Introduction

IMMI leads the way in designing, manufacturing, and testing advanced safety restraints and seating systems for millions of people around the world. Headquartered in Westfield, Indiana, IMMI’s footprint includes world class, state-of-the art manufacturing, engineering, testing and warehousing facilities in multiple global locations.

For more than five decades, IMMI has engineered and provided innovative safety products that help to protect those who use them. At IMMI, “Bringing Safety to People” is our way of life. As such, we provide special attention to design, build and test systems intended to help keep every member of the family safe; a baby in a car seat, children on a school bus, a truck driver on the road, a construction worker in the field, an adventurer in a sport utility vehicle, and many, many more.

We consider our suppliers to be partners who play numerous key roles in helping IMMI to satisfy our diverse customers and end users. Supplier focus should be on providing raw materials, components and subassemblies that meet or exceed IMMI requirements, specifications and drawings. Suppliers must satisfactorily demonstrate their own product and process capabilities, as well as document and maintain fully effective controls for the entire product development, manufacturing and supply chain processes. Each supplier should have robust change controls in place to ensure product consistency and to provide suitable validation of any necessary process changes.

To remain globally competitive and to exceed our own customers’ expectations, the IMMI quality focus must be on pursuing a zero-defect target. To satisfy our customers each and every time, our strategy for success must include working closely with our suppliers to foster a proactive culture of teamwork, continuous improvement, elimination of waste, improved response time and metric-driven management. It is required that all supplier partners comply with this approach.

The purpose of this Global Supplier Quality Manual is to clearly present IMMI expectations to existing and potential new suppliers of production materials and components coming into our IMMI manufacturing facilities. Our objective is to create a lasting customer/supplier relationship that is mutually beneficial. In that light, any successful long-term plan must focus on overall customer satisfaction, and IMMI must seek to provide flawless outgoing quality as a cornerstone of such a strategy. Our suppliers must likewise pursue zero defects for all material coming into each IMMI location. To that end, traceability is a valuable error-proofing tool. Each supplier must practice full raw material and product lot traceability, record keeping, establish and maintain proficient document control, effective notification and change management, provide compliance certification for product and process requirements, and demonstrate compliance with all regulations mandated by relevant state, federal or country codes.

To support a zero-defect culture, each supplier must develop and maintain comprehensive quality system that not only addresses initial sourcing and part approval, but also a robust plan for sustainable quality supply of product to IMMI. As a supplier to IMMI, we expect this level of commitment (at minimum) for the products and services that you provide.

The information provided in this Global Supplier Quality Manual will help our suppliers to clearly understand IMMI’s quality policy and expectations for IMMI supply chain management regarding procurement of quality product that will be delivered on time, fully to specification and at a competitive total cost. Your cooperation and support are greatly appreciated.

Matt Waikel  
Vice President of Global Supply Chain
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How to Use this Manual

The purpose of this manual is to communicate IMMI’s quality requirements to our suppliers, and to ensure the quality, on-time delivery and competitive cost of supplied product. Included are expectations and procedures with links to associated documents necessary to ensure suppliers successfully develop and maintain quality systems and processes that support IMMI’s zero-defect policy.

The latest version of the Global Supplier Quality Manual is available on the IMMI Supplier Portal, located at www.imminet.com under the “Clients” menu on the main web page (Password: qa5802).

IMMI’s Global Supplier Quality Manual is organized in sections related to our main processes.

IMMI will comply with all applicable customer and regulatory requirements and will strive for continuous improvement in all aspects of our business as we “Bring Safety to People.”
Key Procedures and Forms

To operate in accordance with our Quality Policy, IMMI requires that suppliers shall comply with all procedures and use forms as shown below in Table 2. These documents are available at www.imminet.com, in the “Quality Assurance Portal”, under the “Clients” menu. Suppliers may access the Quality Assurance Portal and I-Supply Portal using passwords issued by IMMI Purchasing. Suppliers should check these documents regularly for updates.

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Table 1
Supplier Management System Expectations

- QUALITY SYSTEMS
  IATF 16949 certification by an accredited 3rd party

- APQP
  Compliance to AIAG methodology of Core Tools

- SUPPLIER PERFORMANCE
  Maintain acceptable Quality and Delivery rating

- SUB-TIER SUPPLIERS
  Supplier has full responsibility for quality of sub-tier suppliers

- LABORATORY REQUIREMENTS
  All necessary materials & process traceability information on required test components, assemblies and samples. Suppliers must possess and maintain laboratory equipment necessary to ensure continuous supply of quality product.

