



Stoneridge  
Global Quality Agreement

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## **1 Introduction**

### **1.1 Definitions**

“Party” or “Parties” shall mean individually or collectively Stoneridge (as defined below) and/or the entity identified as the “Supplier” in the applicable Stoneridge Purchase Order or Master Supply Agreement.

This Global Quality Agreement is an integral part of and incorporated into the supply agreement(s) and purchase order(s) between Supplier and Stoneridge Inc. or its applicable Related Companies (hereafter referred to as “Stoneridge”). There will be no exceptions or modifications to any portion of this Global Quality Agreement unless approved in writing by an authorized Stoneridge purchasing contact.

### **1.2 Parties to this Agreement**

This Global Quality Agreement shall apply to the Parties including the participating Related Companies of the Parties. “Related Companies” shall mean any company which, through ownership of voting stock or otherwise, directly, or indirectly, is controlled by, under the common control with, or in control of a Party hereto, the term "control" meaning the ownership of more than 50 % of such company's voting rights.

### **1.3 Scope**

In support of Stoneridge’s commitment to exceeding our customer’s expectations, Suppliers shall also have the commitment of planning, execution, communication, quality and delivery of parts and service.

The Stoneridge Global Quality Agreement defines requirements that Suppliers shall implement in their quality processes and systems. Suppliers are expected to develop, document, implement and verify processes and procedures to comply with the requirements of the Global Quality Agreement. This document is a companion document to IATF 16949, ISO 9001, and ISO 14001, and shall be used as a supplement to these standards. Conformance to these requirements shall be maintained by the Supplier using internal audit processes and qualified personnel.

The purpose of this document is to communicate Stoneridge requirements with respect to the quality and environmental management system of those companies that supply production goods to Stoneridge. The requirements are applicable to all suppliers including distributors and manufacturers. Service providers, including Logistics and Tooling supply, are not governed by this Global Quality Agreement.

It is the Supplier’s obligation to ensure that all quality rules set out in this Agreement are transmitted, implemented, and committed to by the members of Supplier’s sub-supplier panel. Stoneridge expects zero defects for every quoted contract-product and a commitment from Supplier to implement

appropriate systems and controls to ensure the 100% on-time delivery of conforming, defect free products.

Supplier shall exhibit a philosophy of Customer Satisfaction and commit to actions leading to execution (quality, delivery, communication, documentation, etc.).

## **2 General System Requirements**

### **2.1 Management System Requirements**

Present and potential suppliers to Stoneridge, including Supplier, must operate within a comprehensive quality system. Supplier shall provide written confirmation and objective evidence of third-party certification to an active version of IATF 16949. Manufacturing suppliers who are not IATF 16949 (latest issue) certified must have a working plan to become compliant to IATF 16949 available for review, unless the supplier has an approved exemption from Stoneridge waiving such a plan. Distribution suppliers of parts manufactured by another company shall have a valid quality certificate according to latest version of ISO 9001.

Manufacturing suppliers are required to implement environmental systems in their facilities that are compliant to ISO 14001. Manufacturing suppliers who are not certified must have a working plan to become compliant to ISO 14001 available for review, unless the supplier has an approved exemption from Stoneridge waiving such a plan.

Manufacturing and distribution suppliers must provide their initial and renewal certifications to Stoneridge within 10 days of receiving the certificate from their registrar.

### **2.2 Sub-Supplier Control**

The requirements set out in this Supplier Quality Agreement shall also apply to the Quality Management System of sub-suppliers to Supplier. Upon Stoneridge's request Supplier shall submit supplier and product approvals and corresponding quality contracts with its sub-suppliers. Supplier is responsible for the control and continuous improvement efforts of its sub-suppliers. This responsibility applies to sub-suppliers directed by Stoneridge. Suppliers shall enable visits by Stoneridge at their sub-suppliers' facilities.

### **2.3 Audits**

Upon request by Stoneridge, a 3<sup>rd</sup>-party representative or customers shall be entitled to visit any product related location of the Supplier and to conduct audits based on IATF 16949 and VDA standards and product safety requirements. This right shall also include audits at the Supplier's sub-suppliers' locations. Supplier shall provide the necessary resources for the performance of this task.

