipment of non-conforming material during Safe Launch may result in Restricted Shipping Level 2 (RS2) and other possible consequences.

4.10. Approved / Designated Sources

The use of Allison Off-Highway or Allison Off-Highway's end customer directed sources, including tool / gauge suppliers, does not relieve your organization of the responsibility for ensuring the quality of the source's products or compliance with all other supply agreements

4.11. Sub-Tier Supply Chain Control

Supplier is responsible for and must manage the performance of its sub-supplier(s) including, but not limited to, quality and delivery. This obligation extends to suppliers directed by Allison Off-Highway or Allison Off-Highway's customers. Upon request, any Allison Off-Highway supplier must provide evidence of its sub-tier approval and performance monitoring process.

4.12. Supply Capacity

Suppliers must manage deliveries to Allison Off-Highway according to the release / forecasts supplied by Allison Off-Highway. When releases / forecasts exceed a Suppliers' manufacturing or labor capacity, the Supplier must immediately notify their Allison Off-Highway Purchasing representative. The Supplier's notification to Allison Off-Highway does not relieve the Supplier of its obligation to deliver products in accordance with the applicable contract requirements and related delivery schedules. Suppliers must maintain an updated capacity verification/planning process to satisfy this obligation.

4.13. Allison Off-Highway Owned Tooling and Equipment

Allison Off-Highway owned tooling, and equipment shall comply with the terms and conditions of your Contract as well as marking/tagging and documentation requirements delineated in the Supplier Tooling Guidelines included in this Manual.

Suppliers must complete and maintain the LiveSource tooling information field and upload photo(s) showing completed tooling and complete the final itemized tooling breakdown forms. To release the final payment, Allison Off-Highway requires all tooling information in LiveSource to be accurate and complete, and the product to be PPAP approved by Allison Off-Highway.

4.14. Allison Off-Highway End-Customer Owned Tooling

Suppliers shall comply with all Allison Off-Highway end customer tooling requirements and documentation requirements. Supplier must complete the Allison Off-Highway end customer's customer paid tooling ("CPT") form(s) and upload them into LiveSource. Final tooling payment will not be authorized until all tooling information in LiveSource is accurate, complete and approved by Allison Off-Highway's end-customer.

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4.15. Environmental Protection and Sustainability, Health and Safety

In addition to the obligations set forth in the Allison Code of Conduct, Suppliers must also comply with the following obligations:

4.15.1. Sustainable Environmental Practices:

Suppliers must create and implement a written Environmental Policy as the basis for their environmental management and sustainability program. This policy must include commitments to:

4.15.1.1. **Legal Compliance:** Adhere to all applicable local environmental laws and regulations, including a process for compliance review and corrective action.

4.15.1.2. **Environmental Management System (EMS):** Establish and maintain an EMS with clear objectives, targets, and improvement plans to minimize environmental impact. Key areas of focus include:

- **Air Emissions Reduction:** Minimize on-site air emissions through process improvements, material substitutions, reduced fuel combustion, and effective filtration.
- **Greenhouse Gas (GHG) Emissions Reduction:** Reduce Scope 1, 2, and 3 GHG emissions across facilities and the value chain, with a communicated reduction target and timeline. Allison Off-Highway encourages science-based targets.
- **Water Consumption Reduction:** Minimize water use, especially in water-stressed regions, through conservation and reuse programs.
- **Waste Reduction:** Implement the 4Rs (remove, reduce, reuse, recycle) to minimize waste generation.
- **Material / Substance Composition:** Supplier products must not contain banned or restricted substances, including those classified as hazardous for health (e.g., carcinogenic, mutagenic, toxic for reproduction), as defined by:
  - Customer-specific requirements.
  - Applicable laws and regulations.

4.15.2. Registration, Evaluation, Authorization and Restriction of Chemicals (REACH):

- All substances in proposed chemical products must be reviewed and approved by the EHS department.
- Supplier products must not contain substances hazardous to health or banned substances, including those on the REACH Candidate List. Refer to the latest CAS classification at: https://echa.europa.eu

4.15.3. Compliance with Other Regulations and Lists:

- Suppliers must comply with substance restrictions outlined in:
  - Annex 14, Annex 17, and the End-of-Life Vehicle (ELV) directive, as defined in the Global Automotive Declarable Substance List.
  - Substances of Concern in Articles or Products (SCiP) reporting requirements.
  - Toxic Substance Control Act (TSCA) for imported toxic substances.
  - Per and Polyfluoroalkyl Substances (PFAS) restrictions.
  - Restriction of Hazardous Substances directive (RoHS).
  - California Proposition 65.
  - Asbestos is strictly prohibited in all products.