Expectations for Suppliers

IMMI requires that all suppliers Quality Management System (QMS) is third-party certified to the latest ISO-9001 standard, with preference to IATF16949 certification (to latest standard). Certifications shall be from an accredited registrar. IMMI Purchasing reserves the right to directly assess sub-supplier processes, as needed.

IMMI requires the use of the AIAG Production Part Approval Process (PPAP). Suppliers have the responsibility for managing PPAP for their sub-suppliers. Once a part is approved, a request for sub-supplier changes that may affect fit, form or function shall be directed to IMMI Purchasing and Supplier Quality.

Laboratory Requirements

The supplier’s laboratory facilities shall comply with the requirements of IATF16949 section 7.1.5.3. Laboratory and measurement reports shall include:

- The identity and location of the laboratory used
- The reference to the test methods used
- Any deviation of the test method shall be noted
- Measurement results
- All necessary materials and process traceability information on the tested components or samples

Service Part Requirements

IMMI has the same level of quality expectations for service parts as for production parts.

Outsourced Process Requirements

Suppliers providing outsourced processes must maintain the same quality and delivery rating along with laboratory requirements as specified above.
Sourcing

The award of business to a supplier is one of the most important decisions made by IMMI Purchasing. It impacts the ability of our products to satisfy the customer, remain competitive and to provide successful future development projects. The Global Purchasing Process provides important guidelines toward building a strong positive relationship between IMMI and both new and even existing suppliers.

The supplier plays an active role within this process:

- During assessments or audits performed by IMMI.
- In the implementation of action plans to reach the expected levels of quality.
- By demonstrating achievement in current and future product quality.

The following explains the primary sourcing steps visible to the supplier, what inputs the supplier will receive and what evaluation will be required.

As part of the IMMI sourcing requirements (prior to business award), a potential new supplier will be evaluated per an on-site assessment or process audit. This will evaluate the ability of a supplier to work with IMMI and to meet acceptable levels of quality for the type of product manufactured. An acceptable evaluation result is required to become an approved supplier. New suppliers may also include satisfactory completion of IMMI’s supplier onboarding process/checklist.

The supplier will then be required to comply with the following IMMI agreements:

- Mutual Confidentiality Agreement
- Global Supplier Quality Manual
- Supply Agreement and/or Standard Terms of Purchase
- Tooling Bailment Agreement
- Invoicing Payment Policy
- Pull System Stocking Program (as directed by IMMI)
- Registration on I-Supply Portal (as directed by IMMI)
- Annual Supplier Surveillance Survey (as directed by IMMI)

Mutual Confidentiality Agreement

Before being sent a Request for Quotation (RFQ), the supplier must sign the Mutual Confidentiality Agreement. IMMI recognizes that its suppliers may be exposed to data and/or knowledge in strict confidence. Any intentional or nonintentional breach of confidentiality should be reported to IMMI management or executive level personnel immediately. The Mutual Confidentiality Agreement will be initiated and managed by IMMI Purchasing, or their designee(s).
RFQ - Request for Quotation

The supplier must complete and return the RFQ in its entirety, with any requested supporting information, when requested by IMMI Purchasing. IMMI expects the supplier to fulfill all stated requirements, as defined in the RFQ and IMMI procedures. IMMI may audit the evidence for fulfillment of these requirements at any time. Any exceptions to the requirements must be made in writing and submitted with the returned RFQ, and approved by IMMI Purchasing.

Supplier Evaluation Assessment or Audit

New suppliers to IMMI will be subject to an on-site assessment or audit to evaluate the supplier’s capabilities. Suppliers must pass the evaluation criteria to be awarded business.

- The evaluation may include elements, but not limited to, the following criteria: (Leadership and Management
- Quality and Customer Satisfaction
- Materials Management
- Change and Document Control
- General or Specific Process Controls
- Production, Inspection, Testing, Verification Controls
- Containment Controls

Working Environment and Employee Safety
APQP: Advanced Product Quality Planning

IMMI supports our business growth by proposing and developing products to ensure strong competitive offerings for each of our brands. Remaining competitive requires continuous upgrades and improvements to existing product offerings and the regular introduction of innovative new products. A flawless launch is necessary and expected for all product introductions, new or refined. This requires a well-defined project plan, a proven design, a capable process, and fully conforming incoming materials.

IMMI has adopted the AIAG - “Advanced Product Quality Planning (APQP) and Control Plan”, with the Core Tools, as the standard method for planning and execution to support IMMI and our suppliers with a common methodology. Suppliers are expected to develop and utilize a detailed APQP-based plan of their own to ensure successful demonstration and overall robustness of each relevant product and production process. Suppliers shall share the detailed status of their APQP process, including supporting documentation and data, with IMMI when requested as compliance confirmation.