A scoring and audit report will be provided by the respective auditor at the end of an audit during the common wrap-up discussion with the involved participants. The audit report and the necessary measures resulting from the audit (as far as identifiable) shall be agreed upon by Supplier and Stoneridge within an action plan. The tracking and follow-up for the realization of the action plan will be performed by Stoneridge's auditor.

Supplier shall audit each manufacturing process to determine its effectiveness. Supplier shall conduct Self-Assessments in accordance with AIAG Special Processes (CQI), which shall include assessments of any sub-supplied parts or outsourced processes. Stoneridge requires that applicable audits are conducted at a minimum frequency of once per year and that a record of assessments including action plans be maintained and made available to Stoneridge upon request. Compliance to be demonstrated for the latest edition of following special processes:

- CQI-9: Heat Treat Assessment
- CQI-11: Plating System Assessment
- CQI-12: Coating System Assessment
- CQI-15: Welding System Assessment
- CQI-17: Soldering System Assessment
- CQI-23: Molding System Assessment
- CQI-27: Casting System Assessment

## 2.4 Supplier Performance Indicators and Rating

Supplier performance is monitored through a continuous evaluation process. Indicators include (but are not limited to) quality ppm, quality incidents and delivery performance metrics. Suppliers are responsible to review scorecards and have action plans for addressing nonconformances. The implementation and results of the action plan shall be communicated to Stoneridge. Supplier shall have documented process to manage product that has not met design specifications. The defined process must prevent any nonconforming material to be shipped to any Stoneridge facility.

Stoneridge performs a supplier evaluation based on the following key performance indicators:

### Incidents

An Incident is any significant product or component relevant disturbance generated by a supplier influencing Stoneridge or a Stoneridge customer. Suppliers are notified of an incident created in case of:

- Customer complaints Field/Warranty
- Customer complaints 0-km
- Stoneridge productions complaints
- Stoneridge Incoming Inspection complaints
- Stoneridge Logistics complaints

**PPM-Level**

The PPM-Level evaluates Supplier's performance in parts per million for failures at Stoneridge's incoming inspection, Stoneridge's manufacturing lines and customer defects.

**APQP performance**

For the definition of APQP requirements see section 3.3. The performance will be measured based on the fulfillment of mandatory elements.

**Supplier Evaluation**

The global performance of Supplier will be evaluated annually for commercial, quality, logistics and technology elements and serves to determine Stoneridge's strategic supply base. Based on the results of such evaluation, Supplier shall define and implement appropriate corrective actions. If the quality results fail to meet the committed goals, Supplier shall implement immediate corrective actions to reach the targets.

**2.5 Delivery**

Supplier shall monitor its delivery performance. One hundred (100) percent on-time-delivery (OTD) is required within delivery time window. Stoneridge is not obligated to accept "early" or "late" deliveries. Supplier must deliver the exact quantity as specified (and time frame – due date) on the material release (Purchase Order) in accordance to the agreed upon standard pack quantity (Commercial Agreement). No "under" or "over" delivery quantities are allowed unless separate agreement exists. Compliance to dates and time specified on the delivery instruction documentation is mandatory and of the essence. Over-shipments will be returned to Supplier at Supplier's expense.

In case of delivery issues (early/late/incorrect-quantity/undeliverable-shipments/etc.) Supplier is required to communicate with the appropriate Stoneridge personnel immediately to reduce impact to Stoneridge production and delivery to our customers. Failure to meet delivery requirements may trigger an 8D request from Stoneridge.

Supplier is responsible for all costs associated with the expedited premium transportation required to meet the original required delivery date. If production is interrupted at Stoneridge and/or Stoneridge's customer, the Supplier is responsible for all related costs incurred.

**2.6 Record Retention**

Supplier must document and maintain Production Part Approval Process (PPAP) documentation, annual layout and validation records, tooling records, traceability records, engineering records, corrective action records, quality performance records, material certifications and inspection and test results. The foregoing documents must be maintained and archived by Supplier for at least 15 years after Stoneridge production has been terminated. Records shall be available to Stoneridge

upon request. The above time periods are considered “minimum”. All retention times must meet or exceed the above requirements and any governmental requirements.

