



# ***NEXTEER SUPPLIER REQUIREMENTS***

**FEBRUARY 15, 2023**

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# Introduction /Business Philosophy

Welcome Nexteer Automotive Suppliers:

Nexteer's vision is to be the leading motion control technology company accelerating mobility to be safe, green, and exciting. Our mission is to be a model global company, achieving profitable and balanced global growth, while fostering a culture that focuses on our People, Operational Excellence and Sustainable Growth. We want suppliers to perceive Nexteer as a business partner of choice that delivers world-class products while demonstrating operational excellence.

Nexteer Automotive is dedicated to providing best-in-class technology, quality and value to every customer, every day. To achieve that goal, we must provide a clear, consistent message to our supplier partners regarding requirements and expectations. The intent of the **Nexteer Supplier Requirements Manual** is to do just that.

For Nexteer and its partners to be successful, we need to build perfect quality. As Nexteer's Quality Policy states, "Take Action for Quality; it's EVERYONE'S job," suppliers shall have a commitment to total quality, with subsequent planning and actions that drive for perfection. This commitment starts with your top leadership and is driven through all levels and aspects of your operations.

In direct support of Nexteer's commitment to perfect quality, it is expected that suppliers meet the **Nexteer Supplier Requirements**. This is demonstrated through consistent delivery of quality products and services (including service products) to Nexteer and our customers. In addition, suppliers are expected to be globally competitive and provide the best delivered value to Nexteer Automotive. Your performance will be a key factor in your growth with Nexteer.

Exceptions to any part of these requirements must be approved in writing by the appropriate functional area contact. Interpretations of this requirements document are to be handled by:

Jacky Xu  
Chief Purchasing Officer  
Global Supply Management

Glenn Barrie  
Executive Director  
Global Supplier Quality & Development

# 1. SCOPE

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## 1.1 Scope – General

**\*\*This document applies to external suppliers of automotive products, processes, and services.\*\***

This includes products and services affected by OEM customer requirements such as but not limited to production parts, sorting, rework, software development, service packaging, logistics providers, and calibration services (typically referred to as “Indirect Suppliers”). Note that distributors adding no manufacturing value must adhere to sections 4.3a, 4.3i, and 8.2.1 of this document.

Section 5.1.1.1, Corporate Responsibility applies to all suppliers to Nexteer Automotive including Indirect suppliers.

**The current version of IATF 16949, the current version of ISO 9001, Nexteer General Terms and Conditions and this document define the fundamental quality system and commercial requirements for Nexteer.** The requirements apply throughout the Supplier’s entire productive value-stream, including sub-supplier processes. Suppliers are responsible to cascade all Nexteer requirements throughout their supply chain. This document contains the Nexteer specific requirements including Nexteer’s Customers’ requirements if applicable, which are supplemental to the current version of IATF 16949 and the current version of ISO 9001. This may also apply to other similar registrations as applicable and stated within this document. Failure to comply with this document may result in the supplier location being placed on New Business Hold. Suppliers certified to ISO 9001 and or IATF 16949 with a status of New Business Hold, shall notify their Certification Body of such status and confirm to the Nexteer SQE when complete.

The US English language version of this document shall be the official version for purposes of third-party registration. Any translations of this document shall be for reference only.

# 2. NORMATIVE REFERENCES

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## 2.1 Normative and Informative References

The following reference documents are vital to the development of a quality system that meets the Nexteer standards. Therefore, it is expected that the supplier will have the current version of the following documents.

- AIAG Production Part Approval Process, PPAP
- AIAG Statistical Process Control, SPC
- AIAG & VDA FMEA Handbook or SAE J1739 FMEA Standard
- AIAG Advanced Product Quality Planning and Control Plan, APQP
- AIAG Measurement Systems Analysis, MSA
- AIAG CQI-8 Layered Process Audit Guidelines
- AIAG CQI-9 Special Process: Heat Treat System Assessment
- AIAG CQI-11 Special Process: Plating System Assessment
- AIAG CQI-12 Special Process: Coating System Assessment
- AIAG CQI-14 Automotive Warranty Management Guideline
- AIAG CQI-15 Special Process: Welding System Assessment
- AIAG CQI-17 Special Process: Soldering System Assessment
- AIAG CQI-19 Sub-Tier Supplier Management Process Guideline
- AIAG CQI-23 Special Process: Molding System Assessment
- AIAG CQI-27 Special Process: Casting System Assessment
- AIAG CQI-28 Traceability Guideline

- AIAG CQI-30 Rubber Processing
- Nexteer Global Packaging and Shipping Manual - Located on Nexteer.com, Suppliers, Shipping & Labeling Processes: <http://www.nexteer.com/shipping-labeling-processes/>
- Nexteer APQP and Current Production Cycle Documents– Located on Nexteer.com, Suppliers, Quality Processes: <http://www.nexteer.com/quality-processes/>
- Nexteer Global Supplier Standard Label Requirements EDIFACT – Located on Nexteer.com, Suppliers, Shipping & Labeling Processes: <http://www.nexteer.com/shipping-labeling-processes/>

Copies of PPAP, APQP, FMEA, MSA, SPC, Special Process Assessments, Guidelines, and other related manuals are available from AIAG at 1-248-358-3003, or at the following link: [www.aiag.org](http://www.aiag.org). Copies of ISO documents are available from the American National Standards Institute (ANSI) at (212) 642-4900, or <http://webstore.ansi.org/>.

Order of Precedence -- These Supplier Requirements are incorporated into, and made a part of, each purchase order, release, requisition, work order, shipping instruction, specification, and other documents (collectively, the "Contract"), whether expressed in written form, by electronic data interchange or other tangible format, relating to the goods and/or services to be provided by Seller pursuant to the Contract. To the extent of any conflict between the terms of any purchase order, Buyer's General Terms and Conditions and these Supplier Requirements, the terms and conditions of such documents will apply, govern, and control in the following order of precedence: (1) the provisions and terms contained in the purchase orders; (2) Buyer's General Terms and Conditions; (3) the Supplier Requirements.

## Quick Reference Guide

Sections of this document related to PPAP:

MSA	7.1.5.1.1
Critical characteristics and capability requirements	8.2.3.1.2
Run-at-Rate	8.2.3.1.3
Process readiness audit F1058	8.2.3.1.3
PFMEA	8.3.2.1
PPAP	8.3.4.4
SoC	8.4.2.2
Control Plan	8.5.1.1
Boundary board and standardized work	8.5.1.2
Shipping and Packaging Information	8.5.4
Labeling	8.5.4
Change control requirements	8.5.6.1
Annual PPAP	8.6.2
Capability studies defined	9.1.1.1

## 3. TERMS AND DEFINITIONS

### ***3.1 Terms and Definitions for the Automotive Industry***

**APV – Annual Purchase Value**

**AQE – Advanced Quality Engineering** – A group of Nexteer engineers responsible for assessing potential suppliers and taking contracted suppliers through the APQP process until the product is into production. In some regions, the SQE may perform this role.

**ASN - Advanced Shipment Notification** – An electronic communication which identifies advanced shipment details to Nexteer via GXS - Trust Link (Van).

**Buyer** – The Nexteer Automotive representative responsible for supplier selection, negotiation, and contract issuance.

**Capacity Verification** – A verification methodology to demonstrate that a supplier can meet the capacity planning volume requirements as defined in the GSM Request for Quote (RFQ). Verification of capacity to be documented with the Nexteer Run-at-Rate form F1019.

**Carry-Over Part** – A part that is currently sourced and PPAP approved, that is going to be used on a new customer program for additional volume.

**CPB** – Complaints Per Billion parts received.

**C-TPAT** – Customs Trade Partnership Against Terrorism – A voluntary government-business initiative to build cooperative relationships that strengthen and improve the overall international supply chain and U.S. border security and focused on improving the security of private companies' supply chains with respect to terrorism.

**Direct Supplier** – Producers of production materials, production or service parts, assemblies, heat-treating, welding, painting, plating, or other finishing services that are used in the creation of the final product that is shipped to Nexteer customers. These material, parts, or services are used to fulfill the requirements of a Nexteer product drawing, material specification, or purchase specification.

**DSS – Design Severity and Sensitivity** – The DSS Assessment is the risk analysis tool that determines if a product characteristic is standard or special and assigns the QCL type, based on the characteristic's severity and sensitivity. Severity is a ranking of 1 – 10 on the negative impact a failure mode could have on vehicle function. Sensitivity is a measure of a dimension's ability to tolerate variation relative to its specification, without impact to vehicle function. Sensitivity Red, Yellow and Green are shown in the Nexteer Design Severity & Sensitivity (DSS) Assessment.

**DUNS® Number** – A nine-digit number assigned and maintained by Dun and Bradstreet to identify unique business establishments. DUNS numbers are assigned worldwide and include US, Canadian, and international organizations.

**eAPQP** - an application within Intalex that supports a standard approach for Advanced Product Quality Planning.

**EIPD – Electrically Induced Physical Damage** – Damage to an integrated circuit due to electrical/thermal stress beyond the level which the materials could sustain.

**EOS – Electrical Over Stress** – Voltage beyond tolerance (Absolute Maximum Rating) resulting in physical damage.

**EPC – Early Production Containment** – Added inspection that validates the supplier's process and is part of APQP.

**ESD – Electrostatic Discharge** – Short event with very high intense energy dissipated into a chip which may result in physical damage.

**External Direct Suppliers** – Suppliers to Nexteer excluding Nexteer owned subsidiaries or joint ventures with greater than 50% ownership that manufacture Nexteer or OEM specified parts for production or service.

**Family Parts** – These are groups of parts processed on the same production line, using the same control plan, PFMEA and process equipment. The parts differ only in end item value. PPAP for the “family” is approved by using the extreme values of the “family” specification to define the “family” boundary.

**FTQ- First Time Quality** – FTQ is defined as a measure of the number of pieces rejected in a manufacturing process versus the total number of pieces attempted. FTQ can be measured at any step in the manufacturing process where parts are rejected (but does not include normal set-up and inspection pieces). FTQ is reported in parts per million (PPM) defective.

**Gate Chart** – A matrix chart used to track and report warranty, customer returns, or first-time quality claims. This chart documents problem resolution and monitors effectiveness of corrective actions over time.

**GSM – Global Supply Management** – The Nexteer Department that has the responsibility to procure materials, products, and services worldwide. GSM is also responsible for ensuring quality of supplied parts, materials, and services from suppliers, including customer-designated suppliers.

**IATF – International Automotive Task Force** – An ad hoc group of automotive manufacturers which aims at providing improved quality products to automotive customers worldwide. The source of the IATF 16949 Automotive Quality Management System Standard. Note that when IATF 16949 is referred to in this document, the reference is to the current version.

**ISO – International Organization for Standardization** – A worldwide federation of national standards bodies. The source of the ISO 9001 Quality Standard. Note that when ISO 9001 is referred to in this document, the reference is to the current version.

**Indirect Supplier** – Producers of items or services that are not part of the final product that is shipped to Nexteer customers or which Nexteer has defined as Indirect based on business structure or strategy.

**Intelex** – A business to business platform upon which Nexteer builds applications for supplier interaction.

**Major Disruption** – A problem case is identified as a major disruption based on supplier caused quality nonconformance that has a major impact on a Nexteer plant, or a Nexteer OEM customer:

- OEM Customer field campaign issued to Nexteer because of a supplier event
- OEM Customer yard hold issued to Nexteer because of a supplier event
- Saleable assemblies replaced in vehicle at OEM customer location because of supplier event
- Containment of finished goods in -transit, at sequencer, and /or at a Nexteer facility

**MAQMSR - Minimum Automotive Quality Management System Requirements for Sub-Tier Suppliers**

A set of requirements for automotive suppliers that helps them transition to IATF16949 by allowing many of the key automotive requirements to be met while developing the remainder of the quality management system. It is not certifiable or a third-party auditable standard.

**MAPP – Manufacturability Assessment & Process Plan** – Excel Template tool used to identify and assess risk and mitigation plans for purchased parts throughout the launch process.

**MCA – Manufacturing Capability Assessment** – An assessment that helps determine if a manufacturing location can successfully produce component parts that meet Nexteer Requirements. The MCA aids the team in identifying gaps in the manufacturing process and the actions required that would eliminate or minimize those gaps.

**Nexteer Supplier Website** – The Nexteer Supplier Website is a website, accessible through the Internet that allows suppliers to access useful information and interact with Nexteer. It is the single point of e-contact between Nexteer and the supply base and acts as an integration point for common systems and processes.

**Nexteer Supplier Assessment (NSA)** – A standardized audit to evaluate a supplier's business and quality systems. The NSA is equivalent to the IATF Minimum Automotive Quality Management System Requirements for Sub-Tier Suppliers (MAQMSR).

**OEA** - The Authorized Economic Operator (OEA - Operadores Económicos Autorizados) is a voluntary program that aims to strengthen supply chain security of foreign trade in Mexico by establishing, in coordination with the private sector, internationally-recognized safety standards.

**OEM** – Original Equipment Manufacturer; considered to be Nexteer customer.

**Performance Complaint** - A process used to request that an IATF 16949 certified supplier's Certification Body investigate a probable nonconformity in their quality management system in accordance with Section 8 of the Rules.

**Problem Case** – A document to track supplier performance issues that impacts a supplier's Scorecard.

**R&R** – Reproducibility and Repeatability, a statistical tool that measures the amount of variation in the measurement system arising from the measurement device and the people taking the measurement.

**SDE** – Supplier Development Engineer – A Nexteer engineer responsible for training and development of new suppliers to Nexteer.

**Shall** – The word “shall” indicates a mandatory requirement.

**Should** – The word “should” indicates a recommendation.

**Site** – A specific supplier physical location under one address, such as a manufacturing plant, which can be assigned or has a DUNS or User Block number.

**SPI** – Supplier Packaging Information.

**Sub-supplier** – Providers of production materials, production or service parts, assemblies, heat-treating, welding, painting, plating, or other finishing services in the direct supplier's value stream.

**SQE - Supplier Quality Engineer** – A Nexteer engineer responsible for managing the current production quality issues and continuous improvement with the supplier. In some regions, the AQE may perform this role.

**SQEP – Supplier Quality Escalation Process** – A process for early engagement between Nexteer Supplier Quality and suppliers when issues are developing to implement sustainable improvement. The process includes multiple levels and specific actions required at each level.

**SSCR - Supplier Suggestion/Change Request** – The supplier must notify Nexteer of any design, manufacturing location change and process changes as defined in the PPAP manual. The SSCR application located on the Nexteer Supplier Website shall be used by the supplier to communicate changes.

**TFS – Top Focus Supplier** – A quality improvement program. It is SQEP level 3.

**Traceability** – The ability to discover information about where and how a product was manufactured. Refer to section 8.5.2.

## 4. CONTEXT OF THE ORGANIZATION

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### ***4.1 Understanding the Organization and its Context***

#### **Environmental Policy**

Nexteer is committed to environmental excellence by minimizing our environmental impacts, promoting environmentally sustainable behavior, and encouraging environmental responsibility in ourselves, our customers, suppliers, and stakeholders which are in concert with our activities, products, and services. See Nexteer's Environmental Policy located at <https://www.nexteer.com/doing-business-with-nexteer/>. Suppliers are expected to read and understand Nexteer's Environmental Policy and implement their own Environmental Policy.

### ***4.2 Understanding the Needs and Expectations of Interested Parties***

No Nexteer specific requirements for this section

### ***4.3 Determining the scope of the quality management system***

#### **Quality System Certification**

The supplier's entire facility shall be certified to the applicable standard as detailed below. Nexteer satisfies the goal of supplier conformity to the current version of IATF 16949 as follows:

- a. For supplier locations that manufacture direct product or materials, certification to the current version of ISO9001 and compliance to MAQMSR is the minimum requirement. Such suppliers may be subject to a risk-based audit by Nexteer to verify compliance to MAQMSR. The preferred certification is IATF 16949. Manufacturing locations that are certified only to ISO9001 must upload to the Intellex Supplier Profile application, a plan that shows how the location complies with the requirements of IATF16949, with the ultimate objective of certification to IATF 16949. A letter from the site's Certification Body will suffice as a plan. If the plan for certification to IATF 16949 is greater than a year, then company letterhead with a targeted timeline should be submitted. This plan is required to be updated by the supplier annually until certification is obtained. Failure to submit the annual plan may result in New Business Hold.
- b. Distributors of direct product or materials must be certified to the current version of ISO9001 or comparable 3<sup>rd</sup> party quality certification (ex. ASA-100). Distributors must ensure and maintain valid quality certificates (IATF 16949 or ISO9001) in the Intellex system for the manufacturing locations they represent.
- c. Direct Supplier locations that manufacture products or materials, which are not certified to any quality standard (e.g., greenfield locations) must comply with IATF publication, Minimum Automotive Quality Management System Requirements for Sub-tier Suppliers (MAQMSR). Greenfield locations must upload to the Intellex Supplier Profile application, a letter from their ISO Registrar indicating their plan and timing for certification.
- d. Suppliers are responsible to comply with the Nexteer Supplier Requirements.
- e. Nexteer only recognizes IATF 16949 certificates issued by IATF recognized Certification Bodies carrying the IATF logo and specific IATF number. See Supporting Documentation, Forms, or Reference section below for the link to the certification body official list.
- f. Nexteer only recognizes ISO9001 certificates issued through a certification body bearing the accreditation mark of a recognized IAF MLA member and where the accreditation body's main scope includes management system certification to ISO/IEC 17021.
- g. Every manufacturing site of a supplier to Nexteer shall be individually certified either by single site or by corporate scheme. (See IATF Certification Reference or consult the certification body)
- h. A clear summary definition of what product value added process shall be included in the certification scope (Example: manufacturing, assembly, etc.) along with the address for each manufacturing site.
- i. Suppliers of non-automotive product should contact their Buyer for specific requirements.
- j. Supplier quality certificates shall be in English or include an accurate English translation on them.

- k. Suppliers of inspection, test, or calibration services must be accredited to ISO/IEC 17025 or national equivalent by an accreditation body (Signatory) of the ILAC MRA (international laboratory accreditation forum mutual recognition arrangement – [www.ilac.org](http://www.ilac.org)) and have a defined laboratory scope that includes the capability to perform the required service. The certificate of calibration or test report shall be traceable to a national standard.
- l. Suppliers of sorting and rework services must be certified to the current version of ISO 9001.
- m. Suppliers of software development services shall have an assessment process profile report or evidence acceptable to Nexteer that is consistent with the current version of ASPICE or CMMI software assessment methodologies. Additionally, certification to the current version of ISO 26262 is required in order to demonstrate ASIL D capability.
- n. Suppliers of service packaging must be certified to the current version of ISO 9001.
- o. Suppliers are responsible to ensure their certificate name and address information matches the DUNS location that is in the Intellex Supplier Profile Application.
- p. Certification Body/Registrar Notification - Suppliers registered to ISO 9001, IATF 16949, or ISO/IEC 17025 shall notify Nexteer of certificates being revoked, withdrawn, being placed on suspension, or re-instated. In those cases, the supplier may be subject to a second party audit process and be placed on new business hold until the supplier is recertified. Supplier must submit to the Nexteer SQE, a plan/timeline for reinstatement.

**NOTE:** Third party certification does not relieve the supplier of the full responsibility of the quality and delivery of the product supplied.