IMMI strongly believes that the overall quality of delivered product is ultimately determined during the product’s design and development phase. IMMI expects suppliers to develop and maintain effective product launch plans, via the APQP process, to support the following related product development and production activities. This includes, but is not limited to:

- Launch of new components intended for serial production
- Development of new manufacturing processes
- Any significant changes that could affect existing products or processes
- On-going production revisions

IMMI Engineering, with input from Purchasing and Quality, will review and define specific APQP and PPAP requirements, factoring product criticality, IMMI, customer and regulatory compliance requirements. Unless otherwise directed and approved by IMMI via documented manner, PPAP shall be required for ALL direct materials, components and assemblies produced to IMMI.

Suppliers are expected to have complete understanding of Technical Specifications and alignment with IMMI prior to PPAP submission, to provide fully accurate and complete PPAP documentation. PPAP submission quality, and product conformance sustainability following approval, are factors in overall supplier performance standing.

Conformity of Production

Governmental authorities, the National Highway Traffic Safety Administration (NHTSA) and environmental organizations have developed guidelines and regulations that are placed on manufacturers. These regulations are intended to protect the public and consumer, and apply to the entire supply chain and to related manufacturing processes for the product. Ensuring compliance to these regulations is referred to as Conformance of Production (COP).

Where such legal requirements exist for individual components, products or systems, these shall be clearly stated within the Technical Specifications, which may be outlined in customer requirements, product CAD models, prints, drawings,
procedures or other directed requirement document sources. In some cases, the supplier may carry the full responsibility for securing component approval from the appropriate agency. However, the expectations of all related directives and regulations concerning Approval and/or Certification System must be met for a product to be approved.

Suppliers must be well acquainted with requirements dealing with regulatory and/or certification issues, as applicable, for their supplied components. Suppliers must take full responsibility to guarantee compliance to these requirements for each individual product they provide.

\[\text{ALL PRODUCTS SHALL BE IN CONFORMANCE WITH REGULATIONS}\]

IMMI warrants against introducing any product changes following the PPAP approval until a new part number, separate verification and a related approval have all been obtained. It is mandatory that all test samples and related data/documentation (including test list/control plan, test reports and certificates at minimum) be kept by the supplier for a defined period of time (see Record Retention Requirements Table 1).

Key Characteristics (KC-1/KC-2)

Reference IMMI QA-51, which determines requirements to control Key Characteristics (KC) within the Technical Specifications. These are intended to ensure correct, error-free performance for the product involved, and the supplier shall comply to the defined requirements. The associated AIAG standards, for Measurement System Analysis (MSA) and Statistical Process Control (SPC), should be referenced as best practice for carrying out these methods.
The Production Part Approval Process (PPAP) demonstrates that a manufacturing process used to produce parts for IMMI has been fully developed, thoroughly verified, and is capable of serial production of parts that must all conform to the Technical Specifications.

Within APQP, IMMI follows PPAP requirements as applied to Levels 1 through 4. To establish PPAP compliance, sample parts and supporting documentation must be submitted by the supplier to show evidence that:

- The design records and specifications have been properly understood and met.
- The manufacturing process has the capability to produce conforming parts in the actual production environment.
- The manufacturing process has the capacity to support production quantities at a consistent quality level.

IMMI shall evaluate any exceptions regarding Levels 1-4 requirements on a case-by-case basis.

Reference

Supplier PPAP documentation and sample submissions should be in accordance with the guidelines and/or requirements defined in the Automotive Industry Action Group (AIAG) PPAP Manual. Additional guidelines/templates and the Part Submission Warrant (PSW) template are posted on the IMMI Quality Assurance Portal.

IMMI requires its suppliers to follow the Customer Notification and Submission requirements as specified in the AIAG PPAP Manual. This includes:

- All new components
- Changes to an existing part
- Drawing changes
- Corrections to a prior discrepancy
- Supplier process change
- Material changes or substitutions
- Tier 1 and Tier 2 manufacturing location changes
Process

The supplier is responsible for the PPAP preparation:

- PPAP shall be planned by the supplier, in collaboration with IMMI, as an element of APQP.
- The supplier must provide the submission date, of samples and documentation, to the respective IMMI Purchasing and Supplier Quality contacts.
- Suppliers (Tier 1) are responsible for the planning, approval, corrective action follow-up and retention of their sub-supplier PPAP submissions.

IMMI Purchasing will coordinate a PPAP sample order with the supplier to confirm the date when PPAP parts and submissions are required, and confirm target delivery date.