## **2.7 Contingency Plans**

Supplier is required to prepare and be able to promptly implement contingency plans to protect against an interruption of timely supply of product to Stoneridge in the event of an emergency or other exceptional circumstance (e.g., facility interruptions, labor shortages, key equipment failure, field returns, etc.). The contingency plan shall have a written instruction about communicating mandatorily to Stoneridge in the event of delivery disturbances. Supplier shall ensure that all production necessities (documented information, equipment/tooling, etc.) are safeguarded and can be recovered in case of loss or damage.

## **2.8 Cybersecurity Obligations**

All products furnished by Supplier to Stoneridge shall comply with the currently published version of ISO/SAE 21434 in order to support Stoneridge and its customers in their compliance with all relevant cybersecurity obligations, including with respect to demonstrating compliance with ISO/SAE 21434 and relevant cybersecurity, cybersecurity management system, and software update management system regulations (collectively “CSMS and SUMS regulations”).

Supplier shall, upon Stoneridge’s request, provide support necessary for Stoneridge to comply with ISO/SAE 21434 and for its customers pursuit of vehicle type approval, comply with any audits, and otherwise respond to any inquiries from public authorities or auditors in respect of CSMS and SUMS regulations. In the event the CSMS and SUMS regulations (or any interpretation of such regulations) are updated, Supplier and Stoneridge will discuss additional requirements and Supplier agrees to provide reasonable cooperation in meeting any additional requirements.

## **2.9 Customer Representative**

Supplier shall appoint a member of management who shall be responsible to ensure compliance with the requirements set forth in this Global Quality Agreement, including ensuring appropriate processes are developed, implemented, validated, and maintained.

## **2.10 Product Safety Representative**

Supplier shall have a trained Product Safety Representative (PSB) identified at each manufacturing location, with authority to independently advise, interact, and secure the Product Safety aspects of the products developed at their company. The PSB should report directly to Supplier’s management, the plant manager, or the quality assurance manager. Supplier must implement all organizationally and technically feasible measures to ensure the product safety of its parts and those of its sub-suppliers and to minimize product liability risks.



### **3 Product Safety and Liability**

Supplier contribution to safety lies in developing innovative solutions, implementing safety features and producing fully conforming products.

#### **3.1 Definition**

Safety requirements are determined based on the potential of a feature, product or system to create a personal hazard to any person in contact with the products or effects caused by the product. A Safety Customer Effect is considered when a danger can lead to injuries to vehicle operators, passengers, other travelers, passers-by or maintenance personnel. A part becomes a safety part if a Critical to Safety characteristic (CTS) is stated on the drawing and/or its specification.

Suppliers of safety parts will be notified by the presence of a check box on a Request For Quotation (RFQ) form or by notification from the SDE assigned for the component.

#### **3.2 Responsibility**

The production and supply of safe, fully conforming products to Stoneridge is Supplier's responsibility and is part of Supplier's contractual commitment. Suppliers are required to conduct a criticality analysis for features of the product design and production process that could result in a safety effect.

For Suppliers having design responsibility, special characteristics related to safety must be clearly identified within their design specifications, verification/validation plans, drawings, and technical documentation. Suppliers who are design responsible for products impacting safety are required to develop System, Sub-System, Design and Process Failure Modes Effects Analysis to assist in the analysis. Severity for any features identified by Stoneridge with a CTS (Critical to Safety) must have a severity score of a 9 or 10 on Supplier's DFMEA.

Stoneridge must be notified immediately in the event a non-conformance or potential customer risk is identified.

#### **3.3 Marking**

The methods used for marking lot/serial numbers on safety critical parts must support identification, traceability and failure investigation through all phases of the product's life. When feasible, CTS symbol must be included on the box label.

#### **3.4 Production and functional requirements**

Regarding dimensional, material, test and functional requirements for part features identified as safety critical (CTS), the following requirements apply and supersede the general requirements. Safety critical characteristics must be clearly identified throughout the manufacturing process and in all associated documentation such as Process FMEA, control plans and work instructions. Critical to Safety Characteristic (CTS) refer to special characteristic which affect safe operation of the vehicle, safety of manufacturing personnel and vehicle users, and/or regulatory compliance.

