Cespira
Supplier Manual

Supplier Manual

Note

All Suppliers wishing to do business with Cespira shall meet the requirements within this Supplier Manual. The intent is that this manual will communicate the methodology applied to Suppliers for the assessment, evaluation, qualification, monitoring and management of Suppliers to Cespira.

Copyright

This document is revision controlled and will be continuously updated to ensure the current quality and business protocols are being met. It will be the responsibility of the Supplier to ensure all references are being made to the latest released version of the Cespira Supplier Manual.

Any questions regarding this manual should be addressed to:

Cespira
Attention: Purchasing Department
1691 West 75th Avenue, Vancouver, British Columbia, Canada, V6P 6P2
Tel: +1 778-607-2050
Fax: +1 604-718-2001
Email: hpditechnology.purchasing@cespira.com

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1 Organization

1.1 Introduction

The Cespira Supplier Manual has been developed for Suppliers to become familiar with the method applied for our initial Supplier evaluation process up to the qualification to becoming a Supplier to our company. The foremost objective of this manual is to communicate to our Suppliers the Cespira quality and service requirements. This manual is intended to be the primary document for communication of our Purchasing & Supply Chain and Quality Philosophies to our Suppliers.

It is part of our business strategy to build a long-lasting relationship with all Suppliers to ensure a strong communication link and support in all areas of our business. Cespira is keen to work with Suppliers that can support new product introduction through the concept and prototype stage, up to and including the viable business stage of pilot scale to full production. It is envisaged that Suppliers with the ability to support design and development will play a key role in product development and evaluation.

1.2 About Us

Cespira is a clean transportation technology company. By inventing, engineering, building, and supplying clean and affordable alternative fuel systems and components for automotive applications, we are changing the way the world moves. We do it in a way that creates value for our people, our customers, our investors, and the environment.

For an overview of Cespira's history, visit www.cespira.com.

1.3 Mission Statement

Drive innovation to create a better world for future generations.

1.4 Vision

Be a global leader in the development and supply of fuel system solutions for sustainable transportation.

1.5 Value Principles

Cespira value principles are fundamental to our business relationships, our market success, and are a source of pride for our teams:

- Fostering a positive and balanced workplace where achievements are celebrated, ensuring everyone feels motivated and appreciated
- Integrity in action - Always doing the right thing and doing it well
- Striving for excellence while maintaining ethical standards, ensuring a fulfilling and principled work environment
- Respecting and listening to our colleagues, recognizing that nothing is achieved alone
- Fostering a sense of purpose and ownership in all tasks
- Embracing diversity and inclusivity, ensuring every individual feels respected, recognized heard, and valued
- Commitment to sustainable practices, giving back to the environment, community, and future generations
- Always innovating, we empower every team member to contribute ideas and solutions to drive our progress

1.6 Locations

Cespira corporate headquarters are located in Vancouver, BC, Canada. For an overview of Cespira's locations, visit www.cespira.com.

Cespira **Corporate Office**
1691 West 75th Avenue, Vancouver, British Columbia, Canada, V6P 6P2
Tel.: +1 778-607-2050
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2 Quality Management System and Environmental Management System

Cespira continuously strives to deliver high value, leading environmental technology products and services that meet or exceed our customer expectations, including those related to safety, performance, on-time-delivery. In our commitment to adhere to our Quality Policy & Environmental Policy, Cespira and its employees expect all Suppliers to work with us in achieving these goals, at minimum, by meeting the expectations and requirements outlined in this manual.

Suppliers shall maintain a quality system certified according to the following standards:

- ISO 9001 (current version) as a minimum requirement, with the aim that the Supplier develops a Quality Management System according to standard IATF 16949.
- IATF 16949 (current version), unless otherwise waived by the Cespira Global Supplier Development Engineering group.
- ISO 14001 (current version) - Suppliers without a valid ISO 14001 certification shall provide an 18-month action plan in order to attain certification, or unless otherwise specified and approved by the Purchasing and Supply Chain group.
- ISO/IEC 17025 (current version) as a minimum requirement for external laboratories for inspection, testing or calibration.

Certified Suppliers shall inform Cespira buyer within 10 business days if the certificate is suspended. The Supplier shall submit to Cespira buyer a copy of the certificate if it is renewed and in the case of new certificates.

When required, Suppliers shall submit data in the International Material Data System (IMDS), a tool used by the automotive OEMs and Supply Chain to manage environmentally relevant aspects of the different parts supplied for use in vehicles.

Cespira is registered in IMDS portal which is used to verify and ensure that the received Supplier submissions of Material Data Sheets (MDS) providing information on materials and substances used in the manufacture of supplied products comply with the EU End of Life Vehicles (ELV) legislation; Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), and the Global Automotive Declarable Substance List (GADSL). Please see Appendix 1 - IMDS Information Sheet for details.

2.1 Quality Policy

Cespira is committed to continuously improves our products and processes through adherence to, and improvement of the effectiveness of our Quality Management System.

- Zero-defect target approach, which includes adherence to safety, traceability, cleaning, and packaging standards.
- Products meet or exceed customer's expectations and Cespira requirements for Quality, Cost, Delivery, and Technology.

- Preventive quality methods are in place to assure any potential issues are identified and eliminated in advance.
- Supplier ownership of quality by proactively and continuously improving product quality through process improvement.
- Suppliers complete their tasks with professionalism and integrity to the agreed timeline.
- Suppliers react quickly to sudden changes in the product or process that affect the supply of parts or services.

2.2 Environmental Policy

Cespira is committed to prevent pollution and minimize environmental impacts from our activities as well as to continuously improve our products and processes.

- Ensure that our operations comply with all applicable environmental legislation, industry codes and standards.
- Collaborate with partners and industry stakeholders in the protection of the environment, the conservation of resources and the implementation of pollution mitigating practices.
- Research, design, and develop alternative fuel engine technologies that preserve environmental health and safeguard employees, customers and the general public from injuries or health hazards.
- Mitigate the environmental impacts of our operations and conduct a thorough environmental assessment and risk analysis prior to the implementation of new projects.
- Utilize energy and other resources efficiently in its operations, including emissions and waste management programs that exceed current legislative requirements.
- Be an environmentally responsible neighbour in the communities where we operate and to act promptly and responsibly to correct incidents or conditions that endanger health, safety or the environment.
- Respond to environmental emergencies promptly and effectively with external response agencies.
- Fully investigate all environmental incidents or unplanned releases and communicate findings as necessary to all affected parties.
- Train employees on their individual responsibility to protect the environment. On-site contractors and others acting on behalf of Cespira are expected to abide by the same environmental code of conduct.
- Evaluate our environmental performance through regular auditing and assessment of compliance and communicate the appropriate information to our stakeholders including our Board of Directors, employees, shareholders, governmental agencies and the general public.
- Continuously improve our environmental management system and measure the environmental impacts of our operations.