- PPAP submissions shall only be approved on IMMI released drawings (serial production drawings). Sample parts for PPAP approval must be produced during a production run.
- Supplier shall confirm that the PPAP samples have been produced off of new, revised or refurbished IMMI-owned tooling.
- PPAP parts are produced with a requirement of minimum 30 pieces with $C_{pk}$ studies, of which 5 parts shall have full documentation unless otherwise specified.
- Unique component situations with an annual forecast below 30 parts shall be evaluated jointly on a case-by-case basis with IMMI with regard to determining part approval.
- Low volume or infrequently produced product may require re-PPAP to ensure conformity of product and processes, at the discretion and request of IMMI.

Upon satisfactory completion of all required supplier measurements, tests, material certification and supporting process documentation, the supplier shall complete the required information on the Part Submission Warrant (PSW), and attach ALL supporting documentation.

- A separate PSW shall be completed for each part number unless otherwise specified, and previously approved by IMMI.
- The PSW shall be signed by the authorized supplier representative before submission to IMMI.

IMMI will review all PPAP packages and assign a disposition status as -IN-PROCESS, APPROVED, or REJECTED.

In the case where there is a need to ship saleable product prior to PPAP approval, per IMMI direction, a Temporary Deviation (TD) shall be submitted by the supplier, and approved by IMMI. The TD will be reviewed and approved by both IMMI Product Engineering and Quality. To receive TD approval, the supplier must include an acceptable plan to accomplish full approval with the request.

Significant Production Run

The Significant Production Run (SPR) is to be conducted using production tooling/equipment, environment (including production operators), facility, and cycle times. The Significant Production Run shall be performed by the supplier as part...
of the Production Part Approval Process (PPAP) to verify that the production process is capable of meeting program target volumes and quality levels.

All suppliers shall perform a SPR for all new part introductions, unless alternative plan approval has been given by IMMI. The SPR requires that an adequate quantity of parts be produced to allow:

- Overall process stabilization time
- Accurate calculation of manufacture cycle time
- Determine production throughput from warehouse to shipment
- Sufficient volume for completion of capabilities studies

The minimum quantity of parts to be produced during the SPR shall be specified by IMMI, but can be increased by the supplier. An exception for minimum quantity may be appropriate and permitted by IMMI pending discussion. Samples used for the PPAP must be taken from the parts produced during the SPR.

The SPR provides a good opportunity to identify and correct potential manufacturing process bottlenecks for future improvements. The observed capacity of the SPR should take into account measured Overall Equipment Effectiveness (OEE) results during processing, any planned or unplanned down time, and any scrap or rework produced during the SPR. NO rework may be involved in the production of the PPAP samples without prior review and approval from IMMI.

**Packaging & Labeling**

Supplier Packaging Guidelines (PUR-03) and Supplier Labeling Requirements (PUR-02) describe packaging rules and mandatory labeling requirements. A Packaging Data Calculator (PUR-019) is also available to assist in determining a proposed container size, and is available from IMMI Purchasing upon request. The supplier shall work jointly with IMMI to determine the optimal standard pack or box quantities that best comply with IMMI internal manufacturing flow and cycle times.

Suppliers are responsible for ensuring defect free product delivery to IMMI. Packaging should be configured such that product is not susceptible to dimensional or cosmetic damage during standard handling methods of warehouse processes and the assigned mode(s) of transportation.

Supplier names, logos and/or branding are not permitted on IMMI end customer packaging or containers without prior approval.

**Reference the pertinent procedures located on IMMI Quality Assurance Portal**

Supplier Labeling Requirements (PUR-02)
Packaging Guidelines (PUR-03)
Packaging Data (PUR-007)

**Documentation Requirements**

IMMI will determine and communicate the level of PPAP required for submission based on, but not limited to, product/material type, application criticality, process/manufacturing plan, previous approvals and measurement/testing required to confirm product conformance. PPAP level agreement must be obtained with IMMI prior to submission.
Suppliers are expected to submit documentation per the AIAG Production Part Approval Process (PPAP) manual, with all supporting objective information regarding product conformance. Included are all material certifications, and confirmation of compliance to global statutory and regulatory requirements.

Proprietary documents that cannot be physically submitted to IMMI must be made available for a complete and sufficient review upon request.

**Supplier Lot Sampling Procedure**

Reference Supplier Lot Sampling procedure (QA-106) found on the IMMI Quality Assurance Portal.

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**Production Requirements**

**Supplier Expectations**

**IMMI Supplier Portal:** Suppliers will be given access rights to the I-Supply Portal from their IMMI Purchasing contact, as requested and required for business purposes. Access to the I-Supply Portal allows the supplier to view forecast information, quality records and pertinent procedures. The supplier is held accountable for delivering the need-by date on the purchase order based on a continuous review of the forecast.