Thorough documentation is necessary to:

- Demonstrate that critical components do not have any safety related defects, either from Stoneridge or Supplier
- Demonstrate that both Stoneridge and legal requirements are met
- Limit the number of products subjected to field actions if any

For production requirements for Special Characteristics see chapter 4.7.

### **3.5 Safety Management Audit**

Suppliers of safety critical components or assemblies must have safety system requirements embedded in their quality management system. Suppliers must be able to demonstrate they have the organization, systems, processes, and competencies to manage Stoneridge requirements related to safety critical features.

### **3.6 Traceability**

For traceability requirements see chapter 6.9.

### **3.7 Supply network Management**

Suppliers are responsible to ensure that all sub-suppliers and contractors are aware of and comply with the requirements related to safety requirements:

- Identify and perform analysis of sub-suppliers safety parts
- Identify the CTS on the technical specifications and communicate to sub-suppliers.
- Communicate Product Safety, traceability, and Manufacturing Process requirements for CTS.
- Control and advise Stoneridge of changes of material, product, process changes or re-sourcing activities.

Stoneridge will not approve deviations to safety critical characteristics (CTS) or regulatory requirements.

### **3.8 Product Safety Representative**

Supplier shall have a trained Product Safety Representative (PSB) identified at each manufacturing location, with authority to independently advise, interact, and secure the Product Safety aspects of the products developed at their company. The PSB should report directly to Supplier's management, the plant manager, or the quality assurance manager. Supplier must implement all organizationally and technically feasible measures to ensure the product safety of its parts and those of its sub-suppliers and to minimize product liability risks.

## **4 Advanced Quality Planning**

### **4.1 Design and Development**

Supplier shall use a multi-disciplinary process to validate, while required and/or applicable, all design specifications and shall document conformance with all specifications. All special characteristics must be monitored and complied. All product/process documentation including FMEAs and control plans are to be up to date including action plans to minimize or eliminate potential risks.

For the development of a product with embedded software, Supplier shall implement and maintain a process for software quality, utilize a software development assessment process (e.g., ASPICE or CMMI) and retain its outputs.

### **4.2 Feasibility Commitment (FC) and Component Review (CR)**

With each offer to Stoneridge, Supplier shall submit a Feasibility Commitment in regard to project time plan, quality targets and technical requirements. Supplier shall perform a detailed feasibility analysis and present the outcome to Stoneridge. The Feasibility Commitment defines a common agreed project time schedule, a common agreed (target) specification/drawing and a fixed supply chain. Suppliers shall participate in Component Reviews and Design for Manufacturing reviews. Designs for Manufacturing (DFM) and manufacturing system design reviews shall be conducted by Supplier. Identified problems and proposed action plans are to be documented and retained.

### **4.3 Advance Product Quality Planning (APQP)**

Supplier shall plan, document and implement processes in accordance with the latest AIAG and Stoneridge requirements. All Stoneridge end customer-specific requirements shall also be covered. Supplier and its sub-suppliers shall have a comprehensive APQP process in place. Based on these requirements Stoneridge and Stoneridge's customers must have the opportunity to verify the APQP process at Supplier's premises and at Supplier's sub-suppliers' premises. Supplier shall have a designated project engineer or manager for each component development project. Supplier shall participate in APQP review meetings and APQP requirements as defined by Stoneridge.

### **4.4 Engineering Prototype Sample Submission**

Engineering prototype parts with documentation of specification conformance shall be submitted to Stoneridge by Supplier as defined by Stoneridge. Each sample or prototype must be clearly labeled as such and accompanied by completed dimensional results, material test results, and performance test results reports as described in the AIAG PPAP Manual. Specific instructions, in addition to these stated requirements may be agreed upon and documented by Stoneridge via the APQP Meetings or other formal communication.

#### 4.5 Failure Mode and Effects Analysis (FMEA)

Supplier shall conduct FMEAs before design and process validation in accordance with AIAG standard. FMEAs shall:

- (a) recognize and evaluate the potential failure modes of the design and process as well as effects of failure modes
- (b) identify actions that could eliminate or reduce the chance of the potential failure occurring
- (c) document the entire process.