3 Purchasing

3.1 Organizational Philosophy

Cespira endeavours to supply its customers with leading edge technology, while maintaining the highest quality and the most cost-competitive products available in the industry. To support this objective, our organizational philosophy is to develop relationships with Suppliers who best demonstrate their commitment to these goals through 100% on time delivery, consistently meeting quality requirements and competitive pricing.

While aiming to build a strong Supplier base, Cespira takes the steps to involve the Supplier in the early stages of product/part development. This early involvement with the Supplier will ensure that there is a solid communication link that allows both groups to review and consider Design for Manufacturability & Assembly (DFMA), while looking at cost drivers and quality concerns. We believe that this open relationship will result in a robust and reliable design resulting in products that meet or exceed our expectations.

Cespira evaluates and selects Suppliers at two different capabilities: prototype Suppliers and production Suppliers.

Suppliers are monitored and evaluated on their technical, commercial, and quality capabilities Cespira has an established process for Supplier performance monitoring. We will continually communicate findings to the Supplier, and as we are always seeking opportunities for improvements, we will discuss with Suppliers' development and implementation plans, to meet performance requirements.

All sourcing activities will be conducted by the Purchasing & Supply Chain group supported by the Cespira process of Supplier evaluation and qualification. Ongoing support will be provided to develop products through their life cycle with focus on continual improvements resulting in improved reliability and manufacturability along with reduced product cost.

3.2 Operational Philosophy

Cespira remains focused on continuous improvement by using a variability reduction philosophy. This philosophy will allow us to remain competitive and continue to lead in the field of alternative energy and environmental emission controls.

Our objectives are clear: to provide customers with a high-quality product, on time, and to budget. In all cases, customer satisfaction is paramount. To meet our objectives, continuous communication is necessary to ensure all issues are addressed in a timely and efficient manner. Suppliers are expected to have operating philosophies which are compatible with these core values.

3.3 Communication between Cespira and Suppliers

Cespira works closely with Suppliers on all components. Many components are unique and are designed, developed, or modified to meet our requirements. The product maturity stages are described in six gates:

Accurate communication on design and functional intent is critical. This will ensure that consideration is given to the product for various elements of quality, design for manufacturability, capacity, technical feasibility, and cost.

In order to streamline and manage the communication flow, the Cespira buyer is the primary contact for all internal and external communication and should be included in the communication regarding all Supplier related issues including technical, quality and commercial issues. All communication involving purchase orders, Long Term Supply Agreements (LTSA), volume, order forecasts and leadtimes will be managed directly by the Purchasing & Supply Chain group.

All documentation shall be communicated in the English language unless otherwise specified and approved by the Purchasing and Supply Chain group.

3.4 Non-Disclosure Agreement

Much of the design and product development work being done at Cespira is proprietary. We recognize that Suppliers may be asked to share proprietary or confidential business information with Cespira to assist in the establishment of a solid and open relationship. To protect proprietary, product development and business information being communicated, we may require Suppliers to sign a non-disclosure agreement protecting the interests of both parties.

3.5 Supply Agreements

Supply Agreements for high-volume, repetitive requirements are negotiated by the Purchasing & Supply Chain department. Established Suppliers are encouraged to discuss the mutual benefits of long-term supply agreements centered on continuous improvement and productivity sharing.

3.6 Pricing

Cespira continues to develop markets, and our focus on pricing policy supports cost reduction and/or a minimum of cost maintenance.

Suppliers are expected to recommend ways to reduce cost; these might include alternate products and materials and process improvements. It is expected that Cespira and its Suppliers will collaborate on initiatives and activities to find ways to reduce costs and manage cost control for products.

Suppliers may be asked for input on design for manufacturability where potential cost reduction opportunities may be realized. Cost reduction initiatives may also include the elimination of waste, streamlined inspection activities, inventory management activities and reduced warranty claims.

Cespira has a process for Suppliers to present opportunities for improvements and cost reduction. Proposals are reviewed with the Supplier to determine if the change will be implemented.

3.7 Supplier Discontinued Product

If for any reason a Supplier discontinues a product that is currently being purchased or used by Cespira, it is the obligation of the Supplier to notify Cespira at least 18 months in advance, otherwise defined in the Supply Agreements, and advise the date of final production. The Supplier shall also offer Cespira the opportunity to do a last time buy to protect our production.

We invite Suppliers to advise any recommended replacements and/or substitutions for discontinued products. However, Cespira is not obligated to accept the recommended replacement or substituted product.

3.8 Payment, Terms and Conditions

For Standard payment terms and our Terms and Conditions please contact Cespira Purchasing, or visit our website.

3.9 Supplier Compliance with Laws

Cespira is committed to a culture of honesty, integrity, and accountability, and it is our intent to maintain the highest standards of behavior while conducting business. As such, Cespira requires that its Suppliers comply with all applicable laws, rules and regulations in conducting their business. This includes, but is not limited to, laws, rules and regulations relating to labour and employment practices, anticorruption and bribery, health and safety, and environmental matters. The automotive industry, governmental authorities and environmental organizations have developed guidelines and regulations that are placed on vehicle manufacturers. These regulations apply both to the customer vehicle and to the manufacturing processes. Therefore, the Supplier (when required) shall ensure compliance to these regulations, obtain Conformity of Production (COP) approval certificate, maintain a system in place to record and document COP over time, and submit a copy of the COP upon request. Supplier products shall be manufactured in accordance with all applicable laws and safety standards.

3.10 Conflict Minerals

As a result of a law in the United States, the Dodd-Frank Wall Street Reform and Consumer Protection Act, Section 1502 (e) (4) related to Conflict Minerals, Cespira has the obligation to conform to the guidelines of this law as a manufacturer where “conflict minerals” are potentially necessary to the functionality or production of our products. The full text of the law is available at the following link: http://www.sec.gov/about/laws/wallstreetreform-cpa.pdf

To clarify Conflict Minerals; the rule defines “conflict minerals” as: cassiterite, columbite-tantalite (known as tantalite; an ore from which niobium and tantalum are obtained), gold and wolframite, as well as their derivatives. Other minerals can be designated by the US Secretary of State. Conflict minerals are those obtained from the following “Covered Countries”: Democratic Republic of the Congo (DRC), Central Africa Republic, South Sudan, Zambia, Angola, The Republic of the Congo, Tanzania, Burundi, Rwanda and Uganda.

Our obligation is to conduct a reasonable, good faith country of origin inquiry to determine whether any of the conflict minerals that are used to manufacture or used in the production process of our products, originated in the Covered Countries and are not from recycled or scrap sources.

Steps shall be taken to document status through the EICC declaration process, and we will require this documentation when completed, and annual updates or validation. Please send updates to: hpditechnology.purchasing@cespira.com

Please visit https://www.responsiblemineralsinitiative.org/reporting-templates/cmrt/to download the Conflict Minerals EICC Reporting Form.