**Cost Competitiveness:** Suppliers are expected to be globally competitive. IMMI will benchmark suppliers to ensure competitiveness. In addition, suppliers are expected (through joint continuous improvement) to agree on annual price reductions that are effective January 1st each calendar year.

**Continuous Improvement:** Suppliers are expected to perform VA/VE (Value Analysis/Value Engineering) on a routine basis and strive to eliminate waste. The supplier is expected to control and manage cost and avoid contractual price changes. All changes are required to be reviewed and approved by IMMI Purchasing prior to implementation, and full supporting details outlining the proposal must be provided to IMMI to initiate potential consideration.

**Flexibility and Responsiveness:** IMMI will issue annual blanket orders and procure product based on weekly issuances of 4-week firm and 6-week forecasted demand. These forecasts are based upon our best estimates of our customers’ needs. The supplier must have manufacturing systems with sufficient flexibility to adjust to fluctuations. IMMI will take delivery for the products weekly per the firm schedule. Any major changes in the forecast will be negotiated with the supplier for delivery of materials.

**Shipment Routing:** Suppliers are required to follow the IMMI Static Routing Instructions (PUR-020). Failure to comply may result in supplier charge back(s) for non-conforming logistics or premium freight incurred as a result.

**Supplier Pull System Agreements:** Supplier pull system agreements will be determined as needed by IMMI, as necessary for optimal inventory and product movement.

**Need-By Date:** An acknowledgement to the “IMMI need-by date confirmed on the IMMI Purchase Order” is mandatory. The supplier must acknowledge the need-by date. The acknowledged date is entered into the IMMI Planning System and this date is then referred to as the “promise date”.

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Supplier Customer Service Representative: Business needs to be conducted and executed on a timely basis. IMMI requires a backup Customer Service Representative for the person who is normally responsible for the day-to-day interface with the IMMI Purchasing and Planning functions. When there is a change to the Customer Service Representative, it is the supplier’s responsibility to notify IMMI Purchasing in a timely fashion to prevent any interruption of service.

Production Interruption: The supplier shall notify IMMI Purchasing as soon as possible (and no later than 24 hours before a scheduled delivery) of any production interruption. The nature of the problem shall be communicated with the immediate actions to be taken to ensure supply of product. Production interruptions may include, but are not limited to, natural disasters, political unrest, war, capacity issues, quality issues, labor strikes, or other events that prevent the supplier from meeting IMMI’s Purchase Order requirements.

Electronic Data Interchange (EDI): EDI arrangements will be initiated and established with suppliers as necessary by IMMI.

Supplier Chargebacks: IMMI reserves the right to issue chargeback claims to suppliers for adverse impact events to IMMI business operations. Claims will be debited to the supplier for not performing in accordance with IMMI’s performance expectations. Examples include, but are not limited to, late deliveries, nonconforming packaging, quality rejections, corrective actions issued, sorting fees and downtime charges.

Tooling and Parts Bailment Agreement: Suppliers are required to complete a Tooling and Parts Bailment Agreement whenever the supplier has possession of IMMI property. Examples of IMMI property are tooling, machinery, or parts owned by IMMI that may be used by the supplier in support of IMMI Purchase Orders.

While IMMI strives to encourage a culture of continuous improvement, we do expect stability and conformity for both production parts and production processes with respect to what has been previously PPAP approved.

IMMI challenges our suppliers to be best-in-class with regard to cost, quality and delivery. Suppliers who meet this challenge can be rewarded with increasing business opportunities. However, changes from a supplier cannot be implemented without specific approval in writing prior to the change implementation. Suppliers who do not conform to IMMI’s change control processes will be identified for levels of containment and held accountable for necessary next steps. Accountability may range from the supplier be required to create and progress to completion detailed corrective action plans, and/or “new business hold” designation until all needed corrections have been effectively achieved.
Production Process Change Notification - (PPCN)

The purpose of the PPCN is to prevent quality and delivery issues for IMMI’s receiving plants and to protect the final customer from potential field issues during the implementation of supplier modifications.

A supplier shall notify IMMI AND receive approval prior to implementing a change on a product or to a process that may impact any conditions of the approved PPAP. This applies, but is not limited to, the following cases:

- Any transfer of the production line; in part or in total, to or within a new or existing plant, building or facility; whether in the same or another county, city, state or country
- Any change in a tier Supplier’s part, process, handling, shipping or warehousing
- Any new or proposed revision to a production layout
- Any packaging changes or modifications to repackaging operations
- Any Tier Supplier change that can affect fit, form or function of the product
- Any modification, refurbishment and/or major maintenance of PPAP approved tooling
- Any change of raw material.
- Any outsourcing plans/actions associated with the production part

The supplier desiring or requiring a change shall submit a formal request, detailing all change details, to IMMI Purchasing and Supplier Quality. Suppliers may be required to submit additional information to support evaluation of the proposed change. No implementation of the proposed change, in whole or part, is permitted without direct IMMI approval. Approval of the change shall be provided via PPAP approval and/or written communication from IMMI.