4.15.4. Conflict Minerals:

- Suppliers must identify and inform Allison Off-Highway about any products containing "Conflict Minerals" as defined by U.S. law, including the origin of raw materials.
- Use the latest Conflict Minerals Reporting Template (CMRT) and Extended Minerals

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Reporting Template (EMRT) found at:
https://www.responsiblemineralsinitiative.org/reporting-templates

For further guidance see www.mdsystem.com and / or your Allison Off-Highway Engineering contact. All communication shall refer to the IMDS code provided by the Allison Off-Highway's receiving plant.

4.16. Warranty Management

Warranty claims will be managed through the Contract and Allison Off-Highway's non-conformity process. If a Supplier's product(s) fails to meet the warranty obligations of the Contract, then Supplier will be responsible for resulting costs and damage as established by the Contract and applicable law. Upon request by Allison Off-Highway, Supplier must provide evidence of root cause analysis of any performance failure or deficiency identified by Allison Off-Highway, its customer(s), or applicable government authorities, along with corrective action and containment of the affected product(s) as appropriate.

5. Change Management

All changes in product design, process, source, location, material, as well as equipment moves and/or deviation requests to the current PPAP approved level must be submitted to Allison Off-Highway in advance for formal approval through a Supplier_Change_Deviation_Request.xls. This requirement is in alignment to the latest version of AIAG PPAP manual, Section 3. This obligation includes all changes and/or deviations at Supplier's location and including sub-suppliers. This requirement also applies to any change resulting from any process or product improvement activity or processing changes related to any previous product nonconformance.

Suppliers must obtain written approval from Allison Off-Highway prior to implementation of any requested change or shipment of any product manufactured after implementation of any change or containing deviation to Allison Off-Highway specifications. It is important to submit change requests early, as some changes will require Allison Off-Highway and/or customer testing and often lengthy customer review and approval processes. While change requests are pending, Supplier is responsible to maintain existing quality and delivery obligations.

Suppliers will be responsible for the costs of any testing required by Allison Off-Highway or Allison Off-Highway's end customer(s) to validate the change / deviation, requested by the Supplier. Suppliers must also ensure that the proposed change will not have a negative impact on the performance of Allison Off-Highway or Allison Off-Highway's end customer's product. Any testing costs related to the Supplier's requested change / deviation incurred by Allison Off-Highway and / or Allison Off-Highway's end customer(s) will be communicated to the Supplier by their Allison Off-Highway Purchasing Representative and will be paid by Supplier in accordance with Allison Off-Highway terms.

Upon receipt of written Allison Off-Highway approval of a Supplier change request, Supplier is required to submit a new Level 3 PPAP or VDA2 Level 2 PPA unless the written approval from Allison Off-Highway specifies otherwise. The receiving Allison Off-Highway facility will advise if they require a PTR (Production Trial Run) and / or any change management lot control or identification. No production shipments shall begin until Supplier has received the approved PSW from the receiving Allison Off-Highway facility.

Upon receipt of written Allison Off-Highway approval of a Supplier deviation request, Supplier is required to notify the receiving Allison Off-Highway facility's Materials Department that it will be shipping deviated product. Shipments of deviated products to an Allison Off-Highway facility must have the deviation number clearly identified on each individual container as well as the shipping documentation.

Suppliers are responsible for all damage or costs incurred by Allison Off-Highway and/or Allison Off-

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Highway's end customers for a Supplier's failure to comply completely with the Allison Off-Highway Change Management requirements.

In addition, failure to follow the Allison Off-Highway Change Management process may result in New Business Hold or loss of business.

6. Non-Conforming Materials Requirements

Suppliers are responsible for regularly checking LiveSource for non-conformities and engaging with Allison Off-Highway to address corrective actions and cost recovery.

6.1. Non-Conformance Determination

A non-conformity is defined as a non-conformance in any product received by Allison Off-Highway to satisfy one or more of the following requirements:

- Material Specifications.
- Print Dimensions
- Material and Substance Specifications (including 4.15 requirements above).
- Engineering Specifications.
- Packaging Specifications.
- Mixed / wrong parts within a shipment.
- Improper identification of parts.
- Supplier provided product fails during the warranty period Allison Off-Highway has extended to their end customers.

Interruption to Allison Off-Highway's or its customers scheduled production, due to non-conforming or late shipments, will result in the issuance of a non-conformance and full cost recovery along with an administrative fee.