3.11 Data Protection and Data Security

As minimum requirements, the Supplier shall comply with all applicable laws and regulations concerning data protection and data security and handle data responsibly and transparently. The Supplier shall take the necessary measures to adequately protect personal data. This encompasses the data of employees, customers, Suppliers, and business partners. The Supplier shall warrant information security. The Supplier shall take the necessary measures to protect confidential information from unauthorized third-party access in accordance with state-of-the-art technologies and may only use this information for the purposes agreed upon with Cespira.

4 Supplier Quality Management

4.1 Quality Management Systems

Suppliers shall have active certifications and maintain them during the business relationship with Cespira. A copy of a valid quality certificate of the manufacturer and/or each production location shall be provided in the initial Supplier evaluation process and after renewal.

If a Supplier is in the process of obtaining their certification, a certification plan shall be provided to Cespira. This plan shall include a proposed certification date along with the details of the status of the quality system at the time of evaluation. There may be unique exceptions where we will work with Suppliers that are not quality certified or where plans for quality certification have not been developed. In such situations we will ensure a required level of quality compliance is met.

The Supplier shall have a system in place that follows the same guidelines for the monitoring of current production product and process with their sub-Suppliers as is required by Cespira for the Supplier. This includes sub-Suppliers of product from other facilities within the same company.

All Suppliers are expected to have Change Control procedures in place (Refer to 4.4 and 6.5).

4.2 Supplier Approval Process

Cespira has a process for Supplier approval, commencing from a process for Supplier selection, evaluation, and qualification. All products purchased are reviewed for criticality and decisions made on the level of Supplier qualification activity related to the Supplier approval process.

Upon completion of initial screening process, Cespira will decide whether the Supplier qualification process will continue. Further follow-up and/or corrective actions may be requested of the Supplier. A self and/or on-site assessment may be required based on the impact of the product or process.

Considerations included in the Supplier approval process:

Business Assessment

Cespira requires an understanding of the business of Suppliers in order to ensure on-going support and stability of the performance and maturity of the company. These considerations are outlined in the initial documents provided to the Supplier at the outset of any business discussion.

The Supplier Initial Evaluation Form shall be completed as the first step of this process.

Technical Assessment

Many of Cespira products are technically complex. We review the Supplier's ability to provide technical support, to conduct product testing, process capability, and analysis, controls, and records of processes. Parts to be designed will require the Supplier's ability to have in-house design capabilities and product support.

Quality Assessment

As most of our key customer base are automotive, Cespira requires not only the quality of the product but the Supplier's ability to supply appropriate documentation related to product validation and qualification. We are working towards minimising incoming inspection and therefore work with Suppliers to ensure they have systems in place to provide a product that meets or exceeds the design intent.

Supplier Quality Audit

As part of the qualification process, a detailed quality systems audit has been developed. The audit is used to become aware of any gaps in the Supplier's quality system and in turn develop plans for improvements. Ratings will identify where the gaps are and what development plans are needed. Third party quality system registration such as ISO 9001 plus MAQMSR or IATF 16949 may be recognized in lieu of an on-site assessment if the Cespira group deems it appropriate.

Special Process Assessments

If a specific manufacturing or supporting process is applied (e.g., heat treatment, welding, plating, coating, injection molding, etc.), the Supplier has to meet the requirements of the corresponding AIAG CQI Standard with the latest published revision. Suppliers with internal or outsourced special processes as identified by AIAG shall comply with the relevant AIAG Special Process documents, unless otherwise waived by the Cespira Global Supplier Development Engineering group.

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

Suppliers shall use AIAG's assessment forms, and auditors shall meet each standard's requirements. At a minimum, auditors must have experience in QMS auditing, plus five years of applicable process knowledge. The Supplier shall submit the CQI assessment at the time of PPAP submittal, and annually by internal or third-party auditor, including sub-Suppliers, as applicable. Any unsatisfactory ratings mandate that the Supplier also submit a corrective action plan, plus confirmation that actions have been completed and are effective.

Supplier Site Visit

Cespira shall have the right to audit Supplier facilities and quality system at its discretion based on Supplier performance, changes to the Supplier's quality system. Notification by Cespira and approval by Supplier should precede the conduct of all such audits. The Supplier is not required to share confidential information without a non-disclosure agreement signed by both parties.

It is expected that a site visit takes place with Suppliers to understand the business, technical and quality aspects. At this point the business opportunities will be discussed and potentially a design and specification review will be held to understand any manufacturing concerns or considerations for improved manufacturability. The Supplier shall provide the resources needed to carry out this task. Concluding the site visit, the Cespira representatives may complete a visit report based on their findings.

Process and Documentation Review

One key aspect of the site visit is to conduct a process and documentation review. The aim is to understand the process control of manufacturing or production processes from start to finish. In most industries it would be expected to see incoming material up to final inspection and part shipment. All processes for the handling of goods, documentation, processing of nonconformities to outgoing shipments and packaging will be assessed. This review generally takes place prior to the Supplier producing any parts for the customer so the intent is to get a general overview of the process at the
Suppliers. Any assistance provided by Cespira does not in any way limit the Supplier's responsibility to
supply parts that conform to all technical specifications and standards, as well as regulatory, contractual and legal requirements.

Supplier APQP Requirements

All Suppliers are required to and responsible to develop and drive Advanced Product Quality Planning (APQP) for all components delivered to Cespira. This must include at a minimum:

- Product and process development including technical and quality requirements, key component decisions
- Milestones (timing, key path)
- The requirements for special characteristics, including product safety
- Work and communication methods and forms

The AIAG publication Advanced Product Quality Planning (APQP) and Control Plan latest edition shall be used as a reference in developing these plans.

Scope

Cespira expects Suppliers to create product launch plans to support:

- Launch of new components intended for serial production
- Development of new manufacturing processes
- Significant changes to existing products or process

Key Components Definition

Key Component – a component identified as critical due to complexity, cost, and lead time during project development activities.

Key components are chosen by a cross functional project team in Cespira and will be clarified with Supplier in RFQ stage. For any questions, please contact your Buyer.

Responsibility in APQP

The Supplier is responsible to:

- Develop and execute an APQP Plan for successful product launch
- Organize the cross-functional APQP team
- Utilize and submit the Cespira Supplier APQP Workbook (if Supplier is designated as "key") by Cespira. This document is intended to track the Supplier's progress throughout the APQP and launch processes

- Have a system in place that follows the same guidelines for the development of new product and processes with their sub-Suppliers as is required by Cespira for the Supplier. This includes sub-Suppliers of product from other facilities within the same company
- Identify and minimize all possible risks that have been identified as early as possible. During the product development phase, the Supplier shall apply appropriate preventive quality planning methods, e.g., feasibility analysis, reliability studies, and risk analysis Cespira is responsible to:
- Identify the Cespira Project Team members
- Assign the SDE to coordinate the APQP activities with the internal Project Team as needed

APQP Planning

The first product quality plan in alignment with Advanced Product Quality Planning (APQP) is expected from Suppliers with the answer to the Request for Quotation (RFQ). Suppliers shall generate an Advanced Product Quality Plan in accordance with the AIAG APQP reference manual for review by the Project Team.