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Treatment of Non-Conforming Parts

IMMI shall take all necessary actions to protect the supply of conforming product. It is imperative for both IMMI and the supplier to identify non-conforming parts as quickly as possible. In the event that non-conforming product or material have been identified, IMMI will notify the supplier for containment, root cause and corrective action.

IMMI expects the supplier to respond and ensure that all receiving plants are protected within 24 hours. Suppliers are expected to notify IMMI immediately if non-conforming material is found to have been shipped to IMMI.

Suppliers may be asked to ship replacement parts per a stated schedule and to provide sufficient support and/or resources to perform short-term sorting and replacement activities. As determined by IMMI, and depending on the type of non-conformance and the overall material situation, parts may either be scrapped at IMMI or returned to the supplier. Additional expenses associated with extra handling and actions within IMMI, including costs for adjusting, sorting, disassembly, reassembly, administrative support, etc. may be charged back to the supplier.

Product dispositioned as non-conforming, and to be scrapped, at IMMI or the supplier must be destroyed or otherwise rendered permanently non-usable to prevent potential use in secondary markets.

When notified of a non-conformance, and issued QA-693 (Corrective Action Problem Solving Worksheet) or other form of requested action feedback, suppliers shall react within the below timeframes – start of timeframe shall start at time of notification by IMMI:

- **24 Hours**: Quick response/Containment → sorting at IMMI (3rd party sorting is allowed)
- **10 working days**: Root cause analysis conducted and identified, including ability to “turn on” and “turn off” confirmed root cause.
- **30 working days**: Permanent corrective/preventative action implemented checked and recurrence prevented.
- **60 working days**: Verification/confirmation of permanent corrective/preventative action, for proposed closure

It is the responsibility of the supplier to notify and obtain agreement with IMMI for timeframes that extend beyond those stated above. Extension of timeframes will only be given when the supplier can confirm with documented action plan(s) that progress is being made. Additional chargeback claim fees may be issued for late activities.

All suspect product must remain in containment by the supplier and each box of verified conforming materials labeled as “certified material” until corrective action is fully verified and approval given by IMMI to eliminate containment and special labeling requirements.

Deviation Requested by the Supplier

In cases where the supplier wishes to request a deviation to supply parts that do not fully comply with stated requirements, the supplier must inform IMMI Purchasing and Supplier Quality to request approval. The supplier must request a formal deviation by submitting details of the request to Clients → Quality Assurance Portal at www.imminet.com following the QA-653 (Temporary Deviation Request) link.

The minimum information required for submission is:

- Supplier and contact name
- Phone number
- Email address of supplier contact
- PO number
- Part number, Lot number, Revision number and part description

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• IMMI Purchasing contact
• Drawing Spec: IMMI defined specification requirement (i.e. per print, procedure, process)
• Request Deviation: description of deviation being requested (specifically, what IMMI requirement is not being met) Root Cause: Why is this deviation being needed and requested?
• Corrective Action: What permanent corrective action has been implemented to prevent additional deviations?
• Number of pieces being affected or date deviation is proposed to expire (must be within short-term timeframe)

Suppliers shall provide additional justification information to support approval consideration, as requested by IMMI.

First In/First Out – (FIFO)

Suppliers must ensure that no obsolete material is shipped to IMMI. The supplier shall utilize first in/first out (FIFO) inventory management practices. This means all material shall be manufactured and shipped in the series order it was received.

Lot Traceability

Definition:

• “Lot/batch traceability” refers to a one-to-one relation between a lot/batch traceability number and a certain quantity of produced parts.
• “Serialization” refers to a one-to-one relation between a traceability number (serial number) and one produced part.

General requirements for all parts:

• All suppliers shall have an effective lot definition and traceability procedures based on risk analysis.
• Suppliers shall ensure that their lot traceability system maintains its integrity throughout the entire supply chain, including not only raw material, but also purchased components/products and sub-contracted operations, as applicable.
• IMMI may, at any time, request a review of these lot definition/traceability procedures and systems, including all supporting lot traceability data and documentation retained for IMMI product.