**NOTE:** Nexteer Automotive does not grant Quality Management System waivers.

## **Requirements for Suppliers of Electronics**

The supplier shall support Nexteer's efforts to comply with ISO26262.

If requested by Nexteer, the supplier shall enter into a Development Interface Agreement with Nexteer which details functional safety responsibilities between the two parties, and also identifies required information sharing.

For hardware elements of Class 2 complexity according to ISO26262:2018 Part 8 Clause 13 (example, sensor ICs without internal safety mechanisms necessary for Nexteer safety case), the supplier shall support the hardware evaluation steps defined therein by providing the necessary analysis and test data. The supplier shall also provide the necessary failure rate information for Nexteer to incorporate into a system level FMEDA.

For elements of Class 3 complexity according to ISO26262:2018 Part 8 Clause 13 (example, complex ICs with internal safety mechanisms, like microprocessor, power supply or gate drive IC), it is expected that these will be developed by the supplier as a Safety Element out of Context (SEooC) capable of ASIL D. The supplier shall provide independent evidence that an ASIL D compliant ISO26262 hardware development process was followed. The supplier shall provide independent evidence that the component has been assessed to a level of ASIL D per ISO26262. The supplier shall also provide a safety manual detailing the assumptions of use and requirements to Nexteer as the integrator to achieve ASIL D at the item level. The supplier shall provide safety analysis reports (including results from FTA, FMEDA, DFA) and a safety case report. The detailed FTA, FMEDA, and DFA should be available for review with Nexteer. The supplier shall provide the necessary failure rate information and diagnostic coverage information (with justification) for Nexteer to incorporate into a system level FMEDA. The supplier shall support any Nexteer item level ISO26262 assessment or audit activities by making information readily available to assessor/auditor.

For suppliers of electronic assemblies, the supplier shall provide evidence of compliance with applicable requirements of ISO 26262:2018 Part 7, and also Quality management systems standards such as IATF 16949 and/or ISO 9001. Nexteer reserves the right to perform a functional safety audit on processes implemented in the assembly supply chain w.r.t ISO 26262. The supplier shall support any Nexteer item level ISO26262 assessment or audit activities by making information readily available to assessor/auditor.

## **Environmental Management System Certification**

Nexteer encourages suppliers to seek environmental training and strongly recommends registration to the current versions of ISO14001 through an accredited third-party registrar. Nexteer is committed to environmental responsibility. We strive for economical use of raw materials, energy, water, and other goods; we fully consider the life cycle of our products and strive for continuous improvement. We therefore expect our suppliers to pursue environmental responsibility throughout the supply chain to reduce the life-cycle environmental footprint of products. All products manufactured, and the applied materials and substances used in the process are expected to meet environmental standards for design, development, distribution, use, disposal, or recycling. Such items include but are not limited to reducing energy consumption, reducing emissions, reducing water usage, increasing use of renewable energy, appropriate waste management, environmental testing, training of employees and sub-contractors, and regulatory requirements. We require our suppliers to improve environmental performance and set targets that are measurable through performance leading indicators. Suppliers are to communicate to their employees an Environmental Policy Statement reflecting their commitment. Suppliers shall, upon request, provide evidence of adherence to these requirements including any government environmental regulatory requirement (i.e., audit or testing results).

## **Electrostatic Discharge Standards**

When electronic components, or assemblies, are present, the supplier must fulfill the requirements of ANSI/ESD S20.20, IEC 61340, or equivalent as determined by Nexteer and audit to this requirement a minimum of once per year.

### ***4.3.1 Determining the Scope of the Quality Management System – Supplemental***

**No Nexteer specific requirements for this section**

### ***4.3.2 Customer Specific Requirements***

**No Nexteer specific requirements for this section**

## **4.4 Quality Management System and its Processes**

### ***4.4.1***

**No Nexteer specific requirements for this section**

#### **4.4.1.1 Conformance of Product and Processes**

**No Nexteer specific requirements for this section**

#### **4.4.1.2 Product Safety**

For suppliers of software development services, the supplier shall establish and maintain the software safety specific processes for the project and keep their descriptions at the disposal of Nexteer. The Supplier shall also establish and maintain rules, guidelines, and trainings for the teams involved including a reporting line of safety status and issues, reporting to the supplier's safety management and to Nexteer's designated safety representatives. Reference section 4.3N.

The supplier shall support Nexteer's efforts to comply with Industry/ OEM specific standards such as ASPICE, ISO 26262, ISO/SAE 21434, KGAS, etc.

If requested by Nexteer, the supplier shall enter into a Development Interface Agreement with Nexteer which details functional safety responsibilities between the two parties, and also identifies required information sharing.

The supplier shall also support any Nexteer item level ISO26262/ISO/SAE 21434 assessment or audit activities, ASPICE assessment, KGAS audit by making information/ evidence readily available to assessor/auditor. If required resources from the supplier will be required to attend such audit/ assessment sessions.

Further, in case of suppliers who are not in staff augmentation or time material contract, Nexteer reserves the right to perform a functional safety/ cyber security/ KGAS audit/ ASPICE assessment. Such assessment/ audit can be conducted by a competent Nexteer team member or external assessor/ auditor (at the discretion of Nexteer).

#### **4.4.2**

**No Nexteer specific requirements for this section**

#### **Supporting Documentation, Forms or Reference for Section 4:**

- ISO/TS 16949 Certification Body Official List: [www.iaob.org](http://www.iaob.org)
- ISO9001 Certification Body Official List: [www.anab.org](http://www.anab.org)
- Minimum Automotive Quality Management System Requirements for Sub-Tier Suppliers (MAQMSR): [www.iaatfglobaloversight.org](http://www.iaatfglobaloversight.org)
- IATF 16949 Certification Body Official List: <http://www.iaatfglobaloversight.org/>

## **5. LEADERSHIP**

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### **5.1. Leadership and commitment**

#### **5.1.1 General**

**No Nexteer specific requirements for this section**

##### **5.1.1.1 Corporate responsibility**

Nexteer recognizes that being a good corporate citizen is making a positive impact where we do business and is the basis for sustainability. Nexteer is committed to the welfare and health and safety of all its employees and contractors and to delivering socially and environmentally responsible products to our customers. We have a moral and ethical responsibility to respect human rights throughout our supply chain and make a difference where we operate. Nexteer complies with all applicable laws, government regulations and rules in the countries where we operate and has established a Code of Conduct (available at [nexteer.com](http://nexteer.com)) governing the actions of its employees. We expect that our supply base does the same and enforces policies that include but are not limited to providing a safe and healthy working environment, offering competitive wages and benefits, establishing reasonable working hours, allowing freedom of association, providing training and development of employees, intolerance of harassment and discrimination as well as, forced and child labor. In addition, suppliers must operate

honestly and equitably in accordance with laws pertaining to terrorism, money laundering, corruption and conflicts of interest, anti- competitive business practices, protection of intellectual property, confidential information, company data and personal data, respect for company property, and export controls. Suppliers shall, upon request, provide evidence of adherence to these global requirements. Failure to comply or failure to work with Nexteer to correct non-compliant situations is grounds for termination of our business relationship. Nexteer encourages suppliers to seek training in Corporate Compliance/Responsibility, Ethics, and Diversity. For details on no-cost AIAG Corporate Responsibility eLearning, go to:

<http://www.aiag.org/store/corporate-responsibility/training>.

Inappropriate behavior by a Nexteer employee may be reported to your Nexteer contact or by calling the Nexteer Ethics Line or filing a report on-line. The Nexteer Code of Conduct document contains the Ethics Line phone numbers and link for on-line reporting and is available on Nexteer.com at the following link: <http://www.nexteer.com/corporate-governance/>. Nexteer expects suppliers to have a grievance mechanism for stakeholders.

Nexteer believes in equal employment opportunity (EEO) and fully complies with government requirements. Nexteer expects suppliers to comply with the Nexteer EEO policy which may be found on the Nexteer supplier website at <http://www.nexteer.com/doing-business-with-nexteer/>

Reference section 11.7, Corporate Social Responsibility (CSR) Supplier Principles (Sustainability)

## **Health and Safety Policy**

Nexteer is committed to protecting the health & safety of each employee, visitor, and contractor on our premises through proactive programs to achieve safe and healthy working conditions. The implementation of actions from identified risks and opportunities to help individuals realize a healthy, injury free environment is a leadership responsibility. Continuing support of this effort is the responsibility of everyone. See Nexteer's Health and Safety Policy located at <https://www.nexteer.com/doing-business-with-nexteer/>. Suppliers are expected to read and understand Nexteer's Health and Safety Policy and implement their own Health and Safety Policy.

## **Health and Safety Management System Certification**

Nexteer encourages suppliers to seek health and safety training and strongly recommends registration to the current versions of ISO45001 through an accredited third-party registrar. Nexteer is committed to ensure the health and safety of every visitor, contractor, and worker on our premises. We require our suppliers to improve health and safety performance and set targets that are measurable through performance leading indicators. Suppliers are to communicate to their employees a Health and Safety Policy Statement reflecting their commitment. Suppliers shall, upon request, provide evidence of adherence to these requirements including any government health and safety regulatory requirement (i.e., audit or local/federal recordkeeping requirements).

## **Environmental Sustainability**

As an automotive supplier we aspire to achieve a long-term goal of carbon neutrality for our products, facilities, and suppliers. This goal aligns with our business needs and drives actions to reduce greenhouse gas (GHG) emissions, helping to prevent adverse impacts of climate change, and is enabled by a clearly defined pathway provided by science-based targets. As we continue to work towards achieving this goal, we recognize our supply base plays a very important role. We want to make a positive impact to our internal and external environment with support from our supply base.

This will require coordination with our internal and external key stakeholders, including our entire supply base.

Nexteer encourages all suppliers to support the reduction of our greenhouse gas (GHG) emissions. Nexteer suppliers are encouraged to minimize their impact on climate change, via alignment with the United Nations Framework Convention on Climate Change (Paris Agreement). Suppliers are encouraged to work towards carbon neutrality within their own operations and throughout their sub-suppliers. Upon request, suppliers are expected to report prior year energy use, Scope 1, 2 and 3 emissions (where applicable), including year over year target reductions.

Nexteer has focused on energy efficiency, energy resiliency and reducing our carbon footprint through energy program improvement at our facilities and in manufacturing processes. We encourage our Suppliers to support environmental continuous improvement in their manufacturing operations by reducing emissions, increasing energy efficiency, and utilizing renewable energy, wherever possible. Nexteer continues to work towards reducing waste to landfill across all manufacturing locations. We encourage all suppliers to establish recycling programs that align with the goal for landfill waste reductions. It is the responsibility of the Supplier to implement a process, procedure, or program that minimizes waste generation within their facilities to benefit the environment.

To further emphasize our commitment to Environmental Sustainability, we require Suppliers who are performing under Contract with Nexteer, to use the necessary resources (in particular materials, energy, and water) efficiently. Suppliers shall reduce the environmental impact (in particular with respect to waste, wastewater, air pollution and noise) to a minimum. This also applies to logistics and transportation expenses.

For the quantitative assessment of suppliers' resource efficiency, all suppliers manufacturing locations shall upon Nexteer's request, promptly provide the following information relating to the total annual scope of orders placed by and supplied to Nexteer:

- Total energy consumption (including a breakdown by energy sources)
- CO2 emissions from energy generated in-house and externally
- Total water consumption
- Process wastewater
- Waste for disposal
- Waste for recycling
- Air Quality
- Water Quality
- VOC emissions (volatile organic compound)

Additionally, upon Nexteer's request all suppliers shall promptly provide data for a life cycle assessment (data such as but not limited to carbon neutrality, renewable energy, recycled materials, etc.) relating to goods or parts thereof (including data with regard to the materials input) according to the data collection format indicated by Nexteer.

For the avoidance of doubt, Nexteer's audit rights under any Contract and/or supply agreement shall cover compliance with the terms of this clause "Environmental Sustainability".

Each supplier shall ensure that all of its sub-contractors and/or sub-suppliers are contractually bound to comply with the terms of this clause "Environmental Sustainability".

#### ***5.1.1.2 Process Effectiveness and Efficiency***

**No Nexteer specific requirements for this section**

### **5.1.1.3 Process Owners**

No Nexteer specific requirements for this section

### **5.1.2 Customer focus**

No Nexteer specific requirements for this section

## **5.2 Policy**

### **5.2.1 Establishing the Quality Policy**

No Nexteer specific requirements for this section

### **5.2.2 Communicating the Quality Policy**

No Nexteer specific requirements for this section

## **5.3 Organizational roles, responsibilities, and authorities**

### **5.3.1 Organizational roles, responsibilities, and authorities – supplemental**

No Nexteer specific requirements for this section

### **5.3.2 Responsibility and Authority for Product Requirements and Corrective Actions**

No Nexteer specific requirements for this section

## **Supporting Documentation, Forms or Reference for Section 5:**

- Nexteer EEO Policy: <http://www.nexteer.com/doing-business-with-nexteer/>
- Nexteer Policy on Gifts and Gratuities: <http://www.nexteer.com/doing-business-with-nexteer/>
- Forced Labor Policy <http://www.nexteer.com/doing-business-with-nexteer/>
- Nexteer Overarching Global Privacy Policy: <http://www.nexteer.com/doing-business-with-nexteer/>

## **6. PLANNING**

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### **6.1 Actions to Address Risks and Opportunities**

#### **6.1.1**

No Nexteer specific requirements for this section

#### **6.1.2**

No Nexteer specific requirements for this section

### 6.1.2.1 Risk Analysis

The supplier must have a system to feedback root cause and corrective actions from problem cases to the PFMEA.

The supplier must have a system to review PFMEA High Risk Priority Numbers and create action plans as necessary.

The supplier must have a system to audit process risk (reverse PFMEA) and create action plans as necessary. The reverse PFMEA process must cover all Nexteer part numbers annually.

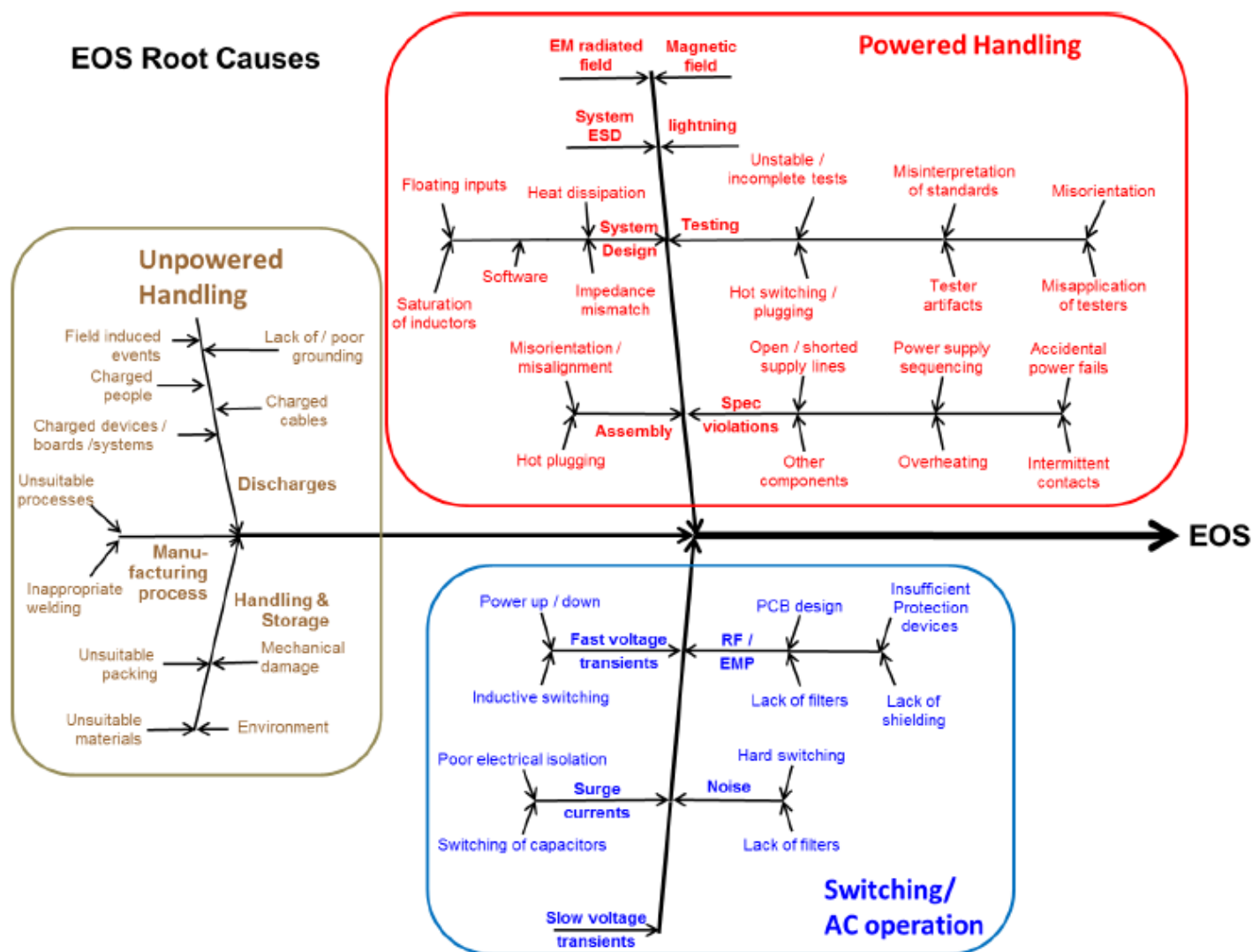
Priority must be given to part numbers with Nexteer problem cases (recommended higher frequency).

### 6.1.2.2 Preventive Action

Suppliers are responsible to develop and implement a proactive process to identify ongoing potential risk for nonconformities and their causes. This process is commonly referred to as Reverse PFMEA. The purpose of performing Reverse PFMEA is to verify known risk is appropriately controlled, identify sources of potential risk, and take appropriate actions to lessen the impact of negative effects of the risk.

#### Electrical Over Stress (EOS)

When electronic components, or assemblies, are present, the supplier must identify the potential opportunities to induce EOS/EIPD damage and implement controls to eliminate the risk. Some leading root causes for EOS/EIPD damage are highlighted in the fault tree analysis below.



### **6.1.2.3 Contingency Plans**

The supplier shall prepare contingency plans to satisfy Nexteer requirements in the event of any production interruption. When the supplier becomes aware of an impending production interruption, the supplier shall make every attempt to notify the Nexteer receiving plants (Production Control), the Buyer and the AQE/SQE within 24 hours. The nature of the problem shall be communicated with the immediate actions taken to assure supply of product. Production interruptions may include (but are not limited to) natural disasters, political unrest, war, cyber-attacks on information technology systems, capacity issues, quality issues, labor strikes, planned down-time or other events that prevent the supplier from meeting the specified capacity volumes or from performing/submitting any APQP event or task that would impact program launch or timing (e.g., R@R or PPAP). The supplier is required to advise Nexteer of the plan for recovery and work toward minimizing its effect on the Nexteer plants. Supplier shall provide their contingency plans to Nexteer if requested.