This plan shall include, but is not limited to:

- Notification of risks that affect product integrity or the project plan
- Implementation of mistake-proofing, poka-yoke to achieve Zero Defects to Cespira
- Identification of changes needed to product or process specifications
- Satisfaction of project milestone

APQP Stage Review

Key Suppliers shall report the progress of their APQP plan regularly during the project development. In case of any delay or deviation an action plan needs to be submitted by the Supplier. This file is owned by the Supplier, updated by the Supplier, and shared with Cespira during APQP reviews.

IT IS THE SUPPLIER'S RESPONSIBILITY TO PERFORM AND DRIVE APQP FOR ALL COMPONENTS.

Measurement System Analysis

Product and process conformance shall be determined by measurements made with appropriate test equipment and gages.

The Supplier shall establish the error of measurement according to specification ratios since the test equipment or gage is a significant part of the process. Any error in these measurements, whether known or unknown, has a direct bearing on the ability to judge process/product conformance and capability.

Cespira requires that test equipment and gages used to evaluate any Control Plan characteristic have Gage R&R Studies conducted which meet the requirements of the AIAG MSA Manual; otherwise, they shall be removed from service and replaced with a conforming gage.

Variable gaging shall be used wherever possible.

All families of gages referenced on the Supplier's process control plan shall be verified with an MSA utilizing the AIAG MSA manual as guidance. GR&R Studies shall be submitted for all Special Characteristics gaging for PPAP approval. For Special Characteristics on the Supplier's control plan, the acceptability of GR&R Studies shall be confirmed by the Cespira SDE.

Gage R&R Guidelines:

- Under 10% error is required for Special Characteristics

- 10% to 30% error may be acceptable based upon the importance of the application, noncritical product characteristics, cost of gage, and cost of repair.
- Over 30% error, the measurement system needs improvement. The Supplier should identify the problems and submit proposed corrections to the Cespira SDE.

The use of the guidelines as threshold criteria alone is not an acceptable practice for determining the acceptability of a measurement system. Refer to the AIAG Measurement Systems Analysis (MSA) manual for specific details on conducting GR&R Studies.

Special Characteristics

Special Characteristics are any product or process characteristics that affect safety or compliance with regulations, fit, function, performance, or subsequent processing of product.

Cespira designated Special Characteristics are identified on drawings/specifications.

In accordance with the requirements of IATF 16949, all Special Characteristics shall be identified and specifically addressed in the Design or Process Failure Mode and Effects Analysis (DFMEA or PFMEA), Control Plans, Process Flows, Work Instructions, and other associated documents. The Suppliers shall identify Special characteristics, as appropriate.

The Supplier shall control and monitor the variation of process characteristics (e.g., process parameters such as feed rate, temperature, pressure) on an ongoing basis to assure conformance to specifications and customer satisfaction.

The following requirements apply to the Special Characteristics specified in documentation used to produce parts (e.g., drawings, SPECs, Control Plans):

	Critical Characteristic ▽	**Major Characteristic** ◇
Short-term study	**CpK ≥ 1.67**	**CpK ≥ 1.33 / CpK ≥ 1.67***
Long-term study	**PpK ≥ 1.67**	**PpK ≥ 1.33 / PpK ≥ 1.67***
Process under statistical control, normally distributed	- Ongoing Statistical Process Control - Ppk analysis conducted every 12 months - or, in a method agreed upon by the supplier and HPDI Technology SDE	- Ongoing Statistical Process Control - Ppk analysis conducted every 3 years - or, in a method agreed upon by the supplier and HPDI Technology SDE
Process not under statistical control or capability not achieved **	- Mistake proofing of design - Mistake proofing of process with sensors / fixturing - Automated 100% inspection - or, in a method agreed upon by the supplier and HPDI Technology SDE	- 100% inspection - or, in a method agreed upon by the supplier and HPDI Technology SDE

* In deviation from AIAG PPAP manual, this index applies to electronic components.

** In addition to the method of control, an improvement plan for achieving proven process capability through Statistical Process Control is required.

The Supplier shall control/confirm all Special Characteristics by the methods in the table above and shall submit Special Characteristic data to Cespira upon request.

The Supplier shall require the same level of documentation and control from all sub-Suppliers to meet quality requirements.

100% INSPECTION WITHOUT ANY IMPROVEMENT PLAN FOR ACHIEVING THE REQUIRED PROCESS CONTROL AND CAPABILITY INDEX IS NOT ACCEPTABLE UNLESS A WAIVER IS GRANTED FROM CESPIRA.

Process Capability and Statistical Process Control

Suppliers shall meet the process capability requirements as defined in the AIAG Production Part Approval Process (PPAP) and Statistical Process Control (SPC) reference manuals, unless otherwise specified by the Cespira SDE. The Supplier is responsible to ensure process capability and SPC control requirements are documented in their control plan and that capability indices are achieved and improved throughout production (See also Special Characteristics).

- Capability is the total range of inherent variation in a **stable process** (see the Statistical Process Control reference manual).
- Stable Processes are processes that are **in statistical control** (see the Statistical Process Control reference manual).
- When performing initial process capability studies, the Supplier shall meet the requirements defined in the AIAG PPAP Manual latest edition (see section 2.2.11).
- The process shall **FIRST** be brought into statistical control by detecting and acting upon special causes of variation.
- When the process performance is predictable and its capability to meet customer expectations can be assessed, data shall be taken at random from the significant production run. These studies could be augmented or replaced by long term results from the same or similar process run on the same equipment with prior Cespira concurrence.
- Study data shall be submitted in a format agreed to by Cespira SDE.
- ALL Initial Process Studies shall be accompanied by Measurement System Analysis Studies.
- 100% inspection shall **consider error measurement** for the allowable tolerance (e.g., LL; UL)
- Supplier shall submit the Initial Process Study for all Special Characteristics (e.g., major, critical) that are called out on the Drawing, Spec, and Control Plan. Studies shall be submitted that are representative of each unique production process (e.g., duplicate assembly line and/or work cell, each position of a multiple cavity die, mould, tool, or pattern)
- If the Process Capacity Index (Cpk, Ppk) fails to meet the Cespira requirements, an improvement plan is required. Submit a process improvement plan (free format) to Cespira SDE including the planned implement date. The Supplier shall verify results in a mutually agreed manner for the elimination of the cause of variations.
- New studies shall be performed right after the improvement action is implemented and shall be included in a revised PPAP submission.
- Initial Process Studies shall be performed for ALL engineering changes that could have an effect on the Special Characteristics (e.g., major, critical) that are called out on the Drawing, Specification and Control Plan.
- For further information, please contact Cespira SDE.