General requirements for safety related parts:

• The supplier’s lot definition and traceability procedures shall be sufficient and effective so that all delivered product can be traced back to:
  o The finished parts
  o All subcomponents/blanks
  o All raw materials
  o All outsourced product/services/processes utilized in manufacture of all components
• In addition, the history of the processes applied to the product must being fully traceable, including:
  o Any rework operation
  o Product and process special characteristics, including test records (according to the control plan)
  o Influential process parameters
  o Influential machine settings
- Maintenance of equipment, jigs, gages and testers
- All personnel trainings and qualifications

- Risk analysis should be utilized to minimize the size of batch compared to the risk of product recall
- The period of storage for related information is set according to legal requirements. **Compliance to the record retention requirements defined below shall be followed by all suppliers, and the related supply chain tiers.**
- Any labeling or marking solution identifiers used on components or final product to IMMI should support product investigation during the life of the part(s). Suppliers should indicate the lot number on actual parts and it should be easily visible when applicable.

**Additional Requirements (unless otherwise specified on product documentation):**

- Serialization of components and/or final product where required, or feasible
- Use of AIAG Formatting for bar coding
- Variable data values for process parameters and inspection results.. Attribute data may be acceptable with evidence of a 100% effectiveness of the check, and previously agreed upon by IMMI.
## Record Retention Requirements

<table>
<thead>
<tr>
<th>Document Type</th>
<th>Example (not limited to)</th>
<th>Shall be Maintained for</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>APQP and PPAP documentation</strong></td>
<td>Technical specifications, design details, drawings, process flow charts, control plans, FMEAs, manufacturing instructions, etc.</td>
<td>The length of time that the part (or family of parts) is active for production and service requirements plus one calendar year, unless otherwise specified by IMMI.</td>
</tr>
<tr>
<td><strong>Quality Performance Records</strong></td>
<td>Control charts, Inspection and Test results, Product Audits, Layout Inspection, Functional Testing, etc.</td>
<td>The length of time that the part (or family of parts) is active for production and service requirements plus one calendar year, unless otherwise specified by IMMI.</td>
</tr>
<tr>
<td><strong>Quality System Records</strong></td>
<td>Internal Quality System Audits and Management Reviews.</td>
<td>Three calendar years</td>
</tr>
<tr>
<td><strong>Product Safety Related Records</strong></td>
<td></td>
<td>A minimum of 15 years from the date of manufacture.</td>
</tr>
</tbody>
</table>

Table 1

The lengths of time indicated in Table 6 shall be regarded as minimums. Retention periods longer than those specified above may be specified by a particular organization or customer within its procedures. These requirements do not supersede any regulatory requirements.
Managing Performance

Supplier performance is monitored on a continual basis and gauged against some or all of the following key performance parameters, as applicable:

- PPM LEVEL
- INCOMING OR PRODUCTION NON-CONFORMANCES
- DELIVERY PRECISION
- ISSUE CHRONICITY
- RESPONSIVENESS
- CONTINUOUS IMPROVEMENT
- PPAP QUALITY (SUBMISSION, SUSTAINABILITY)

Supplier Scorecard

The scorecard is a tool used by IMMI for monitoring the performance of a supplier. It should be used by suppliers to proactively manage their production quality. An example of the scorecard is indicated below in Figure B.

IMMI maintains multiple levels of purchasing and performance data for ALL suppliers providing product to our facilities. Scorecards, with the core measures of Quality and Delivery, will be distributed electronically to selected suppliers. The measurements on the scorecard are reviewed by IMMI to track supplier performance and identify specific trends, and will serve as an ALERT in the case of LOW PERFORMANCE. Scorecard performance is updated monthly, with scoring results based on a monthly and twelve-month (+ current month to-date) rolling average. It is recommended that suppliers examine this information on a regular basis, as the performance data should allow proactive addressing of problems and/or trends before IMMI is required to take action with the supplier.

Suppliers with low performance in a single month, or in a downward trend, shall have actions initiated by IMMI per the Low Performing Supplier (LPS) protocol. IMMI expects suppliers to react with immediate effective improvement actions to return to an acceptable performance level.

Suppliers receiving scorecards will be presented with the following information outlining performance, for the monthly and rolling periods described above:

- PDF file: Supplier Delivery (OTS) and Quality (PPM) performance summary
- MS Excel file: Supplier Delivery and Quality performance detail data
  - Dataset 1 (tab): Delivery disposition line item detail
  - Dataset 2 (tab): Defective/Rejected line item detail

In the focus for Continuous Improvement, IMMI may refine the scorecard criteria and/or format. Questions on scorecard performance should be directed to IMMI Purchasing.

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Figure B: Example Supplier Score Card
Quality (PPM: Parts Per Million PPM)

PPM is a key indicator of the quality of products shipped to IMMI. PPM reflects the percentage of non-conforming parts, and is calculated as the quantity of non-conforming parts identified divided by the number of parts delivered, then normalized over one million parts.