## **6.2 Quality Objectives and Planning to Achieve Them**

### **6.2.1**

No Nexteer specific requirements for this section

### **6.2.2**

#### **6.2.2.1 Quality Objectives and Planning to Achieve Them – Supplemental**

No Nexteer specific requirements for this section

## **6.3 Planning of Changes**

No Nexteer specific requirements for this section

### **Supporting Documentation, Forms or Reference for Section 6:**

- AIAG PPAP Manual -- [www.aiag.org](http://www.aiag.org)
- APQP and Current Production Cycle Forms – located on Nexteer.com, Suppliers, Quality Processes: <http://www.nexteer.com/quality-processes/>

## **7. SUPPORT**

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### **7.1 Resources**

#### **7.1.1 General**

No Nexteer specific requirements for this section

#### **7.1.2 People**

No Nexteer specific requirements for this section

### **7.1.3 Infrastructure**

No Nexteer specific requirements for this section

#### **7.1.3.1 Plant, facility, and equipment planning**

Refer to section 8.2.3.1.3

### **7.1.4 Environment for the Operation of Processes**

No Nexteer specific requirements for this section

### **7.1.5 Monitoring and Measuring Resources**

#### **7.1.5.1 General**

##### **7.1.5.1.1 Measurement systems analysis**

Supplier is required to perform measurement correlation with the Nexteer receiving plant during APQP. Refer to form F1041, Product Gage Correlation located on nexteer.com:  
<https://www.nexteer.com/quality-processes/>

Gage R&R's:

- Shall be completed on all measurement systems identified on the control plan. This includes hand tools such as micrometers or calipers, as well as those features checked by a CMM, Optical Comparator, Smart Scope, attribute gages, online test or inspection equipment, visual inspection, etc.
- Shall be included in PPAP submission for special characteristics and those features that will have capability studies submitted at the time of PPAP.
- Gage R&Rs are to be updated annually along with annual layouts.
- Minitab version 15 or newer is the required software and format for all MSA submissions unless an alternate software has been evaluated by Nexteer and proven to match the results from Minitab.
- Reference section 9.1.1.2 Identification of statistical tools for software requirements.

**Variable Gage Studies** – Shall be completed with all operators who will be using the gage as part of normal production process. The study shall consist of a minimum of 3 trials, using a minimum of 10 parts unless agreed to and documented during the APQP process with the Nexteer AQE. All variable gage R&R studies should have a minimum of 5 distinct categories. The required method for calculating the gage R&R is by using the ANOVA method. Recent gage R&R's may be used if completed within one year at the time of submission.

For process control situations (where measurement determines stability, direction, and compliance with natural process variation) percentage R&R should be calculated based on study variation with a maximum target of 10%.

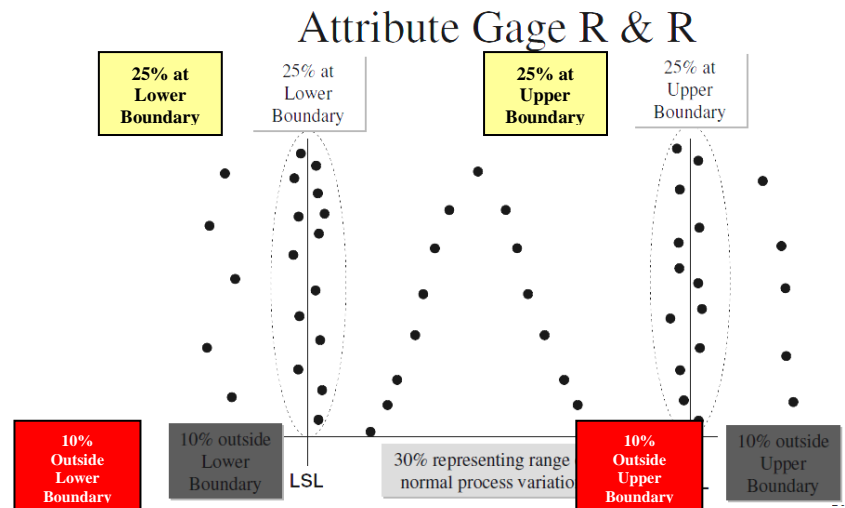
For product control situations (conformance or non-conformance) the percentage R&R should be calculated based on tolerance with a maximum target of 10%.

In special cases where the manufacturing process is very capable, stable and in control, the percentage R&R should be calculated based on tolerance, with concurrence of the Nexteer AQE/SQE. The minimum number of 5 distinct categories may not be applicable in this situation.

Upon request from the Nexteer AQE/SQE, the Supplier is required to provide linearity and bias studies.

**Attribute Gage Studies** – Shall be completed with 3 operators, 3 trials, using 50 parts and evaluated with KAPPA calculations as outlined in the AIAG Manual. The parts used should be distributed as shown in the below graph.

All attribute gages for special characteristics used for process control must be built to 75% of the specified tolerance, centered around the target, unless otherwise agreed upon with the Nexteer AQE/SQE. Gages to the full tolerance may be used for product control (e.g., EPC, final inspection, or sorting operations). Separate gage studies are required for any attribute gage using appropriate discrepant parts for each study.



Gages not meeting the acceptance criteria per the AIAG MSA manual shall have an alternate inspection method and a gage improvement plan. This shall be submitted in writing to the Nexteer AQE/SQE for approval.

Gage studies should be re-verified at a frequency that is appropriate for gage use and wear. Recommendation – Gage re-verification studies should be completed at the time of calibration

### **7.1.5.2 Measurement Traceability**

#### **7.1.5.2.1 Calibration and Verification Records**

**No Nexteer specific requirements for this section**

### ***7.1.5.3 Laboratory Requirements***

#### ***7.1.5.3.1 Internal Laboratory***

No Nexteer specific requirements for this section

#### ***7.1.5.3.2 External Laboratory***

No Nexteer specific requirements for this section

### ***7.1.6 Organizational Knowledge***

No Nexteer specific requirements for this section

## ***7.2 Competence***

### ***7.2.1 Competence – Supplemental***

No Nexteer specific requirements for this section

### ***7.2.2 Competence – on-the-job-training***

No Nexteer specific requirements for this section

### ***7.2.3 Internal Auditor Competency***

No Nexteer specific requirements for this section

### ***7.2.4 Second Party Auditor Competency***

No Nexteer specific requirements for this section

## ***7.3 Awareness***

### ***7.3.1 Awareness – Supplemental***

No Nexteer specific requirements for this section

### ***7.3.2 Employee Motivation and Empowerment***

No Nexteer specific requirements for this section

## **7.4 Communication**

See section 8.2.1

## **7.5 Documented information**

### **7.5.1 General**

**No Nexteer specific requirements for this section**

#### **7.5.1.1 Quality Management System Documentation**

Reference section 4.3

### **7.5.2 Creating and updating**

**No Nexteer specific requirements for this section**

### **7.5.3 Control of documented information**

#### **7.5.3.1**

**No Nexteer specific requirements for this section**

#### **7.5.3.2**

**No Nexteer specific requirements for this section**

##### **7.5.3.2.1 Record retention**

Supplier project records must be stored by suppliers in a manner that will facilitate effective search and retrieval as required for business, legal or tax purposes for their entire retention period. Computing and communication resources must be maintained to access and retrieve records throughout the total retention period. These resources may include required operating systems, applications, retrieval tools and retention media. Periodically, Suppliers may be requested to provide retained data.

Records of process control data, product inspection data and records of appropriate reaction actions to readings outside the specification shall be retained in a recoverable format for a minimum of 2 years, available to Nexteer Automotive upon request. The actual values of process parameters and product test results (variable or attribute) shall be recorded. Simple pass/fail records of inspection are not acceptable for variable measurements.

Maintenance records shall be retained for the current year, plus one calendar year after the year in which they were created.

Records of measurement equipment calibration shall be retained for the current year, plus one calendar year after the year in which they were created.

Records related to components that identify Safety/Critical characteristic features, shall be retained for the longer of 20 years after final delivery (including service requirements) or for the period prescribed by applicable law, unless otherwise specified by Nexteer Global Supply Management (GSM).

Records related to product traceability shall be retained for the current year plus 15 additional years, unless otherwise specified by Nexteer GSM.

Records related to PPAP, and engineering change approval documents must be maintained by Nexteer Suppliers for the production run plus 50 years. Master sample(s) are to be retained per AIAG PPAP current edition unless otherwise communicated by Nexteer.

Some programs or Customer Requirements may indicate longer retention periods than specified above and shall not supersede any regulatory requirements.

### **7.5.3.2.2 Engineering specifications**

**No Nexteer specific requirements for this section**

#### **Supporting Documentation, Forms or Reference for Section 7:**

- [www.aiag.org](http://www.aiag.org)
- APQP and Current Production Cycle Forms – Located on Nexteer.com, Suppliers, Quality Processes:  
<http://www.nexteer.com/quality-processes/>

## **8. OPERATION**

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### **8.1 Operational Planning and Control**

#### **8.1.1 Operational Planning and Control – Supplemental**

Planning of Product Realization

**MAPP** – Manufacturability Assessment and Process Plan. The MAPP is a tool for early risk identification and documentation of mitigation plans. The MAPP requires the supplier to consider each dimension, feature, or requirement on the drawing or in the product specification and document how it will be manufactured. Measurement and control of key items are to be identified in the MAPP. MAPP is required unless otherwise agreed to by GSM. The drawing and DSS Assessment are inputs to the MAPP. After award of business, any deviations to the MAPP agreement require written approval from GSM. Failure to complete the MAPP in the required time frame may jeopardize the supplier's eligibility for business award. Note: If the Government/Safety Regulation Block on the drawing is checked "yes" then refer to the DSS (Design Severity and Sensitivity) .pdf document for CL1, CL2, and CL3s.

**APQP** – The AIAG Advanced Product Quality Planning (APQP) and Control Plan reference manuals shall be used to develop and report progress on new part numbers/programs. For reporting of APQP status, suppliers shall utilize the eAPQP application within Intelex. Note that PPAP submission must be uploaded by the supplier into the Intelex PPAP application.

To facilitate multi-regional sharing of information, all Sourcing, APQP documentation (including MCA, MAPP, PPAP documentation, shipping paperwork, packaging, labeling, part marking, etc....), and Intelex responses shall be in English or include an accurate English translation. Documentation in any other language is for reference only.

Suppliers shall be responsible for and lead the APQP activity for all new parts. Suppliers will receive specific instructions from the AQE/SQE. These requirements are further detailed in the AIAG APQP manual.

The following are some of the key requirements:

- Participate in Design Reviews
- Participate in Program Reviews and Lessons Learned
- Provide and maintain Timing Charts and Open Issues tracking lists
- Provide and maintain DFMEA (if design responsible)
- Submit initial and final completed Supplier Characteristic Summary (SCS)
- Verification of supplier equipment, tool, and gage purchase orders
- Provide and maintain Process Flow, PFMEA and Process Control Plan(s)
- Perform and provide Measurement System Analysis/Gage Reviews
- Develop capability study plan to include rational sampling
- Submit supplier plan for APQP management of sub-tier suppliers
- Provide an Early Production Containment and Pre- Launch Control Plan
- Submit traceability plan
- Complete Part Certification (PPAP) requirements, prior to shipment of initial production. Follow the current edition of AIAG PPAP
- Perform and pass Run-at-Rate
- Provide up-to-date and accurate Supplier Packaging Information (SPI)
- Provide a label and participate in EDI verification
- Conduct or participate in a Supplier Process Production Readiness Audit (F1058)
- Conduct Product Gage Correlation (F1041)

For APQP, suppliers are expected to meet program timing, keep commitment dates, and support early builds and pre-launch requirements.

### ***8.1.2 Confidentiality***

**Suppliers shall maintain confidentiality of Nexteer and Affiliates' products and information as documented in the Nexteer contracts. Additionally, suppliers may be required to sign a non-disclosure agreement.**

#### **Supporting Documentation, Forms or Reference for Section 8.1:**

- MAPP is located on Nexteer.com, Sourcing Processes: <http://www.nexteer.com/sourcing-processes/>
- APQP and Current Production Cycle Forms – located on Nexteer.com, Suppliers, Quality Processes: <http://www.nexteer.com/quality-processes/>

## ***8.2 Requirements for Products and Services***

### ***8.2.1 Customer Communication***

#### **Supplier Website**

The Nexteer Supplier Website provides easy access with links to supplier systems and important documents required to do business with Nexteer. (<http://www.nexteer.com/doing-business-with-nexteer/>) All communication with Nexteer and in Nexteer systems should be in English to facilitate multi regional sharing of information.

#### **Intelex**

Registration to the Nexteer Supplier Management System through Intelex is a requirement for all supplier manufacturing locations, and distributors of direct material, logistics providers, and any supplier of sub-assembly, sequencing, sorting, rework, software development, service packaging, and calibration services conducting business with Nexteer. Suppliers must contact their Buyer to ensure proper set-up in the Intelex system. Upon receipt of the registration, Nexteer will set-up the supplier location within Intelex and provide log-in credentials to the requester. Suppliers are responsible to have the appropriate hardware and

software needed to access and use the system. It is the supplier's responsibility to obtain and maintain a Dun and Bradstreet DUNS number(s) to support the system applications. Suppliers are responsible to contact Nexteer GSM (Global Supply Management) Systems Support for any system related issues at: [gsm.systems@nexteer.com](mailto:gsm.systems@nexteer.com).

Direct Material Suppliers (including distributors of direct material) are responsible to access the Intelex system on a regular basis to retrieve purchase orders and revisions to purchase orders, maintain supplier data integrity including but not limited to Contact Information, and monitor Nexteer initiated communication. Communication may include but is not limited to:

- Conflict Minerals application (reference section 8.4.2.2)
- Cost Recoveries (reference section 11.5)
- CQI-X application (see below)
- eAPQP - Advanced Product Quality Planning (reference section 8.1.1)
- Nexteer Audits – MCA/NSA Audit (reference section 10.3.1)
- Nexteer Audits – Sustainability (reference section 11.7)
- PPAP (reference section 8.3.4.4)
- Problem Case Management (reference section 10.2.3)
- QAD DSCP Supply Chain Visibility (see below)
- Run-at-Rate (reference section 8.2.3.1.3)
- Supplier Development Application (reference section 8.4.2.5)
- SQ Escalation (reference section 8.4.2.4)
- Supplier Packaging Information (SPI)
- Supplier Profile Application (see below)
- Supplier Purchase Order Portal
- Supplier Balanced Scorecards (reference section 9.1.2.1)
- Supplier Suggestions and Change Request (reference section 8.5.6.1)
- Supplier Tooling Application

**A Supplier Profile** Application within Intelex is a requirement for direct material manufacturing locations and distributors of direct material conducting business with Nexteer. Indirect material and service suppliers see note below. Suppliers are required to maintain their supplier profile in the Supplier Profile Application. Failure of the supplier to review this Information on an annual basis will result in a deduction of points on the Supplier's Balanced Scorecard. Suppliers can and should update changes at any time during the year. Suppliers are required to maintain information consisting of:

- Quality Certification (refer to Section 4.3) – The latest valid and complete quality management system certificate shall be posted in the Supplier Profile Application
  - Customs Program Requirements (e.g., CTPAT, OEA, etc.) Reference section 8.5.4
  - Contact Information including but not limited to the supplier's Product Safety Representative. The required review and update to Contact Information will be changing from yearly to a more frequent cadence. Failure to update or confirm in the required cadence may result in a system lock-out.
- 
- New Business Hold (NBH) – maintained by Nexteer.

Note: Regarding indirect material and service suppliers: Any supplier of sequencing, sorting, rework, software development, service packaging, and calibration services that conduct business with Nexteer, should maintain their profile in the Supplier Profile Application including the appropriate quality certificate (Refer to section 4.3) within the Supplier Profile application. Logistics providers should refer to section 8.5.4, Shipment Security.

*To better utilize our systems, we recommend that your organization create a group mailbox within your email client. A group mailbox such as [nexteerapps@supplier.com](mailto:nexteerapps@supplier.com) will allow your organization to manage the users that would receive communication for the Nexteer systems. This email address can then be the*

*email address associated with the one user ID in the Intellex system, as well as be used for any other communications from Nexteer. The benefit of having this group mailbox allows for communications to still be received by your organization regardless of vacation, leave, or employee responsibility changes. If you are unsure how to create or use a group mailbox, please contact your local IT support group.*

### **QAD DSCP Supply Chain Visibility**

Nexteer employs a multi-tier software visibility system, DSCP (a QAD product), to proactively monitor and mitigate supply risk in specific commodities. This visibility allows all parties to verify alignment in demand and supply planning across multiple tiers, anticipate shortages based on perceived misalignment, and proactively mitigate potential shortages. Commodities with long lead times are especially vulnerable to disruption based on demand and supply misalignment, requiring a holistic supply chain view for multi-tier inventory optimization, resource allocation, and demand anticipation for capacity planning.

Extracts of supply chain data from both Nexteer and supplier IT systems are analyzed by DSCP for alignment, and exceptions are flagged for follow-up action. Shared supply chain specific data can be accessed via a supplier portal, allowing Nexteer and suppliers access to a common data analytics tool which leverages information from disparate data sources throughout the supply chain.

Suppliers who win business within the scope of DSCP shall work with Nexteer personnel to integrate all data relevant to the commodity into the DSCP system, and this integration shall be retroactive to any current business within the scope of DSCP functionality. Suppliers currently providing material within the scope of commodities in DSCP will be required to integrate data on existing business into the supply chain visibility system at the request of Nexteer.

### **Financial Assessment**

As part of our ongoing efforts to maintain, develop and properly manage our supply base, Nexteer regularly monitors performance by tracking and investigating various aspects of our suppliers such as quality, delivery, launch and financial health. We believe that a strong supply base is a competitive advantage that allows us to deliver innovative, products at a competitive price to our customer.

To better enable us to monitor financial health risk on an ongoing basis and avoid interruptions and delays caused by supplier financial dilemmas, Nexteer requires submission of financial information, which may be supported by a third party to perform high-level financial assessments on each of our suppliers. This process requires that suppliers initially submit certain financial and other data and then provide updates on a quarterly basis. Based on the results of these financial assessments, additional data may be required.

Participation in this program is mandatory for all Nexteer direct material suppliers. It is imperative that you fully participate in a timely manner (within 30 days of when you receive your invitation. Failure to take part will directly impact new business.

### **DocuSign**

Nexteer may request documents to be signed electronically using DocuSign. DocuSign provides electronic signature technology and Digital Transaction Management services for facilitating electronic exchanges of contracts and signed documents. DocuSign meets statutes and regulations globally, utilizing industry leading encryption standards, retention and storage practices and data security, to support the integrity and legality of transactions. Information by country regarding the legal protection of eSignatures may be found at <https://www.docusign.com/how-it-works/legality/global>. This guide covers current eSignature laws, local legal systems, and electronic signature technology preferences for countries around the world.

It is Nexteer's expectation that documents sent to the supplier via DocuSign, are signed and returned to Nexteer by the supplier using this tool. Note: Registration is not required nor is there a cost to the supplier.

## **CQI-X Special Process Assessments**

### **CQI-9**

Nexteer utilizes the AIAG special process assessment CQI-9 to ensure suppliers are using proper heat treat techniques, processes, and controls. The method for submission to Nexteer of this assessment is via the CQI-X application within the Intelex system. An assessment that is no older than 12 months must be submitted each year. Suppliers are also responsible to submit an assessment for any sub-tier supplier that uses heat treat operations either as a purchased service or part of the process flow of a part purchased by the Nexteer supplier. A full assessment must be uploaded to the CQI-X application (a summary page alone is not acceptable).

### **All Other Applicable CQI Assessments**

The annual submission requirement via the CQI-X application in Intelex applies to all applicable AIAG special process assessments. A listing of the special process assessments is shown in section 2.1.