All identified potential failure modes shall be considered in order to improve the product & process. Supplier shall set up a rating system in its QM-system which identifies the priorities of recommended measures (e.g., RPN, Severity). The process FMEA shall be delivered to Stoneridge. For applicable suppliers with design responsibility, the design FMEA shall be made available for review.

#### 4.6 Measurement System Analysis (MSA)

Supplier shall perform Measurement System Analysis (MSA) studies according latest AIAG Measurement System Analysis (MSA) manual for all gauges and measurement systems/equipment indicated in respective Control Plans for qualification, pre-series, and production components. Each MSA study is required to cover Gage R&R, bias, linearity, and stability studies and shall demonstrate an acceptable percentage Gauge R&R (%GRR). The specified MSA requirements need to be assured by Supplier during the complete component life cycle, including changes (e.g., product changes, process changes, measurement system changes).

#### 4.7 Special Characteristics and Statistical Process Control (SPC)

Special Characteristics are any product characteristics defined by Stoneridge, Stoneridge customers and/or manufacturing process parameters identified by Supplier including government and safety regulations, which have a substantial influence on the:

- manufacturability at Stoneridge
- manufacturability at Stoneridge's Customer
- usage and operation of the product by Stoneridge's Customer
- compliance with applicable regulations
- compliance to applicable safety requirements

Special Characteristics shall be identified and specifically addressed in the Design FMEA, Process FMEA, Control Plans, Process Flows, work instructions and other associated documents. Where needed, any Supplier notation (or equivalent symbol) shall be placed in appropriate documentation if Stoneridge has not denoted a specific indicator, Supplier shall define a symbol

for Special characteristics. Supplier is responsible to fully understand the process impact to its product and identify any process parameter Special Characteristics as it deems appropriate. Supplier is also responsible for ensuring that relevant Special Characteristics are explained, understood, and controlled by sit sub-suppliers where applicable.

A Pass-through Characteristic (“PTC”) is a product characteristic whose fit, function or visual appearance is not validated, verified, or functionally tested at Stoneridge assembly plant. A PTC shall be identified during design review and process validation. It must be controlled by Supplier and included in Supplier’s documentation. Appropriate PTC control methods at Supplier shall be agreed upon by Stoneridge.

Suppliers assume all responsibility for the quality of pass-through parts that are considered safety critical. This requirement applies to parts or features identified as safety critical by either Stoneridge criteria or criteria identified by Supplier as having the potential to impact safety.

Supplier shall use the latest edition of the AIAG Statistical Process Control (SPC) manual as guidelines for control characteristics (product and process) for initial studies and during the complete component life cycle this includes changes (e.g., product changes, process changes, measurement system changes).

For all features identified as a CTS (critical to safety), the following requirement applies:

Type	pFMEA severity level	Description	Process capability requirements	Controls
CTS	9-10	<b>Critical to Safety and Compliance</b> - Safety - Compliance(regulation) - Operator safety	$Ppk \geq 1.67$	- Error proofing with 100% automated inspection and guard banding - Physical or electronic locking of a defective product or assembly - Start-up check of the equipment

#### 4.8 Qualification

Supplier shall meet all applicable Stoneridge Engineering Specification (ES) Test Performance Requirements and PPAP requirements. Supplier shall develop a plan to meet these requirements and maintain manufacturing process capability. The plan shall be submitted as part of the PPAP package. Control Plans along with process flow diagrams must be documented and implemented to include validation of process setup, control of special characteristics, and a reaction plan for issues happened.

#### 4.9 Manufacturing Feasibility

Supplier shall perform manufacturing capability reviews to ensure a consistent flow of parts will be available to Stoneridge. Suppliers must be able to provide components at a volume level at least 20% above the quoted/forecasted volume/usage unless otherwise requested in the Stoneridge Request to Quote. Capacity analysis (Run-at-Rate) shall be conducted to verify manufacturing capability with respect to confirming both production capacity (tooling and equipment) and quality. Any capacity constraints shall be documented and provided to Stoneridge.

An assessment of a Supplier's manufacturing process may be conducted before and after part approval at the Supplier's facility. This assessment may be specified by Stoneridge or its customer (e.g., Run@Rate, Process Audit).