6.2. Non-Conforming Material Parts Per Million (PPM) Determination

The PPM assigned to a Supplier for non-conforming quantities of Products is determined by the number of discrepant pieces contained within a product shipment to an Allison Off-Highway facility with the following clarifications:

- One or multiple discrepancies on a product constitutes one defective piece.
- "Bulk Material" discrepancies are classified in the units the material is ordered (kg, Liters, lbs., etc.).
- Labeling issues are defined as one defective piece per incorrect label.
- Mixed products will be defined as the number of wrong products found in each correctly labeled container.
- The entire shipment quantity of deviated products parts will be considered discrepant unless the Supplier has sorted the shipment to identify the number of products to be covered by an approved the deviation:
  - If a Supplier notifies Allison Off-Highway of a defect, prior to its receipt by Allison Off-Highway, and requests the shipment be returned, then none of the products will be considered defective.
  - If the approved deviation results in a change to an Allison Off-Highway print, then none of the deviated parts will be considered discrepant.
- If discrepant products are sorted, the rejection quantities will be updated based on the sort results at Allison Off-Highway or supplier facility.

6.3. Supplier Notification of a Non-Conformance

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When a Supplier non-conformance has been identified, the non-conformance will be generated via LiveSource which will assign LS # for tracking. This notification will include the requirements for containment, material, response timing and the appropriate documents if an Allison Off-Highway end customer format for containment results is required. It is the Supplier's responsibility to proactively review Allison Off-Highway LiveSource for non-conformities assigned to the Supplier and to engage with Allison Off-Highway on timely response and remediation.

6.4. Supplier Initial response to a Non-conformance

Suppliers are required to respond to each non-conformance report within 24 hours of notification. The initial response must include the Supplier's containment actions, current production controls, product audits as well as all other Allison Off-Highway or Allison Off-Highway end customer specified containment requirements.

6.5. Restricted Shipping

Where restricted shipping is required, the receiving Allison Off-Highway facility will initiate the restricted shipping Process by means of a restricted shipping notification letter which will delineate the Supplier's responsibilities and the criteria that must exist to exit the process. All rejects to be documented and submitted on OFDTFCD00021 Supplier Controlled Shipping Chart.

6.5.1. Restricted Shipping Level I ("RS1")

It means that a Supplier must establish an additional 100% containment process at the supplying location to contain specific and / or specified product non-conformances. The Supplier must protect Allison Off-Highway from the receipt of non-conforming material. The additional 100% containment must be performed by the Supplier's employees, unless an alternative approach is approved by Allison Off-Highway, and must be in addition to the Supplier's normal production process controls.

Criteria for Application of RS1

Any nonconformance may result in the initiation of RS1 based on level of risk as assessed by the affected Allison Off-Highway facility. RS1 status may be established if the Supplier's current controls are deemed by Allison Off-Highway to be insufficient to ensure conformance to product specifications and requirements. Situations may include:

- Lack of, or inadequate response to product issues
- Repeat issues
- Pass-through defects that impact the customer
- Defects on significant or critical characteristics
- Defects related to safety or customer interface points
- Defects contributing to customer warranty

6.5.2. Restricted Shipping Level II ("RS2")

is a requirement that a Supplier implement a certified third-party (approved by the initiating Allison Off-Highway facility) containment process to contain for a specific Product non- conformance condition, while simultaneously implementing a root cause and corrective action problem solving process. The root cause identification and implemented corrective action must be verified as effective by the certified third party. The third-party containment is in addition to your normal production process controls as well as RS1 containment activities.

Criteria for Application for RS2

RS2 may be instituted at any Supplier that meets any of the following criteria:

- Failure for RS1 to effectively contain the discrepant product
- Significant repeat CAR, DMR and/or non-conformances, Major delivery or production disruptions (severity, quantity and duration of the issue may all be considered),

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- Major quality problems (i.e. safety-related defects, pass-through defects, customer complaints, warranty, etc.).

6.6. Root Cause(s) and Solution Identification

It is the Supplier's responsibility to confirm the root cause(s) of the discrepancy identified ASAP, with a target of three business days and to identify effective solutions to eliminate the true root cause(s). Suppliers shall demonstrate root cause validation on the required non-conformance response within 10 days of non-conformance notification. Allison Off-Highway may review the Supplier's root cause analysis. If Allison Off-Highway concludes that the Supplier's root cause measurement and analysis does not clearly validate the potential root cause(s), Allison Off-Highway may reject the Supplier's response to the non-conformance and Supplier will be required to continue its investigation.