4.3 Supplier Performance Requirements

Prototype Requirements

Cespira Product Development Process has four build levels:

- **E release Prototype**: Early Design Lifecycle, created to obtain feedback on the design and/or changes from the project organization. This level has the highest engineering flexibility.
- **D release Prototype**: Design is completed and fully specified. All aspects of fit, form, and function, and performance have been fully verified. It is expected that any changes to D stable designs should be small enough that the risk to starting the production process development is low and long lead time production tooling can be ordered.
- **L release Prototype**: Processes used to produce the parts are production intent. Verification of the design (including durability & reliability) is complete, and the design is considered “Frozen” with no changes expected

that would significantly affect the process. Adequate validation has been completed to justify frozen status and field trials may be ongoing.

- **Production Builds**: All production validation testing has been completed. Supplier PPAP for BUY parts and internal PPAP for MAKE parts is complete (signed PSW).

The Supplier shall submit the Purchased Prototype Sign-off (form 04-0137), including required Quality records (e.g., Material Certs, Dimensional/Test Reports) **prior** to shipping prototypes. 100% measurement/test verification shall be conducted on all prototypes unless otherwise agreed between the Supplier and Cespira SDE, and the results submitted to Cespira. Control Plans for all prototypes and production builds shall be in place prior to start manufacturing the parts.

Part Approval Process

Supplier shall follow AIAG APQP and PPAP requirements for part validation and qualification, unless otherwise waived by Cespira SDE. Please refer to the latest edition of the APQP and PPAP manual.

Prior to PPAP Readiness, the Supplier representative and Cespira SDE shall co-sign the PPAP Submission Checklist. In the absence of a co-signed PPAP checklist the default level is Level 3 per AIAG requirements.

The following documentation is required, unless otherwise, waived by Cespira SDE:

- Design Record
- Engineering Change Documents
- Customer Engineering approval
- Design FMEA
- Process Flow Diagrams
- Process FMEA
- Control Plan
- Measurement System Analysis Studies
- Dimensional Results
- Material, Performance Test Results
- Initial Process Studies
- Qualified Laboratory Documentation
- Appearance Approval Report (AAR)
- Sample Product
- Master Sample
- Checking Aids
- Records of Compliance
- Part Submission Warrant (PSW)
- IMDS submission
- Packaging Data Sheet

PPAP shall be submitted for the requested elements and in accordance with the instructions provided. Regardless of the PPAP level defined in the PPAP Checklist, the Supplier is still required to complete a full Level 3 PPAP of all applicable elements and retain records on file, unless otherwise waived in written by the Cespira SDE.

The Supplier is responsible for the PPAP preparation and execution of:

- Full documentation with 100% dimensional layout/verification test to all specifications is required for five samples per cavity/tool of each part number, selected from the Significant Production Run (SPR).
- System and Design FMEA analyses (for Suppliers having design responsibility) performed, and any safety-related characteristics clearly identified on drawings and technical documents.
- Initial Process Capability studies for special characteristics completed on a stable process using a minimum quantity in agreement with Cespira.
- Ensuring their sub-Suppliers use the PPAP process and have the responsibility for managing PPAP for their sub-Suppliers, including deviation requests. PPAP submissions from sub-Suppliers to Cespira are not required, but the Supplier is responsible to provide evidence of PPAP approval from the sub-Supplier upon Cespira request.
- Producing the Significant Production Run, selecting PPAP samples at random from the SPR (using production tooling/equipment, production facility, production environment, including trained production operators), and meeting the planned PPAP submission date as described in the purchase order.

- Certificates of compliance, accreditation(s) and certifications for the Supplier and subSuppliers submitted to Cespira upon request.
- Shipment of PPAP samples clearly marked/identified (documents and all packaging units) as “PPAP Parts”.

The PPAP submission provide evidence that the Supplier is able to fulfil the required specifications with the applied procedures and equipment. Therefore, the Supplier shall make sure the minimum produced parts defined in the Significant Production Run is adequate to **ensure the process is stable AND capable and ready for a safe launch**.

Cespira may audit Supplier’s PPAP records at any time. Suppliers are expected to forward those PPAP documents within two business day. Cespira requires PPAP approval (signed PSW by Cespira SDE) and written approval from Supply Chain **prior** to shipment of the parts called out on the PPAP PO. In addition, the Cespira approved PSW is prerequisite for production shipments.

Exceptions to approach and scope are only permissible in agreement with Cespira SDE, for example in the following cases:

- Small production batches, after-sale service parts
- Standard and catalogue parts

APPROVAL OF THE PPAP SAMPLES BY CESPIRA DOES NOT RELIEVE THE SUPPLIER OF THE RESPONSIBILITY FOR THE SERIES QUALITY OF THESE PRODUCTS.

Supplier Safe Launch

To ensure product and process stability safe launch planning must be implemented for all key components, or as requested by Cespira Supply Chain.

It is the Supplier’s responsibility to develop a Pre-launch Control Plan with increased controls and separate inspection audits to identify nonconformities in the production process during ramp up and early production stages of a new part launch.

The purpose of the safe launch plan is to protect Cespira and its customers from quality problems until process controls are refined and all start-up problems have been identified and resolved.

The production batches undergoing safe launch measures shall be identified with a green sticker “Safe Launch Components” (at a minimum the first production batch, or as defined by Cespira Supply Chain). This sticker needs to be applied clearly visible to all shipping containers and signed by the quality manager accountable.

Quality Performance Requirements

Cespira monitors the quality of products purchased from Suppliers. We also monitor the overall business quality of Suppliers in order to ensure the delivery of quality products and correct business acumen.

The Supplier shall be fully responsible for all sub-Suppliers, including those chosen by Cespira.

The Supplier shall also be responsible for verifying the quality of all pass-through products (whether sub-Supplier is selected by the Supplier or Cespira).

Suppliers are monitored on their quality performance in the areas of:

- **Quality of Product –** a PPM/ Quality level over committed target. Nonconforming products to the component specification (e.g., drawing, SPEC)
- **Packaging** – wrong containers, mislabelled parts, not labelled or damaged
- **99% On Time Delivery** – delay or error in delivery which leads to disturbances in Cespira manufacturing plant or Cespira customer. Problems such as late delivery, wrong quantities, wrong parts, wrong documents

- **Customer Satisfaction** – opportunities to improve customer satisfaction or as agreed in supply agreements
- **Problem Solution** – A non satisfying response to a complaint (e.g., no response in time, no efficient containment action, 8D report)
- **Continuous Improvement** – Supplier initiative towards Continuous Improvement. The Supplier shall maintain a continuous improvement process that uses all relevant lessons learned and feedback information such as field returns, line rejects, quality-meetings, quality-reporting

Suppliers are evaluated on their commercial performance in the areas of:

- **Supply level and assurance** – stock outs, customer satisfaction
- **Economic value** – price justifications, cost maintenance and/or reduction activities.
- **Solution values** – ability to support global manufacturing, account representative(s), business flexibility.