## **Additional Supplier Communication Requirements:**

- Ownership Change – The supplier shall notify the Nexteer Buyer in advance or immediately in writing of any change in ownership.
- Manufacturing Site Change – The supplier shall notify the Nexteer AQE/SQE in advance of any planned change in manufacturing site location using the Supplier Suggestion Change Request application within Intelex.
- Customer Representative, Plant Manager, Quality Manager, Product Safety Manager Change – When the supplier's contact information changes, the supplier is responsible to update contact information in the Nexteer Supplier Profile Application in Intelex. This is to be reviewed and updated annually by the supplier.
- Quality certificate - Suppliers registered to ISO 9001, IATF 16949, or ISO/IEC 17025 are responsible to notify Nexteer of certificates being revoked, withdrawn, being placed on suspension, or re-instated.

### ***8.2.1.1 Customer Communication – Supplemental***

**No Nexteer specific requirements for this section**

## ***8.2.2 Determining the Requirements for Products and Services***

### ***8.2.2.1 Determining the Requirements for Products and Services - Supplemental***

Reference section 8.4.2.2

## ***8.2.3 Review of the Requirements for Products and Services***

### ***8.2.3.1***

#### ***8.2.3.1.1 Review of the requirements for products and services – supplemental***

**No Nexteer specific requirements for this section**

### **8.2.3.1.2 Customer-Designed Special Characteristics**

Nexteer may utilize specific symbols on drawings and specifications to designate special characteristics. These special characteristics must be identified as customer special characteristics on the supplier's documents, including PFMEA, PFD, PCP and operator standardized work instructions. Operator standardized work instructions will highlight tasks that affect special characteristics. The supplier's management must assure that all operators are knowledgeable and understand the appropriate controls for special characteristics existing on the parts being produced at their workstation. If special characteristics are generated by a sub-supplier, it is the responsibility of the Nexteer supplier to ensure compliance with the special characteristics' requirements in this manual.

Nexteer uses KPCs, QCIs (Quality/Customer Interface Characteristics) and QCLs (Quality Control Level Characteristic) to designate special characteristics on product drawings and specifications. (Note: KPCs and QCIs are used on drawings prior to the 2016 vehicle model year. QCLs are used on drawings both new and carry-over parts beginning with the 2016 vehicle model year.) These designations will define design features or tolerances that have a particular significance to safety, compliance with government regulations, interface to vehicle mating parts, and/or product functionality with consideration of process capability.

Nexteer uses Design Severity and Sensitivity Assessment (DSS) to evaluate the severity and sensitivity of the requirements shown on product drawings and specifications and to determine if a product characteristic is standard or special and assigns the QCL type. The drawing along with the DSS Assessment is an input to Vehicle/End User Severity for PFMEA. The drawing and DSS Assessment are inputs to the MAPP – reference section 8.1.1, Operational Planning and Control – Supplemental.

For any press assembly operation that has a severity 9 or 10 (CL1, CL2, CL3) on the DFMEA/PFMEA the process control will be a force displacement profile, where force and distance will be measured simultaneously, and must conform to established values along the length of the press operation. Compliance to the force displacement profile will be the only acceptable criteria for determining good parts.





Operations with Fastener Assembly processes that have a severity 8, 9, or 10 (CL1, CL2, CL4) the following process controls shall be monitored and recorded 100%: tightening torque, torque angle, screw height, number of turns and a sampling check for breakaway torque and must conform to established values.

For any safety/compliance characteristic (CL1, CL2, CL3), the production control plan must include special checks to verify correct machine set up and that parts meet 100% of requirements prior to release of the process for production.

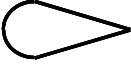
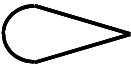
The following are the QCI & KPC designations, and the process/inspection requirements related to each.

**There may be unique OEM specific standards that exceed the requirements listed in this section.**

## Product Characteristic Chart for use without QCLs

Drawing and Control Panel Information	Inputs to Selection	Process Requirements	Documentation Requirements	Response to Nonconforming Material
<b>Safety QCI</b>  <b>QS-100V</b> Attribute or Variable Gages	Select safety-critical product dimensions requiring 100% functional or go/no go checks <ul style="list-style-type: none"> <li>Vehicle interface dimensions</li> <li>Possible pass-through defects</li> <li>Design &amp; process knowledge (BOD/BOP)</li> <li>Customer returns, recalls, lessons learned</li> <li>Control plans from similar parts</li> <li>Design &amp; Process FMEA</li> <li>Process capability</li> <li>Customer required</li> </ul> Compliance with government regulation	100% verification using attribute check (Pass/fail gage or test)  <u>Note:</u> A variable gage may be used to perform 100% verification	Same as Fit/Function QCI CI-100V.	<ul style="list-style-type: none"> <li>Sorting and/or engineering permit required with customer notification when specification not met.</li> </ul> Document containment plan for all non-conforming parts.
<b>Safety QCI</b>  <b>QS-DR</b> Variable or Attribute Gages	Select safety-critical product dimensions where ongoing charting is required on the plant floor <ul style="list-style-type: none"> <li>Vehicle interface dimensions</li> <li>Possible pass-through defects</li> <li>Design &amp; process knowledge (BOD/BOP)</li> <li>Customer returns, recalls, lessons learned</li> <li>Control plans from similar parts</li> <li>Design &amp; Process FMEA</li> <li>Process capability</li> <li>Customer required</li> </ul> Compliance with government regulation	Same as Fit/Function QCI CI-DR.	Same as Fit/Function QCI CI-100V.	<ul style="list-style-type: none"> <li>Same as Fit/Function QCI CI-DR and,</li> <li>Document containment plan for all non-conforming parts.</li> </ul>
<b>Safety and/or Compliance KPC</b>  <b>S/C</b> Variable or Attribute Gages	Product drawings with this symbol should be updated to the correct type of Safety QCI, as needed, during the next drawing revision.	Same as Fit/Function QCI CI-DR.	Same as Fit/Function QCI CI-100V.	Same as Safety QCI Fit/Function QCI CS-DR.
<b>Fit/Function KPC</b>  <b>F/F</b> Variable or Attribute Gages	Product drawings with this symbol should be updated to the correct type of Fit/Function QCI, as needed, during the next drawing revision.	Same as Fit/Function QCI CI-DR.	Same as Fit/Function QCI CI-100V.	Same as Fit/Function QCI CI-DR.

## Product Characteristic Chart for use without QCLs

Drawing and Control Panel Information	Inputs to Selection	Process Requirements	Documentation Requirements	Response to Nonconforming Material
<b>Standard (STD)</b>  No symbol  Variable or Attribute Gages	<ul style="list-style-type: none"> <li>Design &amp; process knowledge (BOD/BOP)</li> <li>Customer returns, recalls, lessons learned</li> <li>Control plans from similar parts</li> <li>Process capability</li> </ul> Design & Process FMEA	Reasonable explanation of the control strategy is required at a review of manufacturing sequence chart, gage plan, PFMEA, & control plan. At this review decisions will be made on a dimension by dimension basis regarding which dimensions, if any, require capability studies during periodic data collection such as during prototype and part approval activities.  <u>Process Indices Acceptance Criteria:</u> <ul style="list-style-type: none"> <li>Initial (PPAP) process study                             <ul style="list-style-type: none"> <li>Capability Index Target Cpk and Ppk &gt; 1.33 &amp; demonstrated statistical control</li> <li>Extended production run (&gt; 6 months) Performance Index Ppk ≥ 1.0</li> </ul> </li> </ul>	Control plan is based on process capability. If plant floor control charts are required to maintain the process, then this requirement should be documented on the control plan.	<ul style="list-style-type: none"> <li>Sorting</li> <li>Request Nexteer Engineering Permit to allow the deviation</li> <li>Reduction in variability required when Ppk capability is not met.</li> </ul>
<b>Fit/Function QCI</b>    <b>CI-100V</b>  Attribute or Variable Gages	Select function-critical product dimensions requiring 100% functional or go/no go checks <ul style="list-style-type: none"> <li>Vehicle interface dimensions</li> <li>Possible pass-through defects</li> <li>Design &amp; process knowledge (BOD/BOP)</li> <li>Customer returns, recalls, lessons learned</li> <li>Control plans from similar parts</li> <li>Design &amp; Process FMEA</li> <li>Process capability</li> </ul> Customer required	100% verification using attribute check (Pass/fail gage or test)  <u>Note:</u> A variable gage may be used to perform 100% verification	<ul style="list-style-type: none"> <li>Plant floor documentation is required. Specific documentation requirements are a function of process capability and must be defined on the control plan.</li> <li>Customer specific requirements must be shown on the drawing and included in the control plan.</li> </ul>	<ul style="list-style-type: none"> <li>Sorting</li> <li>Request Nexteer Engineering Permit to allow the deviation</li> </ul>
<b>Fit/Function QCI</b>    <b>CI-DR</b>  Variable or Attribute Gages	Select function-critical product dimensions where ongoing charting is required on the plant floor <ul style="list-style-type: none"> <li>Vehicle interface dimensions</li> <li>Possible pass-through defects</li> <li>Design &amp; process knowledge (BOD/BOP)</li> <li>Customer returns, recalls, lessons learned</li> <li>Control plans from similar parts</li> <li>Design &amp; Process FMEA</li> <li>Process capability</li> </ul> Customer required	<ul style="list-style-type: none"> <li>Same as for standard dimensions and,</li> <li>Capability study with a sampling plan per Section 9.1.1.</li> <li>If the control strategy is to inspect with an attribute gauge on less than all of the parts, the gage must be built to 75% of the specified tolerance.</li> </ul> <u>Process Indices Acceptance Criteria:</u> <ul style="list-style-type: none"> <li>Initial (PPAP) process study                             <ul style="list-style-type: none"> <li>Capability Index Target Cpk ≥ 1.67, &amp; demonstrated statistical control</li> <li>Ppk must be ≥ 1.33, or 100% inspection and/or error prevention</li> </ul> </li> <li>Extended production run (&gt;6 months) Performance Index Ppk ≥ 1.33 or 100% inspection and/or error prevention</li> </ul>	Same as Fit/Function QCI CI-100V.	<ul style="list-style-type: none"> <li>Engineering permit required with customer notification for usage of parts not accepted with a full tolerance gage.</li> <li>When using a reduced tolerance attribute gage, a full tolerance gage must be used to check 100% of the parts produced since the last acceptable check.</li> </ul> Reduction in variability required when Ppk is not met or when process is not in statistical control.

## PRODUCT CHARACTERISTICS CHARTs and Capability Requirements for use with QCLs

- **Product Characteristics Control Levels Chart – See Attachment B**

- Detection Control Table – See Attachment C
- Process Control Table – See Attachment D
- Defect Handling Table – See Attachment E

- **Initial Process Capability Requirements for PPAP**

- Initial Process Capability studies are required for all special characteristics unless otherwise agreed upon in the MAPP, Supplier Capability and Selection Review, by the Nexteer Product Engineer and AQE. Process studies of other characteristics may be requested by Nexteer during the MAPP review.
- Unless otherwise agreed to and documented by the Nexteer Product Engineer and AQE, the Acceptance Criteria for the initial Process Capability Studies for QCLs classified as CL1, CL2, CL4, and CL5 with either bilateral or one-sided distributions must achieve a Capability Index Target Cpk and Ppk >1.67 & demonstrated statistical control.
- If an Initial process capability study is required for a CL3, the Acceptance Criteria for either bilateral or one-sided distribution is: Initial (PPAP) process study Capability Index Target Cpk > 1.33 (unless superseded by a customer specific requirement) & demonstrated statistical control and Ppk must be > 1.33, or 100% inspection and/or error prevention
- Unless otherwise agreed to and documented by the Nexteer Product Engineer and AQE or superseded by a customer specific requirement, the Acceptance Criteria for the initial Process Capability Studies (if required) for Standard dimensions either bilateral or one-sided distributions are: Initial (PPAP) process study Capability Index Target Cpk and Ppk >1.33 & demonstrated statistical control.
- If the capability index is not met, for CL1, CL2, and CL4, then 100% inspection is not acceptable as the only method for controlling the process. An additional detection control method must be used in conjunction with 100% inspection. Reference Attachment B.
- As part of Launch and Early Production Containment (EPC) AQE/SQE's may require capability monitoring and submission for CL1, CL2, CL3 and CL4 features. Providing capability requirements are met, this requirement would be exited at time of EPC release.

- **Long Term (Ongoing) Capability Requirements**

Suppliers are required to maintain process capability including control charting throughout the product life. Supplier must provide long term capability studies from an extended production run if requested by Nexteer

- QCLs classified as CL1, CL2, CL4, and CL5 with either bilateral or one-sided distributions must achieve a Capability Index Target Cpk and Ppk  $\geq 1.33$  & demonstrated statistical control.
- QCLs classified as CL3 with either bilateral or one-sided distributions must achieve a capability index target Cpk  $\geq 1.33$  (unless superseded by a customer specific requirement). The Ppk must be  $\geq 1.33$  or 100% inspection and/or error prevention employed.
- Standard Dimensions with either bilateral or one-sided distributions must achieve a capability Index Target Cpk and Ppk  $\geq 1.0$  & demonstrated statistical control

### **8.2.3.1.3 Organization Manufacturing Feasibility/Run-at-Rate**

Suppliers shall perform Manufacturing feasibility reviews and shall include Nexteer team members as appropriate. (Reference section 8.1.1, APQP, F1058 Supplier Process Production Readiness Audit).

Product volume changes of 20% or more over a previously verified volume capability shall require run-at-rate. The capacity study shall include identification of the capacity constraints and evaluation of risk to Nexteer by the supplier. The results of this study shall be provided to the Nexteer AQE/SQE. The capacity information provided with the quote should reflect the available daily capacity and operating plan (hours/day, days/week). The operating plan should meet total weekly volume requirements and current model service requirements and shall be no more than 100 hours per 5-day work week. The Nexteer standard work year is based on 48 weeks, 240 workdays. Any operating plan using more than 100 hours per work week (e.g., 5 days x 20 hours per day) or different than the standard 48 weeks, 240 working days, must be agreed upon by Nexteer and clearly documented in the Nomination Letter. Program capacity information will be documented in the Nomination Letter under the Program Capacity Obligation section at time of business award. Suppliers shall be responsible to have capacity to provide 15% over the OEM customer requirement, whichever is greater, above the aggregate Nexteer volume on a sustained basis without additional investment from Nexteer. The additional capacity may be produced outside of the 100-hour work week but less than or equal to 120 hours.

The full capacity for the part should be in place at the Supplier's floor and its sub-suppliers' floor no later than the Nexteer Run-at-Rate date. Any deviation from this requirement is a staged run-at-rate and must be agreed in writing by Nexteer and documented in the approved Nomination Letter at time of business nomination.

When specified in the APQP process, Run-at-Rate shall be based on the aggregate Nexteer volume and is performed as a method for production capacity and quality system verification. It is preferred to perform the Run-at-Rate analysis over multiple shifts with production operators and including a part number change-over if appropriate. The final Run-at-Rate plan will be agreed upon in the early stages of Supplier APQP.

Run-at-Rate will be given a status of Pass or Fail. The supplier is expected to put into place the necessary corrective actions to ensure a successful (Pass) Run-at-Rate. An APQP Problem Case may be issued for failure to meet agreed upon target date or for requirements not met.

NOTE: Commodity or batch-based products may demonstrate Run-at-Rate by a process analysis to determine constraints and show enough capacity is in place to support the product release rates.

### **8.2.3.2**

**No Nexteer specific requirements for this section**

## **8.2.4 Changes to Requirements for Products and Services**

**No Nexteer specific requirements for this section**

### **Supporting Documentation, Forms or Reference for Section 8.2:**

- Nexteer Supplier Website: <http://www.nexteer.com/>
- Supplier Suggestion Change Request Application (SSCR) – Link is located on the Nexteer Supplier Website, Supplier Applications, Intelix: <http://clients.intelix.com/login/Nexteer>
- Nexteer Help Desk for Supplier Systems and Applications: [gsm.systems@nexteer.com](mailto:gsm.systems@nexteer.com)

## **8.3 Design and Development of Products and Services**

### **8.3.1 General**

#### **8.3.1.1 Design and Development of Products and Services – Supplemental**

No Nexteer specific requirements for this section

### **8.3.2 Design and Development Planning**

#### **8.3.2.1 Design and Development Planning – Supplemental**

The supplier shall prepare process FMEA's for all part numbers supplied to Nexteer. Where the supplier is responsible for design, the supplier shall prepare design FMEA's.

FMEA's may be written for families of parts where batch processes and common tooling is used. Families shall be clearly defined and have a full part number listing of the family. The Nexteer Product Engineer and AQE/SQE shall approve the family designations.

For Nexteer drawings (or DSS document if available) containing QCL Special Characteristics, the severity shown on the supplier FMEA should be no less than what is shown in the Nexteer DFMEA SEVERITY column on the Product Characteristics Control Levels Chart, Attachment B. For example, all potential failure modes associated with a characteristic identified as a CL4 on the Nexteer drawing should have no less than an "8" shown as a severity on the supplier FMEA.

Upon request by Nexteer, the supplier shall provide a copy of the FMEA documents for review. The Nexteer AQE/SQE may request that the supplier's FMEA be written in the supplier's local language and English. If the document is considered proprietary, the supplier may provide the applicable section, or provide qualified technical support and bring the FMEA to the requestor for review without retention of copies. A letter stating the proprietary nature shall be included in the Production Part Approval submission package.

FMEA's shall be prepared using the AIAG & VDA Potential Failure Mode and Effects Analysis format OR the SAE J1739 format.

#### **8.3.2.2 Product Design Skills**

No Nexteer specific requirements for this section

#### **8.3.2.3 Development of Products with Embedded Software**

No Nexteer specific requirements for this section

### **8.3.3 Design and Development Inputs**

#### **8.3.3.1 Product Design Input**

No Nexteer specific requirements for this section

### **8.3.3.2 Manufacturing Process Design Input**

No Nexteer specific requirements for this section

### **8.3.3.3 Special Characteristics**

Refer to section 8.2.3.1.2 for Nexteer specific requirements regarding customer defined symbols

## **8.3.4 Design and Development Controls**

### **8.3.4.1 Monitoring**

No Nexteer specific requirements for this section

### **8.3.4.2 Design and Development Validation**

If the Supplier is design responsible, design verification and testing is required. At component levels, the supplier shall develop a qualification plan with Nexteer engineering. Verification methods shall be recorded with the test results.

### **8.3.4.3 Prototype Programme**

**Prototype Program** – Prototype requirements shall be documented through the Buyer for that specific program.

It shall be the supplier's responsibility to request confirmation of the need for prototype control plans, FMEA's, etc. from engineering. NOTE: Prototype control plans do not apply to bulk materials.

NOTE: Prototype control plans may be required on High Impact parts as defined by Nexteer during program development.

**Prototype Parts Provision** – Suppliers who provide prototype/pre-production part requirements are expected to provide them at production pricing unless otherwise agreed to by GSM. Delivery date(s) for samples of prototype components shall be established by Nexteer and noted on the purchase order. The delivery date(s) reflect the date(s) parts are to be received at the Nexteer docks.

All prototype components and shipments shall be identified as prescribed in any relevant documents provided by the Nexteer receiving unit regarding its Prototype Procedure.

The supplier shall submit inspection reports with sample delivery as required by the receiving unit's Prototype Procedure.