Where root cause(s) have been effectively validated, as determined by Allison Off-Highway and/or the end customer, Supplier must propose a remediation plan to implement permanent solutions and verify their effectiveness. Where proposed changes impact the design or the PPAP approved processing of a product a ***Supplier Change / Deviation Request*** must be generated, referencing the LS number. (Reference the Change Management requirements section of this Manual).

The Supplier's remediation plan must be approved by Allison Off-Highway. If the plan is rejected, the Supplier must develop an alternative plan to address the problems identified in its root cause analysis to ensure that it can consistently supply conforming products.

6.7. Permanent Solution Implementation

Once Supplier's proposed remediation plan is approved, it is responsible, at its sole cost, to implement the plan. The relevant non-conformance(s) must be updated by Supplier to indicate progress towards plan implementation. Allison Off-Highway will monitor the progress based on milestones established for the planned activities. Where assistance is required to achieve the plan, the plan cannot be implemented as defined or it is determined that the plan will not solve the original problem, Supplier must notify Allison Off-Highway immediately.

6.8. Permanent Solution Effectiveness and System Changes

Supplier is responsible for providing evidence of the effectiveness of its remediation plan to prevent or control the root cause(s) on the non-conformity within thirty days of non-conformance notification. This evidence shall be included in the relevant non-conformance(s) response. If Allison Off-Highway concludes that the evidence does not clearly indicate satisfactory resolution, Supplier will be notified to include additional or more comprehensive evidence.

Suppliers must include appropriate updates to their Control Plan and FMEA as part of the evidence in its non-conformance response. In addition, Supplier should deploy corrective actions to similar products and processes to minimize the potential for other non-conformities and quality problems.

6.9. Non-Conformance Costs

Suppliers are responsible for all damage and costs incurred by Allison Off-Highway and/or Allison Off-Highway's end-customers because of Suppliers' supply of non-conforming goods, including a reasonable administration fee to be determined by Allison Off-Highway. All actual charges will be documented in the non-conformance and/or related debit memo(s).

6.10. Supplier Improvement Action Plan

Suppliers with poor performance (including but not limited to requirements outlined in this Manual) are required to develop a detailed corrective action plan in accordance with criteria established by Allison Off-Highway to address their performance deficiencies. The corrective action plan must be completed in accordance with Allison Off-Highway's established deadlines and submitted for Allison Off-Highway's

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review and approval prior to implementation of proposed corrective action.

Failure to successfully prepare and implement an acceptable correct action plan may result in Supplier being ineligible for new business or implementation of other rights or remedies by Allison Off-Highway.

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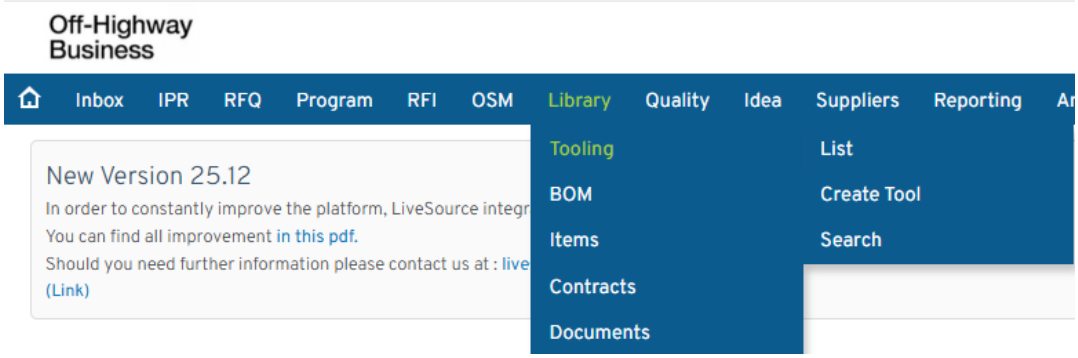
I. Supplier Tooling Guidelines

In addition to the requirements identified in the Buyer's Contract, the following provisions also apply to all Allison Off-Highway or Allison Off-Highway's Customer-owned Tooling provided by the Supplier.

a. Tooling Marking and Identification

All tools must be permanently marked as specified by Allison Off-Highway. Permanent marking includes metal tags, etchings or stampings. Allison Off-Highway will provide proprietary tags when required by Allison Off-Highway or Allison Off-Highway's customer.

Suppliers must submit acceptable photographs which clearly illustrate the Tool ID # and the tool's function/part configuration. Photos must be uploaded to http://oh.livesource.com.