Cespira policy is to receive all goods the day of arrival. Suppliers are considered to have met 100% ontime delivery when deliveries arrive within three (+3) days before the promised delivery date or two (2) days after the promised delivery date.

All deliveries arriving beyond two days from the promised delivery date are considered late. Supplier deliveries and ratings are reduced based on the number of shipments delivered in the following time frames from the promised delivery date:

- Period I: 2 to 5 days after promised delivery date
- Period II: 5 to 10 business days after promised delivery date
- Period III: 10+ business days after promised delivery date

Delivery ratings are monitored on a regular basis and results might be reviewed with Suppliers every six (6) months unless delivery performance is consistently below the delivery requirement.
Cespira Purchasing shall select Suppliers who need to prepare corrective action plans for the missed target metrics. The designated SQE / SDE and buyer will follow-up the effectiveness of corrective actions.

Nonconformities and Corrective Actions

Cespira will inform the Supplier immediately of any product nonconformities and will issue the Supplier a Supplier Corrective Action Report (S-CAR). The Suppliers shall follow the 8D problem solving approach with 5-Why analysis in determining the root cause. The Supplier will receive an S-CAR from Cespira, for which a containment and temporary corrective actions shall be documented and forwarded to the SQE or SDE within 24 hours of receipt of the S-CAR, and full documentation submitted within 5 business days of the date of issue. Documentation will include root cause analysis, decision on disposition of nonconforming product, a corrective action plan and an implementation plan for the corrective action. These completed documents will be required plus an analysis to ensure all part numbers with similar processes and/or tooling will not see the same failure mode in the future. Submission of evidence to confirm the effectiveness of permanent corrective action is required within 20 working days.

The Supplier will be charged for any associated costs of necessary actions caused by nonconformities.

Having received a complaint note from Cespira or a sub-Supplier of ours, the Supplier shall:

- Analyze, whether the affected material (or similar parts or parts manufactured with same/similar production processes) is also shipped to any other Cespira facilities or subSuppliers.
- If any other locations are involved, inform those instantly about the nonconformity.
- Include those locations in any containment activity (sorting, rework, recall of shipments).
- Send copies of the 8D including updates to those locations.
- Set up any other necessary communication with involved locations (e.g., phone conferences).

The Supplier shall identify nonconforming material and reworked material accordingly.

- Contained material needs to be identified in all locations with the nonconformity and NCR number provided by Cespira.
- First three deliveries after containment of nonconformity shall be labeled as “free from defects” of affected NCR numbers; packing slip and every shipping container requires labelling.

Any reworks of parts supplied to Cespira shall be authorized and approved by the SQE or SDE prior to shipment of these parts. Parts and packaging have to be identified appropriately, and if possible be delivered as a separate shipment.

The Supplier shall ensure that the reworked parts are inspected for full compliance to the agreed upon rework standards by the Supplier’s Quality Department prior to shipment.

All nonconforming product shipped to Cespira requires a countermeasure to ensure no repeat occurrences. The Supplier is responsible for providing information to the responsible SDE or SQE representative identifying the root cause(s) and countermeasure. Repeat occurrences due to ineffective countermeasures are not acceptable and require a corrective action. Lessons learned from documented nonconformities shall be extended to similar processes and products supplied to Cespira.

Related documentation shall be made available upon request.

Supplier Deviation Request

In exceptional circumstances, where the Supplier wishes to request a deviation to supply parts that do not fully comply with Cespira requirements, the Supplier shall inform and request approval from Cespira SQE or SDE using the Deviation Request form (MOD 12-8.3) available on the Cespira Supplier Portal.

The request shall be approved prior to shipment. The validity of a deviation is restricted to a limited time and/or quantity. If the deviation is approved, the Supplier will be e-mailed a copy of the notice of approval.

The material delivered under deviation approval, shall be marked with the deviation number and a copy of the deviation approval; packing slip and every shipping container requires labelling. Specific labelling type shall be agreed between the Supplier and the buyer. In addition to the agreed labelling, the Supplier shall inform the buyer about the first delivery of material under deviation (shipment date, delivery note numbering). Shipments under deviation may be subject to additional incoming inspection.

Suppliers requesting a deviation shall complete an 8D response identifying the root cause(s), corrective action, and measures taken to prevent recurrence.

ALL DEVIATIONS NOT COVERED IN THE DEVIATION APPROVAL WILL BE CONSIDERED AS NONCONFORMING

4.4 Changes to Product Drawing and/or Specification prior to PPAP approval

For requesting a drawing and/or specification change, the Supplier shall submit a PPCN form to the buyer with a copy sent to the Cespira SDE at least 6 weeks prior to the introduction of the change during Product Development, unless otherwise agreed with Cespira SDE.

The PPCN form shall include the part numbers affected, the description of the change, the reason(s) for the change, the requested timing for the change, the impact assessment, and the Supplier representative's contact information, signature, and date.

The Supplier shall receive written authorization from the Cespira buyer to proceed with the implementation of the change.

The Supplier shall have any authorized engineering change documents for those changes not yet recorded in the design record but incorporated in the product, part, or tooling.

Continual Improvements

Supplier development activities within Cespira allow us to work closely with our Suppliers and assist in driving their improvement effort by focusing on:

- Improving product safety
- Improving process control
- Improving quality management systems
- Improving product design and quality
- Improving Supplier on-time delivery
- Improving supply chain effectiveness
- Reducing costs
- Increasing capacity
- Improving productivity
- Reducing lead time
- Optimizing the supply chain
- Training

Cespira will select Suppliers for development who present the best opportunity for improvement and who present the greatest potential impact to the organization. Criteria for selecting Suppliers for development opportunities include:

- Strategic growth Suppliers
- Key components
- Risk revenue partner
- Critical to manufacturing flow
- Performance issues

Documentation and Records Retention

Through the regular course of business, it is expected that various Cespira documents will be forwarded to Suppliers. At times it is necessary to share documents that are confidential and contain proprietary information. The Supplier is expected to safeguard and control all documents forwarded by Cespira to ensure integrity, confidentiality and availability are controlled to the highest standard.

Suppliers shall maintain production part approval process (PPAP) packages, annual layout and validation records, tooling records, traceability records, engineering records, purchase orders and amendments for the length of time that the part (or part family) is active for production and service requirements plus one calendar year or a minimum of 15 years, whichever is longer, unless otherwise specified and approved by the Purchasing and Supply Chain group.