If review of the inspection report indicates that the parts do not agree with the prints or examination of the parts discloses an unsatisfactory condition not covered by the report, it shall be the supplier's responsibility to resolve all discrepancies with the Nexteer Product Design Engineer. This needs to be communicated in writing to the Nexteer Buyer.

If resolution of the discrepancy results in a tooling, material or processing change, the supplier will correct the situation (at the supplier's expense), resubmit an inspection report on the revised parts, and communicate the resolution in writing to the Nexteer Buyer as soon as possible.

#### **8.3.4.4 Product approval process**

The supplier shall comply with the current editions of the AIAG Production Part Approval Process (PPAP) and Service Production Part Approval Process (Service PPAP) manuals unless otherwise specified. The AIAG PPAP forms shall be utilized to prepare submissions.

The required method of submission is electronically via the Intelex PPAP application. Each section of the PPAP submission should be a separate file. Any exception must be approved by the Nexteer AQE/SQE.

Any parts (other than those ordered for PPAP) shipped from production tooling to Nexteer Manufacturing Facilities or third-party equipment manufacturers for Nexteer must have some level of PPAP approval (may be interim approval) prior to shipment. The Supplier is to ensure that all sub-tier supplier processes are PPAP approved prior to submission of the saleable part to Nexteer.

The supplier should be prepared to submit a PPAP annually at no cost to Nexteer. An annual PPAP package should include requirements listed in Section 8.6.2. The requirements identified on the PPAP check sheet such as CQI Assessments, gage studies, and capability studies must also be included and be dated within one year of the PPAP submission date. Copies of supplier PPAP's will immediately be made available upon request from Nexteer.

PPAP parts are to be shipped to Nexteer using the Global Sample and PPAP Label located on the Nexteer Supplier Website. The label is to be printed on bright orange paper and securely affixed to all 4 sides of the container(s) of sample parts.

On new or revised materials, notification of PPAP approval by Nexteer does not authorize shipment. Shipping authorization for the initial shipment after PPAP approval, will be issued by the Nexteer Production Control Department (PC&L) and will contain the delivery due date and quantity to be shipped. To ensure breakpoint is established and in agreement with Nexteer plant requirements, suppliers must contact the Nexteer regional PC&L representative. Shipments not authorized by Nexteer PC&L may result in a Problem Case issued to the supplier.

Ongoing dimensional submissions may be required based on OEM customer specific requirements.

#### **8.3.5 Design and Development Outputs**

##### **8.3.5.1 Design and Development Outputs – Supplemental**

No Nexteer specific requirements for this section

##### **8.3.5.2 Manufacturing Process Design Output**

No Nexteer specific requirements for this section

#### **8.3.6 Design and Development Changes**

##### **8.3.6.1 Design and Development Changes – Supplemental**

No Nexteer specific requirements for this section

### **Supporting Documentation, Forms or Reference for Section 8.3:**

- [www.aiag.org](http://www.aiag.org)
- APQP and Current Production Cycle Forms – located on Nexteer.com, Suppliers, Quality Processes:  
<http://www.nexteer.com/quality-processes/>
- Global Sample and PPAP Label – Located on Nexteer.com, Suppliers, Quality Processes:  
<http://www.nexteer.com/shipping-labeling-processes/>
- AIAG Production Part Approval Process (PPAP) manual, AIAG Service Production Part Approval Process (Service PPAP) manual.

## **8.4 Control of Externally Provided Processes, Products and Services**

### **8.4.1 General**

#### **8.4.1.1 General – Supplemental**

**No Nexteer specific requirements for this section**

#### **8.4.1.2 Supplier Selection Process**

The supplier shall be responsible for the quality of the parts it produces, their sub-supplier's quality and delivery performance, and subcontracted services, including sub-suppliers directed by Nexteer.

When the supplier determines incoming inspection of sub-supplier material is necessary, this activity shall be consistent with the risk and quality impact of the supplier. These inspections shall include variable data where appropriate and be used as a key indicator for sub-supplier quality management. Where high risk has been identified in the sub-contracted process, the supplier shall ensure containment is in place to protect the customer. For incoming receiving and inspection, the acceptance level shall be zero defects.

Suppliers are responsible to select sub-suppliers (e. g. Heat Treat, Plating) based on the expectation of Zero Defects, and on the sub-supplier's capability to continually maintain robust processes throughout the life of the product that meet all Nexteer's product requirements.

The Nexteer Supplier Quality Engineer may elect to participate in sub-supplier on site visits and/or audits. The AIAG CQI-19, Sub-tier Supplier Management Process Guideline, should be used as a tool for quality system development of a sub-supplier. The CQI-8, Layered Process Audit Guideline may also be used for sub tier supplier QMS development.

CQI-9, CQI-11, CQI-12, CQI-15, CQI-17, CQI-23, CQI-27, and CQI-30 shall apply to any sub-tier suppliers in the value stream. Suppliers are required to review, update, and upload into Intelex their suppliers' assessments on an annual basis.

Suppliers should seek any additional expertise that is necessary, based on the particular sub-processing technology to ensure they are able to select a capable supplier and ensure on-going performance.

The Supplier shall complete a financial assessment of their supply chain at a minimum annually to evaluate and mitigate risk in the supply chain. The supplier shall be required to supply evidence of this evaluation upon request.

#### **8.4.1.3 Customer-Directed Sources (also known as "Directed-Buy")**

**No Nexteer specific requirements for this section**

## **8.4.2 Type and Extent of Control**

### **8.4.2.1 Type and Extent of Control – Supplemental**

**No Nexteer specific requirements for this section**

### **8.4.2.2 Statutory and Regulatory Requirements**

#### *Chemical Material Content, Reporting, and Approval Requirements*

##### **General Regulatory Requirements**

Suppliers shall ensure that products provided to Nexteer meet all governmental regulatory requirements in the region of use. This includes, but is not limited to, requirements that address chemical registration (TSCA, REACH, IECSC, etc.), transportation (Dangerous Goods), explosive devices, and environmental restrictions as set forth by the applicable governmental agencies for the Nexteer point(s) of receipt.

##### **Governmental Hazard Communication Standard Requirements**

Suppliers shall provide samples, testing, and supporting documentation in the form of GHS-compliant SDSs (Safety Data Sheets) per local governmental and Nexteer-specific requirements for all purchased materials or items that pose a potential health & safety, storage, transportation, use, or environmental risk to Nexteer or its employees. This requirement also applies to any rust preventative, grease, lubricating oil, or other chemical material that is present on a part, raw material, component, or assembly as provided to Nexteer. Nexteer review and approval of all such materials is required prior to delivery of these items to Nexteer. Questions may be directed to the appropriate Nexteer Buyer, Quality Engineer, or Nexteer HMCC email at <mailto:nexteer.divhmcc@nexteer.com>

##### **Substances of Concern and Recycled Content**

Global legal requirements and customer specifications necessitate the need for material substance disclosure via the International Material Data System (IMDS) for all parts and raw materials that become part of the Nexteer saleable product or end item. The content and reporting requirements are detailed in the Nexteer 23000000 Substances of Concern and Recycled Content specification. This specification is part of the standard engineering drawing template and is posted in the Nexteer Supplier Website. Any references to GM100M, GMW3059, or 10949001 is replaced/superseded by Nexteer 23000000 specification. Questions may be directed to the appropriate Nexteer Buyer, Quality Engineer, or Nexteer SoC email at <mailto:nexteer.soc.saginaw@nexteer.com>.

##### **Responsible Sourcing**

All suppliers shall be able to annually, determine the locations where Cobalt, Mica, and Conflict Minerals (i.e., tin, tantalum, tungsten, and gold, as determined by the U.S. Securities and Exchange Commission), contained within products sold to Nexteer originated. It is Nexteer's goal to source products that do not contain minerals that directly or indirectly finance, or benefit armed groups in the Democratic Republic of the Congo or an adjoining country. Suppliers must conduct mineral due diligence in alignment with the Organization for Economic Co-operation and Development Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High Risk Areas ("OCED Guidance"). Suppliers are required to use smelters and refiners that have been validated as conformant to an independent 3<sup>rd</sup> party responsible mineral sourcing validation program. Suppliers are expected to provide parts containing raw materials from sources that have been audited against an independent 3<sup>rd</sup> party standard. Suppliers shall be required to submit this Responsible Sourcing information annually upon the request of Nexteer Automotive via the Intellex Conflict Minerals Application OR by reporting manually using the latest electronic version of the Responsible Minerals Initiative Extended Materials Reporting Template (EMRT) and the Conflict Minerals Reporting Template (CMRT). Responses must be submitted within Intellex in the proper format and version via a completed CMRT or EMRT (letters or other types of declarations will not be accepted). Reporting of other minerals may be required as requested by Nexteer via a Pilot Reporting Template (PRT). Suppliers are to refer to AIAG

([www.AIAG.org](http://www.AIAG.org)) or the Responsible Minerals Initiative ([www.responsiblemineralsinitiative.org](http://www.responsiblemineralsinitiative.org)) for more information.

#### **8.4.2.3 Supplier Quality Management System Development**

Nexteer requires suppliers of productive parts and services to develop and implement a quality management system (QMS) certified to ISO 9001, and to improve that QMS with the ultimate objective of certification to IATF 16949.

Any direct material manufacturing supplier that is not certified to IATF 16949 will be subject to a second-party audit by Nexteer Supplier Quality to verify that the supplier's QMS is certified to the requirements of ISO 9001 and compliant to the Minimum Automotive Quality Management System Requirements for Sub-Tier Suppliers (MAQMSR) or certified to ISO 9001 and compliant to IATF 16949.

Suppliers will be prioritized for QMS verification audits based on 1) parts with safety/regulatory requirements, 2) current performance to Nexteer, 3) quality certification status. Refer to section 8.4.2.4.

A supplier may be subject to annual QMS verification audits by Nexteer until IATF 16949 certification is achieved.

##### **8.4.2.3.1 Automotive Product-Related Software or Automotive Products with Embedded Software**

**No Nexteer specific requirements for this section**

#### **8.4.2.4 Supplier monitoring**

For Direct Suppliers, Nexteer utilizes a Supplier Quality Escalation Process (SQEP) to identify declining supplier performance and engage suppliers early as issues are developing to implement sustainable quality improvement. The intent is to implement a rigorous process that protects Nexteer from any degrading levels of quality performance at a supplier that can lead to spills and customer impacts.

The SQEP application in Intellex manages and documents the Supplier Quality process for early intervention. There are 4 stages of escalation (Level 1 through 4). While the levels are typically sequential, a supplier may skip levels based on risk to Nexteer. The levels with general requirements are:

Level 1 is driven by the supplier and requires a quality system self-assessment via the NSA and supplier improvement plan.

Level 2 includes level 1 activities plus additional focus by Nexteer Supplier Quality (NSA on-site audit), a PFMEA to Control Plan gap analysis by both the supplier and Nexteer, supplier improvement plan to address the gaps, and submission of the supplier's most recent annual Quality Management System surveillance audit report.

Level 3 is the Nexteer Top Focus Supplier (TFS) process. The TFS process requires the active participation of the supplier leadership in weekly performance reviews, monthly reviews (may be at supplier location or Nexteer location), verification of DFMEA/DSS alignment, problem solving certification, demonstrated performance improvement (complaint rate reduction), in addition to level 1 and level 2 activities to be completed.

Level 4 is an on-site Quality Management System audit by the Nexteer SQE. This includes TFS activities of level 3. Entry into level 4 is based on risk related to: 1) Number of problem cases, 2) Quality certification status, 3) Supplied parts contain safety critical or regulatory features, and 4) Other additional risk factors as appropriate (e.g., financial health, program life, etc.).

Each supplier's improvement plan is tailored to the specific needs of the supplier and will be based off the problem cases and gaps identified during the improvement process. The SQEP process is not punitive; it is a focused effort to improve performance and build a stronger relationship between the supplier and Nexteer. Some suppliers may remain in Level 3 due to criticality of the commodity and/or the need to maintain strong supplier relationships at all levels.

Nexteer has the right to pursue systemic corrective action verification from IATF 16949 certified suppliers by filing a performance complaint to the supplier's certification body in accordance with the Rules: Automotive certification scheme for IATF 16949 - Rules for achieving and maintaining IATF Recognition.

Suppliers of calibration services, sorting and rework, software development, and service packaging are subject to a supplier evaluation which is taken into consideration for future business awards.

#### ***8.4.2.4.1 Second-party audits***

Nexteer follows IATF 16949 2<sup>nd</sup> party audit requirements. Where a Nexteer OEM customer has additional requirements (e.g., annual audits, scope, and duration per IATF Rules), those requirements will apply and will be communicated to the affected supplier.

#### ***8.4.2.5 Supplier development***

For existing direct material suppliers, Nexteer utilizes the Intellex based Problem Case Management System (PCMS), Balanced Scorecard, and Supplier Quality Escalation Process (SQEP) to document/escalate performance issues (reference 8.4.2.4 Supplier Monitoring) and pursue opportunities for continual improvement.

In addition, we proactively conduct development activities with select potential new supplier/supplier locations prior to sourcing and APQP. The development process ensures new suppliers are trained/understand how to do business with Nexteer (including navigation of Nexteer Systems), implement a World Class Automotive Quality system aligned with the IATF standard, and create a foundation for a strong business relationship/partnership between the supplier and Nexteer.

During the development process, we jointly work with our new supplier/supplier locations on items such as but not limited to the review/agreement of Nexteer Terms and Conditions, Nexteer Supplier Requirements (NSR), Non-Disclosure Agreement (NDA), Cost Model, Manufacturing Capability Assessment (MCA), and other development training modules tracked via the Supplier Development application within Intellex. A cadence of regular reviews, training, and support with the new supplier cross functional team ensures QMS action plan closure prior to launch/start of production.

### ***8.4.3 Information for External Providers***

#### ***8.4.3.1 Information for External Providers – Supplemental***

**No Nexteer specific requirements for this section**

## **Supporting Documentation, Forms or Reference for Section 8.4:**

- Manufacturing Capability Assessment (MCA)/Nexteer Supplier Assessment (NSA) (F1004), Located on Nexteer.com, Quality Processes: <http://www.nexteer.com/quality-processes/>
- AIAG Special Process Assessments. Refer to section 2.1. Required to be completed and made available to Nexteer when part of the supplier's value stream.
- 23000000 Substances of Concern and Recycled Content specification – Located on Nexteer.com, Suppliers, Quality Processes: <http://www.nexteer.com/quality-processes/>

## **8.5 Production and Service Provision**

### **8.5.1 Control of Production and Service Provision**

#### **8.5.1.1 Control plan**

The Advanced Product Quality Planning and Control Plan manual, available from AIAG, should be used as a guide in developing and maintaining control plans (i.e., Prototype, Pre-Launch & Production). Early Production Containment shall be implemented and identified on the Pre-Launch Control Plan for a duration of 90 days unless otherwise specified by the Nexteer AQE/SQE. Exit from Early Production Containment must be approved by AQE/SQE. A change history shall be maintained as part of the control plan to document implementation of changes.

Nexteer reserves the right to require approval of control plans for any part from any supplier.

All parts shall have Control Plans. Family control plans may be used for parts with common processes. The family shall be clearly defined on the control plan so that applicability is defined.

Design and process controls shall focus on prevention rather than detection and correction. Special attention shall be placed on the identification of input control characteristics rather than the post processing inspection and containment.

Proposed repair or rework of product shall be defined on the control plan (and included in the process flow diagram) and submitted to Nexteer for approval as part of the initial PPAP, or through a subsequent Supplier Change Request and PPAP submission. Repaired, reworked, or out-of-process product shall be re-inspected to all control plan requirements and documented procedures.

The supplier control plan must include layout inspection and functional testing to be performed annually.

The control plan must include the applicable AIAG Special Process Assessments and Guidelines (CQIs). Each applicable CQI Assessment must be submitted annually. Refer to section 8.2.1, Customer Communication, 8.3.4.4, Product Approval Process and section 9.2.2.3, Manufacturing Process Audit.

Traceability as documented in the control plan, shall include a definition of the lot including number of parts and number of production hours.

#### **Engineering Specification (ES) Test Performance Requirements**

In process (IP) testing to the ES is typically specified through an IP test plan/control plan or in the ES. The supplier shall develop a plan to meet those requirements and submit them for approval as part of the PPAP package. Reaction plans to failures shall be included in the IP test plan. Family data shall not be used unless the supplier can demonstrate that the products are a “family” that uses the same process equipment and process specifications. Clarification or approval of the use of family data shall be through Nexteer Supplier Quality.

### **8.5.1.2 Standardized Work – Operator Instructions and Visual Standards**

Visual standards and/or boundary samples that differentiate “good” from “bad” shall satisfy customer requirements and be controlled (listed on the control plan).

### **8.5.1.3 Verification of Job Set-Ups**

No Nexteer specific requirements for this section

### **8.5.1.4 Verification After Shutdown**

No Nexteer specific requirements for this section

### **8.5.1.5 Total Productive Maintenance**

No Nexteer specific requirements for this section

### **8.5.1.6 Management of Production Tooling and Manufacturing, Test, Inspection Tooling and Equipment**

No Nexteer specific requirements for this section

### **8.5.1.7 Production Scheduling**

Suppliers shall electronically receive ship authorizations (DELJIT), schedules and forecasts (DELFOR) – depending on the local requirement and send DESADV's (DESpach ADVice – an electronic packing slip) at the time of shipment. Suppliers shall be EDI (Electronic Data Interchange) compliant. Suppliers who are not EDIFACT (Electronic Data Interchange For Administration, Commerce, and Transport) capable should contact Nexteer Production Control and Logistics (PC&L) for deviation approval and develop a plan to reach the standard requirement.

Nexteer expects DESADV's are not sent until the shipment leaves the dock and within a maximum of 30 minutes of the shipment leaving the dock. The ASN (Advance Shipping Notice) Ship Time should reflect the time zone of the Nexteer site receiving location. E.g., *For shipments to Nexteer Sites in the United States the “ASN Ship-Time” should reflect EST/EDT (Detroit time), for shipments to Nexteer Sites in Mexico the “ASN Ship-Time” should reflect CST/CDT (Chicago time), etc.*

With respect to material obsolescence claims, the standard Nexteer terms are to authorize suppliers to manufacture 2 weeks of material and procure/manufacture an additional 2 weeks of raw material/work-in-process (material authorization will total 4 weeks). All information beyond 4 weeks is for planning purposes only. Exceptions to these terms shall be agreed upon during the quoting process and documented in the purchase agreement.

Nexteer Production Control & Logistics will establish the shipping frequency for each production part. The supplier shall be able to ship daily at a minimum. Supplier shall ship to the exact quantities, dates, and times specified on the release: not over, under, early or late shipments, including holidays and no freedom of the week delivery. Suppliers are expected to ship on weekends, holidays and vacation periods if required. Suppliers shall provide 100% on time delivery. Suppliers shall proactively communicate any delay or risk to the affected Nexteer location. All Nexteer schedules shall be in standard pack quantities in the smallest approved standard pack container. Suppliers shall have shipping capability that matches Nexteer receiving plants normal production schedule.

At the time of pick up, the supplier shall allow the authorized carrier's driver to check the shipping quantities against the scheduled quantities.

Nexteer reserves the right to return over-shipments at the expense of the supplier.