Photos should include a close-up of tool ID number and function/part configuration as illustrated below. Photos must be labeled with the tool description as indicated in the Buyer's Tool Specification Form.

In addition to the required tooling documentation identified above, the following Tooling Documentation must also be submitted when:

1. Tooling located at a supplier, submit an approved PSW (Part Submission Warrant)
2. Tooling includes dies, photo above must be in an open position (see below)
3. Tooling includes multiple quantities of the same tool; each individual tool must be included in a single photograph.
4. Tooling includes final inspection gages, each gauge must be supported by a part print identifying the dimensions being checked by the gage and a print of the gage, if requested by Allison Off-Highway.

Please contact your Supply Chain Management Representative if you have any questions regarding these requirements.

b. Tooling Reimbursement

Where Allison Off-Highway has agreed to pay for tooling and / or tooling installation, the Supplier must submit its actual cost for the tooling including detailed invoices and satisfactory supporting documentation at http://oh.livesource.com

Allison Off-Highway Owned Tooling

If Supplier possesses Allison Off-Highway owned tooling, it must ensure the integrity and usefulness of the tool in respect to safe storage. Storage of all the tools must be kept in a dry location within your facility and stored off the floor. At no time shall the tooling be stored outside or exposed to outside weather conditions. Climate controlled areas are preferred but not mandatory.

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At no time is the Supplier permitted to scrap, modify or destroy Allison Off-Highway owned tooling without written consent from Allison Off-Highway.

All Allison Off-Highway owned tooling in Supplier's possession is held by Supplier on a bailment basis and Allison Off-Highway may, at any time, require Supplier to release such tooling to Allison Off-Highway upon reasonable notice. All Allison Off-Highway owned tooling must be identified and marked as the property of Allison Off-Highway and, to the extent possible, segregated from property of Supplier or other third parties. Supplier is responsible for maintaining appropriate insurance on Allison Off-Highway tooling in its possession and allow Allison Off-Highway access to inspect and take inventory of such tooling at any time upon reasonable request.

II. Website and Document Links

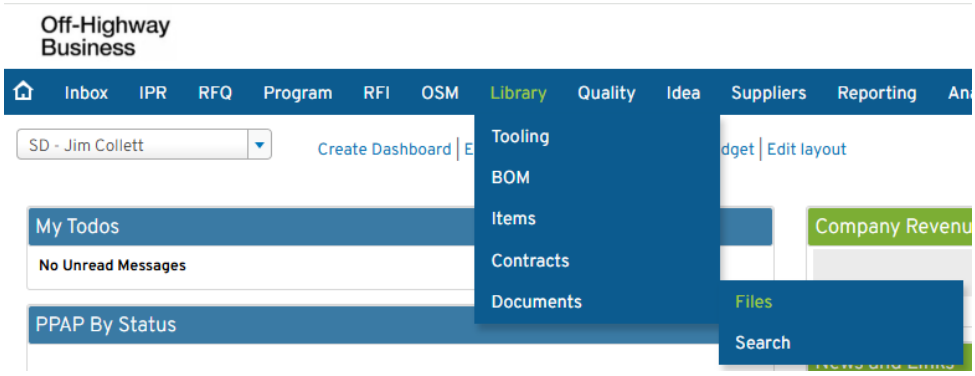
Title: Supplier Code of Conduct Link: Allison-Transmission-Supplier-Code-of-Conduct-SCoC.pdf

Title: Supplier Registration Link: http://oh.livesource.com

Title: AIAG Website, Advance Product Quality Planning, Production Part Approval, Continuous Improvement Training and Tools Link: http://www.aiag.org

Title: IATF Customers End Customer Specific Requirements Link: http://www.iatfglobaloversight.org

The Following documents can be found in LiveSource after logging into your supplier profile under Library/Documents/Files as displayed below



Title: Supplier APQP Training: E-APQP Supplier Training Manual
Title: Supplier Change / Deviation Request File: Supplier_Change_Deviation_Request.xls
Title: Supplier Packaging Form and Label File: Supplier Packaging Form Rev.2.xls
Title: Special Characteristics File: Special Characteristics Definitions
Title: OFDTPD00004 Supplier Prototype Parts Quality Requirements (GQG-001): OFDTPD00004
Title: OFDTPD00007 OH Global Specific Supplier Requirements (GQG-022): OFDTPD00007
Title: OFDTFCD00020 Supplier Safe Launch Activity Worksheet: OFDTPD00021
Title: OFDTFCD00021 Supplier Controlled Shipping Chart: OFDTPD00021

III. Revision History

Initial Release

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