Delivery Precision (OTS: On-Time-Shipment)

Delivery is a key indicator of a supplier’s ability to meet IMMI volume requirements, within the agreed timeline and quantities. The delivery precision indicator reflected on the scorecard is calculated directly from IMMI’s ERP system.

Continuous Improvement

Suppliers are expected to utilize lessons learned from each previous incident to improve processes and/or design, and if necessary, underlying business systems as well. The goal is to eliminate any possibility of similar incidents, by making procedural and process adjustments on the manufacturing floor, and/or eliminating the root cause that allowed the issue to surface. Lasting improvement may also require adjusting the supporting business infrastructure and strategies. The supplier should use statistical data to continually refine their processes and to reduce variation. Analysis of quality incidents, PPM rates, causes for scrap, reasons for equipment downtime, and other available metrics should be reviewed, grouped and ranked in a manner conducive to customer-focused evaluations.

The supplier should have improvement projects in work that target at least two or three of their largest problem areas, based on Pareto analysis or similarly useful statistically-based data. The supplier shall demonstrate a positive trend over time in reducing overall incidents with specific focus on any repeated incidents. Suppliers should show evidence that lessons learned for all similar products or processes have been utilized and incorporated (often referred to as horizontal deployment). The supplier shall be open to cooperatively sharing their continuous improvement decision-making data on occasion with IMMI for constructive discussions and potential future planning.

Supplier Process Assessment

Process Assessments are a tool used for verification of process and product control, and to drive continuous improvement, for both IMMI and our suppliers. The expectation is that suppliers use regular proactive self-audits/assessments as a tool for the early identification of potential problems and to drive continuous improvement opportunities. Best practices include assessments utilizing the AIAG process auditing and CQI methodologies. Suppliers to build a robust improvement plan to close any gaps identified during an audit event.

Criteria for supplier self-assessment, and those initiated by IMMI, shall be considered, but not limited to, the following circumstances:

- For any new supplier
- For any new process/material

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For any new supplier location
During APQP
After the PPAP approval when the supplier is beginning production ramp up
For poor performance with regard to cost, quality and/or delivery
After a major incident

IMMI reserves the right to perform additional Process Assessments when determined necessary per the above circumstances or other determined reasons, with reasonable time of notice.

Low Performing Supplier - LPS

Supplier performance is a critical component in the ability for IMMI to meet and exceed customer expectations. When performance, occurring via a single event or a downward trend, is identified as unacceptable, timely actions must be taken to return the product and/or processes to a conforming controlled state. Diagram 1 outlines the mitigation action protocol IMMI follows in addressing Low Performing Suppliers (LPS), as applicable to the identified occurrence(s).

Diagram 1

![Diagram 1](image-url)
Compliance Management

IMMI strives to minimize risks for operators and passengers when accidents happen. IMMI products are known for providing safety and for saving lives. Our suppliers help contribute in two important ways:

1. Assisting with the development of new safety products and features for the final customer.
2. Delivery of robust products designed and manufactured to be defect-free for the final customer.

Providing conforming product to IMMI must be a top priority for our suppliers and is part of their contractual commitment. It is the responsibility of the supplier to meet or exceed all Technical Specifications and applicable standards, as well as contractual and legal obligations.

IMMI’s objective is to thoroughly understand the overall capabilities of the product from both design and process standpoints. For suppliers having design responsibility, all special characteristics must be clearly identified and documented appropriately, fully evaluated from a design-level FMEA standpoint, and subsequently verified and validated. Any critical characteristics involving manufacturing processes shall be identified within the supplier’s documentation as well, and should at minimum be included in process-level FMEAs, controls plans, related inspection work instructions and supporting inspection results.

The supplier must consider and apply effective strategies for each of the following expectations:

- Identify and document any operations that may have a direct or indirect influence on critical characteristics.
- Provide clear and unambiguous work instructions at workstations.
- Provide training, certification and/or necessary authorizations for people working at each respective workstation.
- Provide a clean, organized and safe work environment that complies with 5S standards and methodologies.

The supplier is responsible to verify all the above requirements within their own supplier chain. In the event of a nonconformance or a risk for the final customer, the supplier shall notify IMMI immediately to communicate the potential issue and then subsequently provide action plans within an agreed to timeframe to protect the final customer.

Suppliers shall also provide, at time of PPAP or at any time requested, verification of compliance to any customer or regulatory requirements to which IMMI or the supplier are under. These include, but may not be limited to:

- Certification of material, product or performance test or analysis results
- Governmental requirements such as Dodd-Frank, RoHS, REACH, Prop 65

During APQP and PPAP related activities, the supplier shall work cooperatively with all IMMI personnel to provide and verify evidence of completion of requirements for the concerned products.