If for any reason the supplier is unable to meet the schedules communicated, it is the responsibility of the supplier to notify Nexteer Production Control & Logistics personnel immediately and receive authorization for the under-shipment. Suppliers will make up all under-shipments via supplier paid premium transportation on Nexteer authorized carriers to meet the originally scheduled destination window.

If Nexteer and/or our customer's production is interrupted by the failure of the supplier to deliver contracted goods within the terms of the contract, all costs that are incurred by Nexteer and/or our customers will be the sole responsibility of the supplier and corrective action taken in the form of a Problem Case.

**Scheduling Lead Time** – Nexteer expects suppliers to meet schedule requirements based on forecast information provided. Suppliers are expected to maintain appropriate finished goods inventory buffers to protect delivery requirements. Significant short-term fluctuations will be reviewed as required.

All suppliers shipping under a Nexteer Legal Entity Purchase Order to other Nexteer suppliers must provide copies of the packing slips to the Nexteer Material Coordinator within 30 minutes after the shipment leaves the dock. ASN's are required to be generated after the shipment leaves the dock and within 30 minutes of the shipment leaving the dock. Once these packing slips are received & verified by the consignment location, they will be entered into Nexteer's system. This will generate payment to the initial supplier.

Suppliers receiving drop shipments from other Nexteer suppliers must **verify part number & quantities** physically received. They must then sign & date the packing slip, acknowledging receipt of material. If there are any discrepancies, they must be noted and sent with the signed packing slip to the Nexteer Material Coordinator. Any inventory variances, which are the result of discrepancies not noted on the signed packing slip, will be charged to the receiving location.

Suppliers who receive Nexteer material on a consignment basis are required to provide monthly scrap & inventory certifications as well as physical count certifications at the time that Nexteer conducts its Annual Physical Inventory.

### ***8.5.2 Identification and Traceability***

The Nexteer product traceability requirements apply to critical components for all 2013 model year programs and beyond.

Traceability as defined by Nexteer is the ability of a supplier or sub-suppliers to provide in-process inspection data, quantity of parts produced, number of non-conforming parts, CQI required documentations, material certs, etc. All this data is to match the Production Control Plan and available for review by Nexteer within 24 hours' notice from Nexteer. This information is to be linked to the shipping label and/or individual part marking (2D bar code, ink stamp, etc.). The details of what is needed from the shipping label and/or individual part marking must be documented by the supplier and shared with Nexteer during the APQP process.

Typical traceable items may include lot, date, shift, raw material, machine, die/cavity number, department number, key process parameters/data, etc. Key process parameters/data must be captured throughout the process using the applicable traceability method.

Critical components are defined as those components that have features designated with safety/compliance QCIs or KPCs (QCI – QS, or KPC S/C) QS-100V and QS-DR QCI's or S/C KPC's

(Reference Section 8.2.3). Nexteer Product Engineering designates critical components/features. For drawings with QCLs, refer to attachment B for traceability requirements.

The ultimate goal of a good traceability system is to minimize exposure if defects are found. The two types of traceability are:

- Singular/Serialization – used to reduce the risk to a single part or component. In the event of parts being moved from the normal process flow, the parts shall be marked for singular traceability. Marking location and method of the direct part marking shall be indicated on the product drawings. Serial number is the minimum information required for singular traceability marking. Parts must be tracked for defect reconciliation.
- Lot Control – used to reduce the risk to a specific number as determined by the size of the lot. A lot is the maximum quantity of parts that share consistent dimensional, material and process characteristics. Lot sizes shall be a maximum of one (1) shift (typically 8 hours) of supplier's production. **NOTE:** One batch of raw material (examples: resin, rubber, heat of steel) can create multiple lots. Only one batch of raw material can be identified in each lot – (i.e., cannot mix two batches of raw material in a single lot). Batch information must be traceable via lot number. Lot definition will be approved by the Nexteer AQE/SQE.

Critical assemblies, sub-assemblies and components shall have traceability to the safety critical component feature or features. Singular traceability, marking / serialization, is Nexteer's preferred method. All CL1 control levels must be compliant to singular traceability unless otherwise approved during the MAPP process. If singular traceability (marking/serialization) is not possible, lot control shall be implemented. Critical components shall be marked at the earliest possible operation and traced throughout the remaining operations. Key process and quality data, as identified in the control plan, shall be included in the stored data. Selection of traceability method and determination of data to be collected is determined by the Nexteer Requirements (DSS, Part Print, MAPP, etc.) and the Nexteer AQE/SQE. Evidence of the record system, including retrieval, must be fully established and available prior to PPAP submission.

Supplier's traceability system will be assessed through the Nexteer F1036 Traceability Fire Drill process (reference <https://www.nexteer.com/quality-processes/> for F1036). Specific part traceability will be reviewed, documented, and verified through the MAPP process and Supplier APQP process, such as control plan, supplier process production launch readiness audit, etc.

See Section 7.5.3.2.1 – Control of Records for record retention requirements for lot traceability.

### ***8.5.2.1 Identification and traceability – supplemental***

**No Nexteer specific requirements for this section**

### ***8.5.3 Property Belonging to Customers or External Providers***

The supplier is to permanently mark Nexteer owned tools as "Property of Nexteer Automotive" or Nexteer's customer owned tools as directed by Nexteer. The supplier shall furnish a tool inventory of all Nexteer owned tools (active and inactive) in the supplier's possession. The tool inventory shall be submitted to the Nexteer Buyer annually by January 31. The inventory shall contain the following information for each Nexteer owned tool:

- Tool part number(s) (typed in numerical order)
- Current tool revision
- Description
- Date parts last ordered

- Total cost of tool
- Number of shots produced from tool
- Remaining tool life (number of shots)
- Indicate previous part number if tool has been changed to produce a new part number

If tooling is to be paid by Nexteer, suppliers will be paid for tooling contingent on receipt and approval of requested tooling documentation, full PPAP approval, and successful run at rate at documented contracted capacity.

Maintenance and refurbishment of Nexteer or Nexteer customer owned tooling are the responsibility of the supplier.

If the supplier is tool design responsible, then reproducible tooling prints shall be completed by supplier within 6 weeks after PPAP approval (or at start of regular production, whichever comes first) on all new program tools, tools undergoing an engineering change, and current tools that are revised. Supplier shall provide electronic reproducible tooling prints for existing tools. See Nexteer.com for Tooling Terms and Conditions for full details.

Where Ziess CMM machines are utilized, refer to Nexteer SD-1019 which is available upon request.

## Returnable Containers

Nexteer will retain ownership of all returnable container systems except as commercially agreed between the supplier and Nexteer. Nexteer Production Control & Logistics will determine the quantity of containers assigned to a supplier. Nexteer will not provide containers for suppliers' internal work-in-process. The supplier is responsible for tracking and cleaning returnable containers in their possession.

## **8.5.4 Preservation**

### **Packaging**

The supplier is responsible for providing a packaging proposal that ensures product quality from the supplier's plant to the Nexteer dock. Suppliers shall provide packaging in accordance with the Nexteer Global Supplier Packaging and Shipping Manual located on nexteer.com, suppliers, shipping & labeling processes. Any deviation from the guideline shall be directed to the Nexteer Buyer and approved by Nexteer Production Control & Logistics. The supplier is responsible for maintaining up-to-date Supplier Packaging Information (SPI) and supplier profiles of manufacturing sites.

For electronic assemblies and components, acceptable packaging material shall be made of ESD Dissipative or Antistatic material. This includes, but is not limited to glues, tapes, stickers, and bags.

### **Labeling**

For all destinations, materials shall be identified in compliance with current version of the Nexteer Global Supplier Standard Label Requirements. A sample or scanned PDF image of your label shall be provided with your PPAP package. Additionally, suppliers will be required to verify label requirements as part of the Nexteer APQP process.

Shipping containers shall be identified with the material's appropriate "COUNTRY OF ORIGIN." Containers must be identified with their own Country of Origin. Questions concerning labels for regions outside of North America may be addressed to Nexteer Production Control & Logistics at email address: [supplier.label@nexteer.com](mailto:supplier.label@nexteer.com).

A legible packing slip shall be affixed next to the master label when skid packed, or next to the container label if the shipment is a single container.

- Master packing lists are required for each supplier shipment, with individual packing lists on each skid listing the materials on that particular skid.
- Master and skid packing lists must be identified with the word “Master” or “Skid” Packing list.
- Each packing slip (both master and individual skid) shall contain the information as referenced in the Label Specification links.

Reference <https://www.nexteer.com/shipping-labeling-processes/>.

## **Regional Customs Documents**

Suppliers within North America – It is the responsibility of suppliers to provide the most current, valid, and appropriate Certificates (USMCA [United States, Mexico, and Canada], Manufacturer’s Affidavits, etc.) and other Free Trade Agreement documentation by part number and manufacturing site (including DUNS number) to Nexteer.

Prior to release of any product per related purchase order/spot buy, supplier shall provide appropriate Certificates and other Free Trade Agreement documentation valid for the remainder of the year.

During the 4<sup>th</sup> quarter of that year and each year thereafter, supplier shall provide appropriate Certificates and other Free Trade Agreement documentation valid for the following year January 1 through December 31. Please note that Suppliers may be required to provide the USMCA certificate outside of the date range in this requirement.

Suppliers to Nexteer in North America (United States, Mexico, and Canada) shall forward all completed Certificates and other Free Trade Agreement documentation to the attention of Nexteer’s service provider, Livingston International, using email address: [Nexteer.solicitation@livingstonintl.com](mailto:Nexteer.solicitation@livingstonintl.com).

Suppliers to Nexteer outside North America shall forward all complete Certificates and other Free Trade Agreement documentation as directed by Nexteer or Livingston International.

**Certificate of Origin** – To obtain a USMCA Certificate of Origin form, and for Instructions on how to fill out the form, contact Livingston International at [Nexteer.solicitation@livingstonintl.com](mailto:Nexteer.solicitation@livingstonintl.com) or [trade.compliance@nexteer.com](mailto:trade.compliance@nexteer.com).

**Country of Origin for Declarations** – Nexteer relies on the supplier provided Manufacturing DUNS for Country of Origin declarations for supplier provided purchased parts and products. If the manufacturing DUNS address is incorrect or does not reflect the country of manufacture of the product, the supplier is responsible to provide the correct information in writing without delay to the Nexteer Buyer.

**Shipping Goods Across Borders** – Nexteer imports shipments accompanied by Supplier invoices. The Supplier invoice shall contain:

- Ship From Location, Contact Name and Phone Number
- Ship To Location, Contact Name and Phone Number
- Purchase Order Number
- Incoterms as agreed to on the Purchase Order
- Nexteer Part Number and Description
- Country of Origin (Country of Manufacturer)
- Unit Price as agreed to on the Purchase Order
- Quantity and Total Value of Material Shipped
- Currency as agreed to on the Purchase Order
- Commercial Invoice is to be in English and Legible

The Supplier is also responsible to provide any information that would assist Nexteer or its Service Provider in determining the correct tariff classification for these goods. Supplier's failure to provide Nexteer part number(s) and a detailed English description invoice has the potential to lead to tariff classification errors and duty rate calculation errors of imported merchandise.

Should a Supplier's non-compliance with this requirement be the cause of an administrative penalty action against Nexteer or any revenue loss to Nexteer, the Supplier will pay for all additional costs and expenses incurred by Nexteer.

## **Transportation**

Routing instructions will be provided by Nexteer Production Control & Logistics for all suppliers who ship under the Nexteer paid freight terms.

Suppliers are expected to meet Nexteer shipping requirements. Supplier must have shipping capability to match the Nexteer logistics routing. Suppliers are expected to secure loads on Nexteer conveyances as required (blocking and bracing, air bags, etc.). Suppliers are expected to pay any administrative fees for pickups by designated Nexteer carriers (e.g., FedEx).

All shipments shall be made by normal mode, at the prescribed ship window time, and on a Nexteer authorized carrier, unless otherwise specified by Nexteer.

The supplier will pay supplier-caused premium transportation. Refer to section 8.5.1.7, Production Scheduling.

Nexteer Production Control & Logistics will schedule a transportation carrier for any premium freight to be paid by Nexteer.

Material ownership terms for all material received by Nexteer are title transfer at the Nexteer plant receiving dock (TTOP). Standard INCO terms for Nexteer are FCA Seller's Premises (2020 INCOTERMS), unless otherwise agreed to by the Nexteer Global Supply Management Department, Production Control & Logistics Department and the supplier and documented in the purchase agreement. If required, offshore suppliers will be responsible for the transfer of parts to small lot containers prior to delivery to the Nexteer receiving plant. Nexteer will not carry any inventory cost associated with this process.

International shipments must meet Nexteer and country specifications. The supplier shall generate advanced forwarder information and customs documentation on time and to specifications.

## **Shipment Security**

Prior to any shipment into the U.S., the supplier is to ensure the shipment does not contain unauthorized material or persons per the U.S. CTPAT and Mexico OEA minimum security requirements. Suppliers not shipping into North America should maintain any equivalent supply chain security programs administered by the affected regions. Suppliers shipping goods into North America shall provide and verify all information required in the Customs Security Questionnaire located on the Nexteer Supplier Profile application within in Intellex, for their DUNS number locations. On an annual basis, the supplier is responsible to review and update the Customs Security Questionnaire.

For more information on becoming CTPAT or OEA certified, go to <http://www.cbp.gov/border-security/ports-entry/cargo-security/c-tpat-customs-trade-partnership-against-terrorism> or [http://omawww.sat.gob.mx/comext/esquema\\_integral/Paginas/OEA.aspx](http://omawww.sat.gob.mx/comext/esquema_integral/Paginas/OEA.aspx) or <https://www.sat.gob.mx/tramites/88401/obten-tu-certiicacion-como-operador-economico-autorizado>, respectively.

#### **8.5.4.1 Preservation – Supplemental**

**No Nexteer specific requirements for this section**

### **8.5.5 Post-delivery activities**

#### **8.5.5.1 Feedback of information from service**

**No Nexteer specific requirements for this section**

#### **8.5.5.2 Service agreement with customer**

**No Nexteer specific requirements for this section**

### **8.5.6 Control of Changes**

#### **8.5.6.1 Control of Changes – Supplemental**

Change Control & Control of Design and Development Changes

This requirement includes changes to part design, material, and sub-tier supplier, manufacturing location (internal or external) or process. (Follow AIAG PPAP, current edition). Nexteer requires that all suppliers and their sub-tier suppliers understand the importance of the timeframe required to get change request approvals through each customer level up to and in some cases, including the Original Equipment Manufacturer (OEM). Contact your Nexteer Supplier Quality representative to discuss the scope and timing of the change approvals.

Any and all changes from the previously approved PPAP related to design, process, component, packaging, component suppliers, or facilities, and site changes including supplier proprietary designs shall be submitted to Nexteer for review and approval prior to implementation. Additionally, a completed and approved Production Trial Run (PTR) may be required. The supplier shall not make any changes without prior written notification and approval from Nexteer. Any unauthorized changes can, and in most cases will result in the supplier being placed on New Business Hold and costs incurred with the unauthorized change will be at the expense of the supplier. The supplier is responsible to communicate Nexteer's Change Management requirements to its sub-tier suppliers. An unauthorized sub-tier change can also lead to Nexteer's supplier being placed on New Business Hold.

The supplier must consider the entire scope and consider key information for the change before a Supplier Suggestion Change Request (SSCR) is submitted. It's critical that the supplier notify Nexteer via an SSCR (see below) as early as possible to allow time for Nexteer to review and approve the SSCR and supplier PPAP. In some cases, the OEM may have additional requirements and will need to approve the change and Nexteer will need to obtain a PPAP approval from the OEM.

Examples of key information to be considered include but are not limited to:

- Does the change require an appearance approval from the OEM?
- Will Nexteer be required to submit a PPAP to the OEM for this change?
- What quantity of banked inventory will Nexteer require?
- How is the supply chain going to be affected by this change?

Involving Nexteer early on, will ensure all parties will be able to develop an acceptable timing plan for the change.

The supplier shall retain approved change requests, for the life of the material per section 7.5.3.2.1.

Initial shipments of new or revised material will be appropriately labeled with the change level until notified by Nexteer Production Control, that all superseded materials, have been cleared from the supply chain.

Nexteer requested changes require timely response to the Buyer. Supplier responses are required within 10 business days.

**Supplier Suggestion Change Requests** – Suppliers are responsible to communicate supplier suggestion change requests (SSCR) with appropriate supporting documentation through the Intelex Supplier Suggestion Change Request Application, for all Nexteer locations. See link below included in the Supporting Documentation, Forms or Reference section.

#### ***8.5.6.1.1 Temporary change of process controls***

**No Nexteer specific requirements for this section**

#### **Supporting Documentation, Forms or Reference for Section 8.5:**

- [www.aiag.org](http://www.aiag.org)
- The following Documents are located on Nexteer.com, Suppliers, Quality Processes:  
<http://www.nexteer.com/quality-processes/>
  - Early Production Containment Training
  - F1094 – Containment Checklist
- Nexteer Global Packaging and Shipping Manual – Located on Nexteer.com, Suppliers, Shipping & Labeling Processes; <http://www.nexteer.com/shipping-labeling-processes/>
- Supplier Packaging Information Form – Located on Nexteer.com, Suppliers, Shipping & Labeling Processes; <http://www.nexteer.com/shipping-labeling-processes/>
- Global Supplier Container Label Requirements Standards EDIFACT – Located on Nexteer.com, Suppliers, Shipping & Labeling Processes: <http://www.nexteer.com/shipping-labeling-processes/>
- Global Sample and PPAP Label – Located on Nexteer.com, Suppliers, Shipping & Labeling Processes: <http://www.nexteer.com/shipping-labeling-processes/>
- Customs and Border Forms Website: <http://www.cbp.gov/xp/cgov/toolbox/forms/>
- Reference IATF Clause 7.2.3.1
- AIAG PPAP Manual -- [www.aiag.org](http://www.aiag.org)
- APQP and Current Production Cycle Forms – Located on Nexteer.com, Suppliers, Quality Processes: <http://www.nexteer.com/quality-processes/>
- Supplier Suggestion Change Request Application (SSCR): Link is located on Nexteer.com, Suppliers, Supplier Applications, Intelex: <http://clients.intelex.com/login/Nexteer>

#### ***8.6 Release of products and services***

##### ***8.6.1 Release of Products and Services – Supplemental***

**No Nexteer specific requirements for this section**

### ***8.6.2 Layout inspection and functional testing***

It is the supplier's responsibility to annually perform a layout inspection on a minimum of 5 pieces (including all notes and specifications called out on the product drawing), functional verification, raw material certification including the updated laboratory scope of accreditation (to all engineering material and performance requirements), and MSA study. These results, along with an updated Part Submission Warrant, shall be submitted upon request to the Nexteer Supplier Quality Engineer. If discrepancies are found in the layout inspection or functional tests, the supplier shall include an Interim Recovery Worksheet. Annual layout inspection and functional testing shall be included in the supplier's control plan.

### ***8.6.3 Appearance items***

No Nexteer specific requirements for this section

### ***8.6.4 Verification and acceptance of conformity of externally provided products and services***

No Nexteer specific requirements for this section

### ***8.6.5 Statutory and regulatory conformity***

No Nexteer specific requirements for this section

### ***8.6.6 Acceptance criteria***

No Nexteer specific requirements for this section

## ***8.7 Control of nonconforming outputs***

### ***8.7.1***

No Nexteer specific requirements for this section

#### ***8.7.1.1 Customer authorization for concession***

No Nexteer specific requirements for this section

#### ***8.7.1.2 Control of nonconforming product – customer-specified process***

The supplier shall have an internal containment procedure that integrates the requirements of the Nexteer Supplier Containment Instruction, located on [nexteer.com](http://nexteer.com), Quality Processes.