Corrective Action records are to be retained for 5 years. Quality performance records such as control charts and inspection and test results are retained for 15 years.

The above time periods are considered minimum. All retention times shall meet or exceed the above requirements,

regulatory requirements, and Cespira OEM Customer Requirements.

5 Logistics

5.1 Shipping of Goods

When Cespira is responsible for the cartage of the shipment, the Supplier shall use the carrier identified.

Upon shipment of goods, the Supplier shall notify the Cespira Buyer with the shipment tracking information.

5.2 Packing List

Packing lists shall accompany all shipments. All packing lists shall contain:

- Purchase Order (PO) number (legible and in bar code format)
- Part number and revision level

- Proper shipping address
- Name of the Cespira buyer

5.3 Packaging Responsibilities

Packaging needs to meet all handling requirements and regulations. It is the responsibility of the Supplier to ensure all packages or parcels arrive at point of delivery intact, in a timely manner, and have been packaged in a manner that protects the product from handling and carrier damage. Packaging provided shall warranty a shelf life of at least 6 months.

When packaging standards and specifications have been provided by Cespira it is the responsibility of the Supplier to ensure that all packaging complies with these requirements.

The Supplier is responsible for the packaging for the PPAP samples and production parts in compliance with Cespira specifications, where specified.

- The Packaging Data Sheet shall be approved and signed by Cespira Logistics prior to the shipment of PPAP samples unless the Supplier and Cespira buyer agree otherwise. Contact the buyer in case of any questions.
- Specific requirements for packaging and identification will be clearly identified as a condition on the Purchase Order.
- Packaging shall be developed and defined to eliminate damage during transportation, handling, and storage.
- Ergonomic handling and environmental criteria shall be considered along with inventory restrictions, optimum pack size, and cost.
- Packaging shall comply with the minimum and maximum quantities in agreement with Cespira logistics, which shall not exceed the maximum permissible weight defined by applicable legislation.
- Traceability is required for all parts and/or services. The Supplier's traceability strategy shall enable the Supplier to work back through their process to the incoming material used in the manufacture of defective or suspect product. Certain components, assemblies, services shall be individually identified.
- Product traceability is assured along the entire supply chain. The traceability system has to maintain its integrity through the entire supply network, including raw material, purchased products, and sub-contracted operations.

5.4 Packaging Labelling and Identification

All shipping containers shall be clearly marked on the outside showing shipping address, PO number (bar coded) and the number of shipping containers in the shipment.

Packing lists shall be attached to the outside of the shipping container, and a copy of the packing slip shall be placed inside the shipping container. In the case the shipment has more than one shipping container; the packing list shall be placed inside the first shipping container (identified as 1 of XX where XX is the total amount of containers).

A sample shipping label may be requested for PPAP parts and for any other special handling conditions (i.e., hazardous materials, fragile, time sensitive). This label or any special handling conditions shall be clearly marked on all shipping containers.

All labels shall be compliant to AIAG standard B-10 that can be found on AIAG.org. If any deviation is required, the Buyer shall be notified prior to shipment.

5.5 Customs Documentation

It is the responsibility of the Supplier to provide all necessary customs documentation for all shipments. All shipments shall be accompanied with completed commercial invoices, packing slips and weigh bills (waybills) and any other documentation required by customs.

5.6 Management Operating Guidelines Logistics Evaluation (MMOG/LE)

Suppliers shall complete the Self-Assessment of Odette/AIAG Materials Management Operating Guidelines Logistics Evaluation (MMOG/LE) and report the resulting score.

To become a long-term Supplier for Cespira a rating of A+ is required in the MMOG Self-Assessment.

6 Risk Management

Suppliers are expected to have plans in place to address and manage risks associated with their production capabilities and performance.

6.1 Facility Management

It is expected that Suppliers have documented procedures in place to manage risks associated with each facility. These procedures shall include fire protection (e.g., structural protection, sprinklers) protection and management of natural hazards (e.g., flooding, earthquakes) machine or tooling breakdown, and security management.

Further it is expected that there are tools and procedures in place to support computer and software protection and storage.

Evidence of insurance for facilities, machinery or tooling may be requested by a Cespira Buyer.

Specific arrangements for Cespira owned tooling and maintenance will be discussed by the Cespira Buyer. The Supplier shall maintain all equipment and tools through a preventative maintenance system in accordance with IATF 16949.

6.2 Union Relations and Considerations

Suppliers will be asked to provide information regarding union relations when and where a union is involved in the production and delivery of the product. Union contract expiration dates are required to consider implications or preventive actions. Strike protection plans are expected to ensure an uninterrupted flow of material to support production demands.

6.3 Contingency Planning

Suppliers are required to prepare contingency plans for situations that may cause a disruption of supply, including but not limited to utility interruptions, labour shortages, supply shortages, key equipment failure and field returns, to reasonably protect Cespira's supply of product in the event of an emergency, excluding natural disasters and acts of God or conditions of war. Insurance coverage is expected for customer owned goods and/or equipment as well as adequate protection from catastrophic loss due to fire, flood, earthquake, or any other natural disasters.

6.4 Alternate Production Site

Suppliers may be asked to provide information and plans for alternative production sites when a problem occurs impeding the Supplier from producing and delivering product. Required in this information will be the location of the alternate production site along with start-up lead times and capacity. If the Supplier intends to cooperate or partner with an alternate company, the identity of the company shall be provided to Cespira. Before any shipping starts from the alternate production site, PPAP approval for this site shall be completed.

6.5 Changes to Approved Product and Processes

Suppliers and sub-Suppliers are NOT to make any unauthorized changes to a product, or the process used to produce a product that has been previously PPAP approved by Cespira. This applies, but is not limited to, the following cases:

- New parts
- Transferring of the production line: partly or totally; to a new or existing location, plant, or building
- Revisions to the production line layout or workstation Change of sub-tier Supplier
- Modifications in the Supplier's purchased parts

- Changes of a process at a contract external provider, (e.g., surface treatment, machining)
- Packaging changes or repackaging operations
- Change that affect fit, form or function of the product at Supplier or sub-tier Suppliers
- Use of new, modified or replacement tools (only applicable to non-consumable tool)
- Change to the raw material
- Outsourcing all or part of production to a sub-tier Supplier
- Change to product design including dimensions, tolerance, function, appearance
- Any changes in the Control Plan (i.e., changes of test/ inspection method, frequency)
- Requalification

Any intended change, including those changes caused by sub-Suppliers, shall be assessed, verified and validated to ensure compliance with Cespira requirements prior to implementation. The evidence of risks associated with the change shall be documented and assessed.

Any intended change, deviating from the latest PPAP approval, shall be communicated as soon as possible to Cespira to allow for a timely review and approval by Cespira.