Per Attachment E, Defect Handling Table, suppliers shall have a material handling, reconciliation and response process that protects Nexteer and Nexteer customers. When required, reject reconciliation must be completed prior to shipment of parts. If reject counts versus actual reject log does not reconcile, there must be a clearly defined reaction plan that includes a robust communication throughout the supplier's organization and communication to Nexteer that defective parts may have not been 100% contained.

## **Controlled Shipping**

The intent of Controlled Shipping is to implement a rigorous process that protects Nexteer from the receipt of nonconforming parts and/or material. Controlled Shipping is a formal requirement by Nexteer Supplier Quality for a supplier to put in place an additional inspection process to sort for nonconforming material, while implementing root-cause analysis and corrective actions.

Controlled Shipping Level 1 (CS1) is an additional inspection process separate from the PPAP approved process controls, implemented at the supplier's manufacturing facility.

Controlled Shipping Level 2 (CS2) is an additional inspection process above and beyond CS1, with the additional inspection process being completed by a third party. The third-party inspection company is selected by the supplier and approved by Nexteer Supplier Quality. The supplier is responsible for the cost of the third-party inspection company and additional incidental cost of CS2. Suppliers in CS2 shall notify their certification body and request review during the next surveillance/recertification audit. The supplier should submit to Nexteer, an audit report showing corrective action review by the certification body. This report should be provided to your SQE.

The Controlled Shipping process includes a detailed notification to the affected supplier for each level. The Controlled Shipping notification clearly identifies the dimensions or features that must be inspected, the supplier's responsibilities, the minimum duration of the inspection, and the specific exit criteria that must be met before the supplier may request exit from controlled shipping.

### **8.7.1.3 Control of suspect product**

The supplier shall separate suspect parts and/or material from conforming parts and/or material by using an isolated secured containment area.

### **8.7.1.4 Control of reworked product**

The supplier shall obtain approval from the Nexteer SQE prior to commencing rework of the part or material that was not already documented in the approved PPAP process. Reworked parts or material require traceability of the individual part *and Nexteer approval. This may include PPAP submission with Process Flow, PFMEA, and Control Plan updates.*

### **8.7.1.5 Control of repaired product**

The supplier shall obtain approval from the Nexteer SQE prior to commencing repair of the part or material that was not already documented in the approved PPAP process. Repaired parts or material require traceability of the individual part *and Nexteer approval. This may include PPAP submission with Process Flow, PFMEA, and Control Plan updates.*

### **8.7.1.6 Customer notification**

Refer to 8.7.1.2

### **8.7.1.7 Nonconforming product disposition**

Refer to 8.7.1.2

## 8.7.2

**No Nexteer specific requirements for this section**

### **Supporting Documentation, Forms or Reference for Section 8.7:**

- The following forms are located on Nexteer.com, Suppliers, Quality Processes: <http://www.nexteer.com/quality-processes/>
  - Containment: Supplier Containment Instruction, F1004 MCA/NSA, F1094 Containment Checklist

## 9. PERFORMANCE EVALUATION

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### ***9.1 Monitoring, measurement, analysis, and evaluation***

#### ***9.1.1. General***

**No Nexteer specific requirements for this section**

##### ***9.1.1.1 Monitoring and Measurement of Manufacturing Processes***

###### **Initial Process Capability Studies**

125-piece capability studies are required at time of PPAP for all special characteristics unless otherwise agreed upon in the MAPP Supplier Capability and Selection review. Process capability studies of other characteristics may also be requested by Nexteer during the MAPP or APQP reviews. The 125-piece data points should come from the 300-piece minimum PPAP production run, in time-ordered rational subgroups of a minimum of 3 pieces. The sampling plan is to be documented and pre-approved by the Nexteer AQE/SQE.

On the initial process studies for special characteristics the supplier needs to demonstrate that the process is stable and in control through the use of a control chart as per the AIAG PPAP manual. Normality and capability must also be demonstrated. The above can be shown using the “Capability Six Pack”, within Minitab per section 9.1.1.2.

The acceptance criteria for the process indices are per the requirements in Section 8.2.3.1.2.

NOTE: Any expected initial non-normal distributions should be communicated at the Supplier Capability & Selection Review (Technical Review) so that the capability analysis method and acceptance criteria can be discussed and agreed upon prior to PPAP submission.

Also refer to section 8.2.3.1.2 for on-going capability requirements.

##### ***9.1.1.2 Identification of statistical tools***

**Identification of Statistical Tools** – The supplier should use the latest edition of AIAG SPC for manufacturing process controls and AIAG MSA for measurement system equipment management.

Minitab version 15 or newer (due to calculation differences in earlier versions) is the required statistical software package for preparation of Measurement System Analysis, and Process Capability studies. Any alternate software proposed must be evaluated by Nexteer and proven to match the results of Minitab.

### **9.1.1.3 Application of Statistical Concepts**

No Nexteer specific requirements for this section

## **9.1.2 Customer satisfaction**

No Nexteer specific requirements for this section

### **9.1.2.1 Customer satisfaction – supplemental**

#### **Monitoring and measurement, analysis, and evaluation**

Nexteer uses a Balanced Scorecard to monitor supplier performance. The Scorecard provides an on-going assessment of quality, cost, delivery, and responsiveness. Suppliers will receive a Scorecard based on a 100-point maximum. Monthly performance details will also be provided to allow the supplier to identify improvement areas. The scorecard calculation is based on Cost (Calendar year % booked savings), Quality (6 month rolling data), Delivery, and Responsiveness. The Nexteer Supplier Scorecard performance levels are used as a measurement tool to compare suppliers:

**Preferred** – 100 to 85

**Source-able** – 84 to 70

**At Risk** – 69 and below

The Intelx Supplier Balanced Scorecard User Guide defines in detail the individual scoring elements. This guide can be found on the Nexteer Supplier Website, Supplier Applications, Application Learning Center. Additionally, scoring rules are available in the Balanced Scorecard application via a link located within each individual monthly scorecard.

Suppliers may be weighted differently based on the supplier's site and commodity. You will be notified by your Nexteer AQE if you have specific targets.

The scorecard is available online via the Intelx System. Suppliers are responsible to access Intelx, review their scorecards, and ensure action plans are developed as applicable to achieve good scorecards.

## **9.1.3 Analysis and Evaluation**

No Nexteer specific requirements for this section

### **9.1.3.1 Prioritization**

No Nexteer specific requirements for this section

## **9.2 Internal audit**

### **9.2.1**

**No Nexteer specific requirements for this section**

### **9.2.2**

Suppliers are responsible to develop and implement a Layered Audit Process. The program shall be administered under the guidance of a competent manufacturing process auditor as defined in IATF 16949 sanctioned interpretation no. 4. The AIAG CQI-8, Layered Process Audit Guideline may be used as a reference.

- The audit process shall involve multiple levels of site management, from line supervisor up to the highest level of senior management normally present at the organization manufacturing site.
- A member of the manufacturing site senior management (e.g., Plant/General Manager) shall conduct process control audits at least one per week. All members of site senior management shall conduct process control audits on a regular basis.
- Delegation of this activity will not be accepted with the exception of extenuating circumstances.

The purpose of performing layered audits is to verify compliance to the documented manufacturing/assembly process to assure the production system and process controls are working optimally.

Refer to the Nexteer Layered Audit Process requirements contained in the Layered Audit process document located on nexteer.com, Quality Processes.

#### **9.2.2.1 Internal Audit Program**

**No Nexteer specific requirements for this section**

#### **9.2.2.2 Quality Management System Audit**

**No Nexteer specific requirements for this section**

#### **9.2.2.3 Manufacturing process audit**

Special processes for suppliers of heat treated, plated, coated, welded or soldered products, suppliers shall comply with the requirements documented in CQI-9 Special Process: Heat Treat System Assessment (HTSA), CQI-11 Special Process: Plating System Assessment (PSA), CQI-12 Special Process: Coating System Assessment (CSA), CQI-15 Special Process: Welding System Assessment (WSA), CQI-17 Special Process: Soldering System Assessment (SSA), CQI-23 Special Process: Molding System Assessment, CQI-27 Special Process: Casting System Assessment, and CQI-30 Rubber Processing published by AIAG. Suppliers are responsible to apply these requirements to applicable sub-suppliers. There may be additional unique OEM specific assessments required.

Suppliers of new parts that require special processes will be notified during the APQP process that they must submit all CQI assessments for their value stream as part of their PPAP submission package. The initial CQI assessment must be less than 12 months old from the date the assessment was performed. An annual reassessment is required. Contact your Nexteer SQE for submission requirements. Refer to section 8.2.1, Customer Communication.

#### ***9.2.2.4 Product Audit***

No Nexteer specific requirements for this section

### ***9.3 Management Review***

#### ***9.3.1 General***

No Nexteer specific requirements for this section

##### ***9.3.1.1 Management Review – Supplemental***

No Nexteer specific requirements for this section

#### ***9.3.2 Management Review Inputs***

No Nexteer specific requirements for this section

##### ***9.3.2.1 Management Review Input – Supplemental***

No Nexteer specific requirements for this section

#### ***9.3.3 Management Review Outputs***

No Nexteer specific requirements for this section

##### ***9.3.3.1 Management Review Output – Supplemental***

No Nexteer specific requirements for this section

#### **Supporting Documentation, Forms or Reference for Section 9:**

- [www.aiag.org](http://www.aiag.org)
- Intellex Supplier Balanced Scorecard Scoring Rules – Located on the Nexteer Supplier Website, Supplier Applications: <http://www.nexteer.com/learning-center/balanced-scorecard/>
- AIAG Special Process Assessments. Refer to section 2.1. Required to be completed and made available to Nexteer when part of the supplier's value stream.

## 10. IMPROVEMENT

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### **10.1 General**

**No Nexteer specific requirements for this section**

### **10.2 Nonconformity and Corrective Action**

#### **10.2.1**

**No Nexteer specific requirements for this section**

#### **10.2.2**

**No Nexteer specific requirements for this section**

#### **10.2.3 Problem Solving**

It is Nexteer's expectation that Suppliers shall have resources certified in structured problem solving (e.g., Six Sigma, Shainin, or equivalent).

Suppliers shall monitor and respond to all Problem Cases issued by Nexteer. The initial response to a problem is due within 24 hours. Final response, (with verified root cause analysis), is due within 14 calendar days.

Suppliers shall complete a 5-Why Analysis as a means of ascertaining root cause analysis. Suppliers shall be able to show evidence of verification of effectiveness of the corrective action. The 5-Why Analysis shall be submitted via the final response in Problem Case Management within Intalex.

When claimed parts require destructive testing for root cause analysis, the supplier shall inform and obtain approval from the Nexteer AQE/SQE before such testing is performed.

#### **10.2.4 Error Proofing**

If the part has CL1 or CL2 features, Nexteer Supplier Quality may complete an additional review of quality documents to determine if controls are adequate. Additional error proofing may be required as a result of this review.

Error proofing is an automatic mechanism or device in the process to prevent a process from producing defects, or it detects any deviation on the part and notifies the operator. Error proofing automatically prevents the defected part from moving to the next process step.

Challenge parts must verify the effectiveness of the error proof device.

### **10.2.5 Warranty Management Systems**

Supplier shall have a warranty analysis process consistent with AIAG CQI-14, Consumer Centric Warranty Management. Warranty issues are documented via an Intalex problem case with the expectation of supplier root cause analysis and corrective action submission within 14 calendar days.

Nexteer may require that a supplier retain returned warranty parts after analysis has been completed. If required for a particular Nexteer customer, an extended retention period (minimum of 90 days) will be communicated during a MAPP review or via a nomination letter.

### **10.2.6 Customer Complaints and Field Failure Test Analysis**

**No Nexteer specific requirements for this section**

## **10.3 Continual Improvement**

### **10.3.1 Continual Improvement**

When necessary, Nexteer will provide suppliers with tools and expertise for improvement activities. Tools suppliers may utilize **are the Manufacturing Capability Assessment (MCA) and Nexteer Supplier Assessment (NSA)** to help identify management and process gaps and to develop appropriate corrective actions. Suppliers are strongly encouraged to perform self-assessments utilizing the NSA, to evaluate the effectiveness of their quality management system and culture of quality.

Suppliers are responsible to develop and implement a First Time Quality (FTQ) improvement process with appropriate alarm limits and reaction plans defined. FTQ issues should be prioritized with action plans showing continual improvement over time. An FTQ improvement process should be implemented during APQP, and PPM calculations verified at PPAP and Run-at-Rate. The goal of FTQ should be zero PPM.

Production Control Charts - When a control chart indicates that the production process has gone out of control, it is the supplier's responsibility to stop and fix the process and quarantine the suspect material for 100% inspection.

Suppliers shall use the Intalex Supplier Suggestion/Change Request application for any process changes associated with continual improvement activities.

### **Supporting Documentation, Forms or Reference for Section 10:**

- The following forms are located on Nexteer.com, Suppliers, Quality Processes: <http://www.nexteer.com/quality-processes/>
  - Five Why Form F15-1-5-F6
  - Five Why Training
- CQI-14 Consumer Centric Warranty Management
- F1004 – Manufacturing Capability Assessment (MCA)/ Nexteer Supplier Assessment (NSA) F1004: Located on Nexteer.com, Suppliers, Quality Processes: <http://www.nexteer.com/quality-processes/>
- Layered Audit – Located on Nexteer.com, Suppliers, Quality Processes: <http://www.nexteer.com/quality-processes/>
- AIAG CQI-8, Layered Process Audit Guideline
- Supplier Suggestion Change Request Application (SSCR) – Link is located on Nexteer.com, Suppliers, Supplier Applications, Intalex: <http://clients.intalex.com/login/Nexteer>

## 11. COMMERCIAL

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### **11.1 Commercial Expectations**

To work with suppliers toward perfect program launches and continued seamless production, Nexteer will need access to suppliers' facilities and appropriate documents. In some cases, this may require access to sub-tiers' facilities and documents, with prior approval and participation of the Nexteer supplier.

Suppliers Involvement Prior to Sourcing – The following requirements are a supplement to Nexteer's General Terms and Conditions, which are located on the Nexteer Supplier Website.

- When the Buyer requests a quotation in Nexteer's On-Line Quoting System, the supplier shall submit their response via Nexteer's On-Line Quoting System. Included with the on-line Quote Template, the supplier shall submit the Manufacturability Assessment & Process Plan (MAPP) template within 7 days of request from the Buyer.
- Nexteer utilizes the Manufacturing Capability Assessment (MCA) prior to contracting a business relationship with a new supplier or a new supplier facility. An MCA will also be used if a technology or part family is new to an existing supplier's manufacturing location. A supplier will only be considered for business by Nexteer, if the MCA results in a green rating or has an acceptable action plan.
- Suppliers may be requested to participate in an MCA with Nexteer personnel or conduct a pre-assessment prior to an on-site meeting.
- Other commercial and technology assessments may be performed prior to or in conjunction with the MCA. Refer to section 8.4.2.5, Supplier Development.

During the Request for Quote response, the supplier should use the Nexteer Cost Breakdown format required by the Nexteer Buyer. Additionally, the supplier will verify the data exchange formats with the Nexteer Buyer. The Nexteer Buyer will assist in the coordination of the definition of these requirements. All communications/documents shall be in English unless there is prior agreement. Suppliers should utilize electronic print file formats.

#### **11.1.1 Cost Modeling**

Nexteer requires the supplier to embrace and use Cost Modeling as the tool when quoting any product (new or current), this tool provides adequate visibility to understand the areas of opportunity that allows both parties to identify where efforts should be focused to make the supplier's offer more competitive, or failing that, which areas should be improved in the future. The Nexteer Cost Breakdown format should be used to ensure a standardized and fair comparison process between the various offers.

Cost Modeling also allows for subsequent evaluations of the parts in Regular Production to guarantee the supplier's competitiveness throughout the life of the program. Nexteer encourage the supplier to apply the tool thru the entire life of the part.

Nexteer is committed to providing the necessary training to the supplier to understand the use of the tool and allow the supplier to maximize its benefits throughout its entire value chain.

### **11.2 Pricing**

Suppliers are expected to be globally competitive and benchmarked by the Nexteer Buyers. When requested by the Buyer, quotes shall be prepared using the Nexteer on-line quoting system hosted by Intellex. Suppliers will complete the Piece Price and Tooling Breakdown Sections and include a separate itemized price for: 1.) Expendable packaging and 2.) Returnable packaging, when specified. Suppliers will complete the

Manufacturability Assessment & Process Plan (MAPP) and Supplier Packaging Information (SPI), as requested by Nexteer.

Suppliers are expected to have a continual cost reduction improvement process to reduce their costs and improve the value of the product to Nexteer. The expected cost reduction goal will be annual. To support this, it is critical that suppliers continually improve their cost competitiveness as suppliers who do improve will be “preferred” to those who do not.

When appropriate, Nexteer GSM can provide assistance in cost reductions, through various workshops. For further information, contact your Nexteer Buyer.

Suppliers who provide prototype/pre-production part requirements are expected to provide them at production pricing unless otherwise agreed to by GSM.

Nexteer will not accept quotations, issue contracts or purchase orders with minimum order quantities or guaranteed volumes.

### **11.3 Currency**

Supplier is to quote in the currency specified by the Nexteer Buyer, which is the currency that Nexteer sells the final product to our customer. Exceptions to this requirement will result in a risk factor being added to the quoted price from the supplier, thus impacting the competitiveness of the supplier’s quote.

### **11.4 Payment**

Note: For production parts, payment (including tooling) requires the following supplier actions:

- Completion of APQP process
- Full PPAP approval
- Successful run-at-rate for the documented contracted capacity

To affect Electronic Funds Transfer (EFT), new suppliers will complete an EFT Payment Authorization Form for the appropriate Nexteer region location, if applicable. These forms are available on the Nexteer Supplier Website and are required only prior to issuing first payment or if remit name, address or "Ship From" DUNS number changes. Payments cannot be issued until the documented remittance information is provided to Nexteer as indicated on the form. Supplier invoices must be issued to the Nexteer legal entity location from which the purchase order was issued, and each invoice must include the purchase order number.

A Foreign Receiving Report or FRR should be used by supplier receiving locations to document that material has been received under a Nexteer Legal Entity Purchase Order at their respective locations. The FRR should be completed by the receiving location and returned to Nexteer to input receipts, which will generate payment to the supplier.

### **11.5 Cost Recovery**

Cost Recoveries including Warranty Recovery will be communicated through the Cost Recovery Management application within Intellex. Warranty costs will be inclusive of all Nexteer incurred expenses including charges from Nexteer customers. Nexteer customers use various methodologies to charge back warranty or recall costs to Nexteer. These methods shall result in a warranty chargeback method between Nexteer and the Nexteer supplier. The most common Nexteer customer chargeback methods are described in the table below, as well as the resulting charge back method between Nexteer and the Nexteer supplier.

	Regular Warranty				Warranty Spike (in case of special warranty cause)
	Direct Chargeback	Responsibility Factor RF (%)		Warranty Performance Target	
OEM to Nexteer Charge Back Method	Cost charge back by OEM is defined based on individual analysis of each warranty returned part	Cost chargeback by OEM is defined based on warranty return sampling analysis at a defined time in the project. RF <sub>Nexteer</sub> can be carried over project life or updated at agreed frequency	Cost charge back by OEM is pre-established (40/60, 100/0...). Can be carried over project life or updated at agreed frequency.	Cost charge back by OEM only if Nexteer does not meet the contractual warranty performance target (i.e. IPTV)	Cost charge back by OEM after negotiation with Nexteer depending on spike scenario
Nexteer to External Supplier Resulting Chargeback Method	Problem Case issued, Cost Recovery refers to Problem Case	PC not necessarily issued, CR issued referring RF <sub>Supplier</sub> established between Nexteer and external supplier. RF <sub>Supplier</sub> ideally results from the analysis of same above samples used for RF <sub>Nexteer</sub> (between OEM and Nexteer)	Specific negotiation required between Global Supply Management and Supplier	Specific negotiation required between Global Supply Management and Supplier	Problem Case issued, Cost Recovery refers to Problem Case
Debit from Nexteer to external supplier	Equals debit Nexteer received from OEM	Equals debit Nexteer received from OEM multiplied by RF <sub>Supplier</sub>	Depends on negotiation	Depends on negotiation	Equals debit Nexteer received from OEM

## 11.6 Data Privacy

At Nexteer we respect and are committed to protecting the Personal Information and align Nexteer's privacy policies and data protection practices with the law. Personal Information means any information relating to an identified or identifiable individual. Nexteer policies and processes reflect current standards and principles with respect to the processing of Personal Information, including sensitive personal data, and will abide by any laws and regulation specific to the countries in which Nexteer does business.

The commitment to protecting the Personal Information and associated data protection practices are extended through contract to our suppliers and partners. Accordingly, all Nexteer suppliers shall comply with (i) all laws, rules, regulations, court orders and governmental requirements applicable to the privacy, confidentiality or security of Personal Information, including without limitation, to the extent they may be applicable: (a) the European Union Directives and/or Regulations governing data protection as well as the laws and regulations that implement such Directives; (b) laws and regulations imposing security requirements to protect Personal Information; (c) laws and regulations restricting international transfers and processing of Personal Information; and (d) laws and regulations requiring the secure disposal of records containing certain Personal Information; (ii) all applicable industry standards concerning privacy, data protection, confidentiality and security of Personal Information; and (iii) all applicable provisions of Nexteer's privacy policies (see notably ), statements or notices made available to the supply base. Suppliers shall enter into any further privacy or information security agreements, including any applicable data transfer agreement, or take any other steps requested by Nexteer for purposes of compliance with the foregoing.

### EU / US Privacy Shield

With respect to personal information (as defined in Privacy Shield) received or transferred pursuant to Privacy Shield, Nexteer Automotive Corporation is subject to the regulatory enforcement powers of the U.S. Federal Trade Commission. The company's commitment to participate in the Privacy Shield program can be found at the following U.S. Department of Commerce website located at: <https://www.privacyshield.gov/list>.

## **Data Processing Agreement**

Where Nexteer transfers Personal Information onward to suppliers for processing, such suppliers will enter into a Data Processing Agreement setting forth their undertakings with respect to adherence to adequate data protection principles.

### **11.7 Corporate Social Responsibility (CSR) Supplier Principles**

Nexteer is committed to acting in accordance with all applicable laws and conducting our business in a socially and environmentally responsible manner with the highest degree of integrity. This commitment is extended to our global supply base via Nexteer's **Corporate Social Responsibility (CSR) Supplier Principles**.

Nexteer's Global Supply Chain Management expects the entire supply chain to specifically adhere to the principles described in this document. Direct suppliers are required to self-certify yearly by answering questions and providing appropriate evidence via the Nexteer Sustainability application in Intellex. Nexteer reserves the right to audit such submissions either on-site or virtual. Compliance to the Nexteer Corporate Social Responsibility Supplier Principles is a requirement of new business award. For each non-compliance, the supplier must implement corrective action plans to remain compliant with Nexteer CSR Supplier Principles. In the event the supplier fails to respect these principles, Nexteer reserves the right to impose penalties up to the exclusion of the supplier from Nexteer's supply base.

#### **Supporting Documentation, Forms or Reference for Section 11:**

Manufacturability Assessment & Process Plan (MAPP) Template - Located on Nexteer.com, Suppliers, Sourcing Processes: <http://www.nexteer.com/sourcing-processes/>

EFT Payment Authorization Forms - Located on the Nexteer.com, Suppliers, Financial Processes: <http://www.nexteer.com/financial-processes/>

Corporate Social Responsibility (CSR) Supplier Principles – Located on Nexteer.com, Suppliers, Doing Business With Nexteer: <https://www.nexteer.com/doing-business-with-nexteer/>

### **Attachments B, C, D and E**

There may be unique OEM specific standards that exceed the requirements listed in this section.

# Attachment B (Note—attachment A does not exist. This document intentionally begins with attachment B)



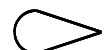


**Nexteer Automotive**

## Product Characteristics Control Levels Chart

Revised: 10-Jun-2016

Nexteer Automotive

Revised: 10-Jul-2010

Design Criteria				Manufacturing Requirements <sup>1</sup>				
Design Severity & Sensitivity (DSS) Result				Detection Activity (Detect nonconforming parts)		Process Control (Monitor the process)	Nonconforming Material Handling	Traceability
FMEA Severity <sup>2</sup>	Sensitivity	Control Level	QCL Symbol	Frequency of Inspection	Allowed Detection Controls			
G1346, G1174	G1331	G1331	G1331	G1331	G1174	G1763	G1901, G1786	G1783
9 - 10	RED	CL1		100% <sup>3</sup>	1 - 4	1 - 4	A	Singular Preferred Lot Control Required
9 - 10	YELLOW	CL2		100% <sup>3</sup>	1 - 7a	1 - 4	A-B	Lot Control or Singular
9 - 10	GREEN	CL3	No drawing symbol	Per Control Plan <sup>5</sup>	1 - 7a	1 - 7	A-B	Per Control Plan
8	RED	CL4		100% <sup>3</sup>	1 - 7a	1 - 6	A-B	Per Control Plan
8	YELLOW	CL5 <sup>4</sup>		Per Control Plan <sup>5</sup>	1 - 7a	1 - 7	A-C	Per Control Plan
8	GREEN	STD	No drawing symbol		1 - 8			Per Control Plan
4 - 7	RED	CL5 <sup>4</sup>		Per Control Plan <sup>5</sup>	1 - 7a	1 - 7	A-C	Per Control Plan
4 - 7	YELLOW	STD	No drawing symbol	Per Control Plan <sup>5</sup>	1 - 8			Per Control Plan
4 - 7	GREEN							Per Control Plan
1 - 3	R - Y - G	STD	No drawing symbol	Per Control Plan <sup>5</sup>	1 - 10	1 - 7	A-C	Per Control Plan

## Attachment B Notes

**Note 1:** WHEN AN ALTERNATIVE CONTROL STRATEGY IS NECESSARY OR APPROPRIATE USE NEXTEER G1331 APPROVAL FORM X-1331.

**Note 2:** AS PRESCRIBED BY SAEJ1739 FMEA STANDARD AND AIAG FMEA 4th EDITION REFERENCE MANUAL, THE PFMEA SHALL INCLUDE EFFECTS ON THE PRODUCT AND PROCESS. THE PFMEA SEVERITY RANKING USED TO CALCULATE THE RISK PRIORITY NUMBER SHOULD BE EQUAL TO OR GREATER THAN THE SEVERITY RANKING IN THE DFMEA.

**Note 3:**

a. IF 100% PART INSPECTION IS NOT THE MOST EFFECTIVE OR FEASIBLE SOLUTION, THEN PROCESS CONTROL PARAMETERS MUST BE 100% MONITORED AND IDENTIFIED AS A KCC IN THE CONTROL PLAN ALONG WITH AN APPROPRIATE VERIFICATION PLAN & DETECTION METHOD WITH DOCUMENTATION REQUIRED.


Examples: BATCH OR STEADY STATE PROCESSES (e.g.: BATCH OR BELT HEAT TREAT, PLATING), DIMENSIONS RESULTING FROM A MOLDING, STAMPING OPERATION OR FROM A MACHINING OPERATIONS WHERE 1 TOOL CUTS MULTIPLE DIMENSIONS, MATERIAL PROPERTIES AND DIMENSIONS FOR INCOMING INSPECTION, GEOMETRIC TOLERANCES VERIFIED BY COORDINATE MEASURING MACHINE AND WHEN DESTRUCTIVE TESTING IS REQUIRED.

b. PART INSPECTION OR PROCESS MONITORING FOR ALL COMPONENTS AND ASSEMBLIES MUST BE WITHIN THE MANUFACTURING FACILITY. EXCEPTIONS THAT RESULT IN 100% VERIFICATION DOWNSTREAM AT NEXTEER INSTEAD OF AT THE SUPPLIER MUST BE APPROVED BASED ON EFFECTIVENESS OF CONTROLS. ALL NEW PART NUMBERS WILL REQUIRE PART INSPECTION OR PROCESS MONITORING AT THE COMPONENT OR ASSEMBLY'S MANUFACTURING LOCATION INDEPENDENT OF PREVIOUS EXCEPTIONS.

**Note 4:** CUSTOMER DOCUMENTED REQUIREMENTS SUPERSEDE REQUIREMENTS SHOWN. WHERE POSSIBLE CUSTOMER DESIGNATED CHARACTERISTICS WILL BE A CL5 OR APPROPRIATE DESIGNATION BASED ON SEVERITY & SENSITIVITY.


**Note 5:** THE OPTIMUM CONTROL STRATEGY METHOD WILL BE DETERMINED DURING PFMEA (MAKE) AND SUPPLIER MAPP DEVELOPMENT AS INPUT TO THE CONTROL PLAN.

## Attachment C

<b>Detection Controls</b> <b>(Reference SAEJ1739 FMEA Standard)</b> 		
Key Words	PFMEA DET Ranking	PFMEA Criteria (Breakdown)
<u>Not applicable</u>	<b>10</b>	No current process control
<u>Random Inspection</u>	<b>9</b>	Random audit performed
<u>Manual Inspection</u>	<b>8</b>	Visual/tactile/audible detection of defect (failure mode) later in process (downstream operation)
	<b>7b</b>	Visual/tactile/audible detection of defect (failure mode) at operation
<u>Gauging</u>	<b>7a</b>	Attribute gauge detects defect (failure mode) later in process (downstream operation) <i>(Includes machine enhanced solutions e.g. Xray, Magnaflux, Eddy current, etc.)</i>
		Visual/tactile/audible detection of defect (failure mode) at operation is acceptable when the product requirement is called out without specific measurable limits <i>e.g. fully engaged (tactile push/pull), clear of grease (visual), etc.</i>
	<b>6b</b>	Variable gauge detects defect (failure mode) later in process (downstream operation)
	<b>6a</b>	Attribute gauge detects defect (failure mode) at operation
	<b>5b</b>	Variable gauge detects error (cause) or defect (failure mode) at operation
<u>Semi-Automated</u> Cannot continue without operator response	<b>5a</b>	Automated controls in-station detect discrepant part (defect/failure mode) and notify operator to take action (light, buzzer, etc.)
<u>Automated</u> Cannot make, Cannot accept, Cannot pass discrepant part	<b>4</b>	Automated controls detect discrepant part (defect/failure mode) and lock part to prevent further processing later in process (downstream operation) <i>(Includes bar code or RFID defect pass/fail tracking)</i>
	<b>3</b>	Automated controls detect discrepant part (defect/failure mode) and lock part to prevent further processing at operation (Includes automatic movement of part from station to detection device)
	<b>2</b>	Automated controls detect error (cause) and prevent discrepant part from being made at operation (process monitoring)
<u>Error Prevention</u>	<b>1</b>	Error (cause) prevention as a result of fixture design, machine design or part design

## Attachment D


### PROCESS CONTROL TABLE

PROCESS CONTROL*	Process Controls Description 
7	Sampling using attribute gauging - to monitor and adjust process
6	Sampling using variable gauging - to monitor and adjust process
5	Sampling using stop light style(red, yellow, green) variable gauging
4	Variable gauging with SPC charting
3	Variable gauging with automatic feedback/compensation control
2	Machine monitoring/control
1	Error (Cause) prevention as a result of fixture design, machine design or part design.

\* 100% Attribute gauging is considered a Detection Control.

## Attachment E

### DEFECT HANDLING TABLE

<b>Nonconforming Material Handling / Reconciliation / Response</b> <b>(Reference G1735, G1786, G1901)</b> 								
Nonconforming Material Handling				Reconciliation Reject Count from Equipment or Process Must Match Actual Physical Rejects and/or Log Sheets		Response		
When Inspecting Part or Monitoring Process 100%	Nonconforming parts prevented from being used in subsequent operations by means of disassembly, destruction or part tracking (RFID or Barcode).  In case of small parts or parts without RFID/barcode, <u>part is placed automatically into a lock box with a tamper proof reject chute.</u>	Nonconforming parts prevented from being used in subsequent operations by means of disassembly, destruction or part tracking (RFID or Barcode).  In case of small parts or parts without RFID/Barcode, <u>operator required to place nonconforming part in lock box</u> interlocked to prevent equipment from advancing until reject part is detected. Reject Chute and lock box must be tamper proof.	Nonconforming parts placed into approved container, properly identified, and segregated from in-process material	Reject reconciliation completed prior to shipment of parts	Standard Reject Containment process formalized	Re-use, repair or rework not allowed	If reject count versus actual rejects/log does not reconcile, there must be clearly defined standard reaction plan (containment procedure) that is utilized	Rework and repair allowed only with PPAP approved methods unless an engineering permit, and/or Supplier Suggestion/Change Request (SCR), is issued and approved to utilize (re-use/repair/rework) any material that deviates from the product drawing or specification requirements
When sampling (< 100% inspection)	Not applicable	If nonconformity found <u>must segregate all parts produced back to the last known good part/lot and place in a lock box.</u>		Reject reconciliation completed prior to shipment of parts	Standard Reject Containment process formalized	Re-use, repair or rework not allowed	If reject count versus actual rejects/log does not reconcile, there must be clearly defined standard reaction plan (containment procedure) that is utilized	Rework and repair allowed only with PPAP approved methods unless an engineering permit, and/or Supplier Suggestion/Change Request (SCR), is issued and approved to utilize (re-use/repair/rework) any material that deviates from the product drawing or specification requirements
A	✓			✓		✓	✓	
B		✓		✓			✓	✓
C			✓		✓			✓

## 12 Nexteer Supplier Requirements – Change Review Log Summary

Approval Date	Issue/Revision Changes Summary	Title/Function
February 15, 2023	<ul style="list-style-type: none"> <li>2.1 Normative and Informative References – <ul style="list-style-type: none"> <li>Added AIAG &amp; VDA FMEA Handbook or SAE J1739 FMEA Standard.</li> <li>Added reference to CQI-30 here and throughout.</li> </ul> </li> <li>3.1 Terms and Definitions – Added Major Disruption and eliminated Spill and Vontik.</li> <li>4.3 Quality Management System – <ul style="list-style-type: none"> <li>Added clarification for Distributors.</li> </ul> </li> <li>4.4.1.2 Product Safety – <ul style="list-style-type: none"> <li>Clarified supplier's responsibility to support compliance with Industry/OEM specific standards such as ASPICE, ISO 26262, ISO/SAE 21434, etc.</li> <li>If requested by Nexteer, enter into a Development Interface Agreement which details functional safety responsibilities.</li> </ul> </li> <li>5.1.1.1 Corporate Responsibility – <ul style="list-style-type: none"> <li>Added Health and Safety Policy and Health and Safety Management System Certification expectations.</li> </ul> </li> <li>6.1.2.1 Risk Analysis – <ul style="list-style-type: none"> <li>Added The reverse PFMEA process must cover all Nexteer part numbers annually.</li> <li>Priority must be given to part numbers with Nexteer problem cases (recommended higher frequency).</li> </ul> </li> <li>7.1.4.1 Operation of Processes – Moved Health and Safety Policy and requirement for supplier to establish their own policy to section 5.1.1.1</li> <li>7.5.3.2.1 Record Retention – Updated records related to safety critical characteristic features shall be retained for the longer of 20 years after final delivery or for the period prescribed by applicable law.</li> <li>8.1.1 Operational Planning and Control – Added a key element of APQP – provide a label and participate in EDI verification.</li> <li>8.2.1 Customer Communication – <ul style="list-style-type: none"> <li>Added Supplier Development Application and Supplier Tooling Application to Intelex Applications list.</li> <li>Supplier review of Intelex Profile will be changing from yearly to a more frequent basis. Failure to update may result in system lock-out.</li> <li>Eliminated reference to Vontik and replaced with generic Financial Assessment reference.</li> </ul> </li> <li>8.2.3.1.2 Customer Designed Special Characteristics – <ul style="list-style-type: none"> <li>Corrected the following statement from CL3 to CL4: "Operations with Fastener Assembly processes that have a severity 8,9, or 10 (CL1, CL2, CL4)....".</li> <li>As part of Launch and Early Production Containment (EPC) AQE/SQE's may require capability monitoring and submission for CL1, CL2, CL3 and CL4 features. Providing capability requirements are met, this requirement would be exited at time of EPC release.</li> </ul> </li> <li>8.2.3.1.3 Organization Manufacturing Feasibility – Added that any operating plan that uses more than 100 hours per work week must not only be agreed upon by Nexteer but clearly documented in the Nomination Letter.</li> <li>8.3.2.1 Design and Development Planning – FMEA's shall be prepared using the AIAG &amp; VDA Potential Mode and Effects Analysis format OR the SAE J1739 format.</li> <li>8.4.2.2 Statutory and Regulatory Requirements – Responsible Sourcing <ul style="list-style-type: none"> <li>Updated to include Mica</li> <li>Added Suppliers are to use smelters and refiners that have been validated as conformant to an independent 3<sup>rd</sup> party responsible mineral sourcing validation program.</li> </ul> </li> </ul>	<p>Jacky Xu Chief Purchasing Officer Global Supply Management</p> <p>Glenn Barrie Executive Director Global Supplier Quality &amp; Development</p>

Approval Date	Issue/Revision Changes Summary	Title/Function
	<ul style="list-style-type: none"> <li>○ Added Suppliers must conduct mineral due diligence in alignment with OCED Guidance.</li> <li>• 8.4.2.5 Supplier Development – Added reference to the upcoming Intalex Supplier Development module.</li> <li>• 8.5.4 Preservation – Labeling – Added Suppliers will be required to verify label requirements as part of the Nexteer APQP process.</li> <li>• 8.6.2 Layout Inspection – Added performed on a minimum of 5 pieces.</li> <li>• 8.7.1.3 Control of Suspect Material – Added the Supplier shall separate suspect parts and/or material from conforming parts and/or material by using an isolated secured containment area.</li> <li>• 9.2.2 Layered Audit – Moved and updated layered audit verbiage from section 10.3.1 to section 9.2.2 and added language defining “senior management”.</li> <li>• 10.3.1 Continual Improvement – removed the layered audit verbiage and moved it to section 9.2.2.</li> <li>• 11.1 Commercial Expectations – Added the timeframe allowed for MAPP submission from the supplier which is 7 days.</li> <li>• 11.2 Pricing – clarified expected cost reduction goals are annual.</li> </ul>	