The Supplier desiring a change shall submit a completed Product or Process Change Notification (PPCN) form to the buyer with a copy sent to the Cespira SQE or SDE as soon as the modification project is known, and at least 15 weeks prior to the intended date of implementation in production, unless otherwise agreed with Cespira SDE. The Supplier shall receive written authorization from the Cespira buyer to proceed with the PPAP submission prior to the implementation of the change.

Once approved by Cespira, Suppliers will be notified by the Cespira buyer. Upon receipt of the approval, the Supplier shall implement the modification according to the agreed implementation plan.

The SDE will review the change and determine the need for PPAP submission, including the level of PPAP documentation required to support the change's introduction.

AUTHORIZATION TO START SHIPPING (WITH THE CHANGES IMPLEMENTED) IS ONLY GRANTED VIA THE RETURN OF THE SIGNED PART SUBMISSION WARRANT FOLLOWING PPAP APPROVAL

Any such change made without prior written approval by Cespira would not only constitute a breach of our purchase order terms and conditions but would also be a serious breach of standard automotive practice. Suppliers who do not adhere to this requirement will be held responsible for all damages, losses and liabilities attributable to any unapproved change made by the Supplier or one of its subSuppliers (e.g., customer rejections, customer line stoppage penalty fees, field failures costs, warranty expense).

Introduction of product or process changes without Cespira approval may result in any or all the following actions:

- The Supplier’s third-party certification body will be formally notified that the Supplier is not following quality system or customer requirements.
- The Supplier shall complete corrective action and demonstrate effective controls to prevent recurrence.
- The Supplier may be placed on hold for new business.

6.6 Production Product & Process Requalification

Product and process validation is required to be performed by the Supplier and be documented in the Control Plan (see Cespira APQP Workbook, tab “Documentation Definitions”).

The Supplier shall re-qualify its process and products:

- in case of changes
- and regularly, at least once a year, if not otherwise mutually agreed

This review shall include, but not be limited to FMEA, process capability data (Ppk analysis), control charts, lay-out inspection data, conformity to engineering drawings and SPECs, and internal yield data.

The Supplier shall have a process for effective review of PFMEA of all manufacturing parts and processes to occur annually at minimum. This review shall consider at a minimum; critical, safety, and high-risk items. The Supplier shall incorporate tools such as reverse PFMEA or others similar to this assist in the PFMEA review.

The yield data shall include details of specific component failures or process-related issues. The yield data shall include the failure details and corrective actions for following manufacturing activities: Endof-Line (EOL) test, Process Inspection, Rework rate, Layered Process Audits.

Supplier shall notify Cespira SQE or SDE immediately if there are any functional/material test failures or out of specification conditions identified during the annual layout/specification verification.

The Suppliers shall maintain tooling in good working condition and to contact the SDE regarding any Cespira-owned tools requiring replacement or refurbishment.

The Supplier shall have current norms, specifications and documents related to production products and check them yearly as part of the document control system.

Results and Documentation shall be maintained by the Supplier and be submitted to Cespira upon request. Regular annual PPAP submissions are not required to be submitted to Cespira unless specifically requested. Conformance to this requirement is subject to audit by Cespira.

7 Acronyms and Definitions

AIAG	Automotive Industry Action Group
APQP	Advance Product Quality Planning
COC	Certificate of Compliance
COA	Certificate of Analysis
DFMA	Design for Manufacturability & Assembly
DFMEA	Design Failure Mode and Effects Analysis
FMEA	Failure Mode and Effects Analysis
MSA	Measurement System Analysis
NCR	Nonconformity Report
NDA	Non-Disclosure Agreement
PFMEA	Process Failure Mode and Effects Analysis
PM	Project Manager
PPAP	Production Part Approval Process
RFQ	Request for Quotation
S-CAR	Supplier Corrective Actions
SDE	Supplier Development Engineer
Shall	Shall refers to activities that the Supplier must perform.
Should	Should refers to activities that are recommended or the Supplier may be asked to perform.
SPC	Statistical Process Control
SPEC	Cespira Specification Document

SQE Supplier Quality Engineer

8 Appendix List

1. Appendix 1 – Cespira IMDS Information Sheet

Appendix 1

IMDS Information Sheet

Regarding your submission, please consult the Cespira SDE or SQE for the IMDS ID#.

What is IMDS and why is it needed?

The International Material Data System (IMDS) is a collective, computer-based material data system used as a tool by the automotive OEMs and Supply Chain to manage environmentally relevant aspects of the different parts supplied for use in vehicles. IMDS has been adopted as the global standard for reporting and tracking the material content of components used in the automotive industry. Suppliers declare, register and submit material / substance information used in the manufacture of components for their customers into the various fields in the IMDS database.

Cespira is registered in IMDS portal which is used to verify and ensure that the received submissions of Material Data Sheets (MDS's) providing information on materials and substances used in the manufacture of supplied products comply with the EU End of Life Vehicles (ELV) legislation; Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), and the Global Automotive Declarable Substance List (GADSL).

- EU ELV – European directive which focuses on making vehicle dismantling and recycling more environmentally friendly. More information can be found at http://ec.europa.eu/environment/waste/elv_index.htm

- REACH – European regulation on chemicals and their safe use. It aims for the industry to assess hazards and risks of substances and implement risk management measures to protect both humans and the environment. More information can be found at http://ec.europa.eu/environment/chemicals/reach/reach_intro.htm

- GADSL – Global effort of representatives from the automotive industry to standardize the information of certain substances. More information can be found at http://www.gadsl.org/

Once a request for substance information from Cespira has been received by the Supplier, the relevant data shall be submitted by the Supplier through IMDS using a Material Data Sheet (MDS). Cespira can accept the MDS if the information is correct or decline the MDS if the information is incorrect, sending the MDS back to the Supplier with the reason(s).
It is the responsibility of the Supplier to ensure that all parts and materials comply with all the above latest revision of published regulations and standards.

Where the system can be accessed?
IMDS can be accessed from the internet at the following web address. http://www.mdsystem.com

Useful information and guides:
NEW TO IMDS?
Visit https://public.mdsystem.com/en/web/imds-public-pages/new2imds/

Who to Contact?

Consult Cespira SDE or SQE for further information regarding the IMDS submission.

Additional requirements

- The Supplier shall ensure the composition of the materials used and their individual components as well as aspects relating to the environment.
- The Supplier shall submit the necessary information into the IMDS database. As a result, the Supplier shall require their sub-Suppliers to submit IMDS to their recipient code; shall review the sub-Suppliers' submissions for compliance; and shall approve or reject submissions. The Supplier shall then use approved sub-Suppliers' IMDS modules to build their own IMDS module for submission for approval by Cespira.
- The Supplier shall input the IMDS data into the system prior to delivery of first samples or PPAP package.
- PPAP shall include PSW and material certifications for all purchased components or services.
- PPAP shall include MSDS for any rust preventative or coating.