#### 4.10 Material Data Reporting

Supplier shall enter component material information into the IMDS (International Material Data System) prior to PPAP approval of components. IMDS is available through <http://www.mdssystem.com>. ROHS, REACH, Prop 65 or other materials reporting are required as directed by Stoneridge.

#### 4.11 Production Part Approval Process (PPAP)

Supplier shall comply with the current edition of the AIAG Production Part Approval Process (PPAP) manual. The Stoneridge default level for PPAP submission is Level III (3). Submissions are to follow the PPAP instructions.

Exceptions must be approved in writing by Stoneridge. Exceptions may include, but are not limited to:

- Catalog Items
- Off-the-Shelf Items
- Packaging
- Customer specific requirements

The PPAP submission shall include all required documentation. Stoneridge, at its sole discretion, may use PPAP submission samples as production parts or scrap them. It is the responsibility of Supplier to retain master samples.

#### **4.12 Product and Process Release Information**

The component and process are released after a PSW has been countersigned by an authorized Stoneridge Supplier Development employee. Changes of the process or component are not allowed after this point without prior notification to Stoneridge. Products from a mass-production process shall not be shipped to Stoneridge without a PPAP approval or an equivalent acceptable to Stoneridge in its sole discretion. Notification of PPAP approval is NOT an authorization to ship materials to a Stoneridge facility. Supplier shall follow Stoneridge shipping authorizations only.

### **5 Pre-Launch Process**

#### **5.1 Pre-Production and Sample Part requirements**

Suppliers are required to meet Stoneridge's Pre-production and Sample Part requirements. These requirements will be defined by Stoneridge via the APQP meetings or other formal communication. Required documentation (e.g., Control Plans) must be kept current.

Suppliers are expected to clearly identify "pre-production" or "sample parts" to ensure that Stoneridge's receiving site does not mix such parts with "regular" production parts. Suppliers are also expected to work closely with Stoneridge plant Scheduling and Material Control personnel to minimize unnecessary obsolescence. Labeling must be done per Stoneridge's receiving site requirements and shall be differentiated from regular production shipping labels unless the parts are already PPAP approved. In particular, Supplier Identification, Part Number, Engineering Level, and Quantity must be clearly displayed on the part-packaging label to ensure easy, visible segregation of containers/parts.

#### **5.2 Safe Launch Concept**

Supplier shall apply a Safe Launch (SLC) concept for the component as defined during the APQP process and agreed by Stoneridge. The purpose of the SLC is to document Supplier's control of its processes during start-up and ramp-up phase, it shall also enable the Supplier to quickly identify and quickly correct any quality issues that may arise at Supplier's location. SLC includes special verifications performed by Supplier for a defined timeframe or quantity as determined together with Stoneridge in the APQP process.

SLC requires a Pre-Launch Control Plan, which is a significant enhancement to Supplier's production control plan and which in turn will raise the confidence level to ensure that all components shipped initially will meet Stoneridge's expectations. The Pre-launch control plan will also serve to validate the production control plan. The Pre-Launch Control Plan shall take into consideration all known critical

conditions of the product as determined with Stoneridge as well as potential areas of concerns in Supplier's process as also identified during the introduction and PPAP. Supplier shall generate the Pre-Launch Control Plan prior to start of series production and shall make it available to Stoneridge for approval prior to start of series production. Stoneridge shall be entitled to require changes.

Suppliers are required to submit SLC data to Stoneridge. This should include variable measurement data where applicable. Suppliers may exit the safe launch process if they have achieved SLC targets unless otherwise specified by Stoneridge.

Supplier shall develop action plans to address missed failure modes or capability improvement needs. Stoneridge may require suppliers to perform production on stock for product and process verification purpose. Missing achievement of the SLC targets within the mutual defined period of time or quantities may lead to a withdrawal of the release.

## **6 Serial Production**

### **6.1 Product Quality**

Supplier is responsible for the conformance to all specifications for all product produced at a Supplier facilities and locations including sub-supplier facilities and locations. Supplier shall determine all required processes to maintain Stoneridge's expectation of Zero Defects. Supplier shall comply with all specifications of the product design including raw material specifications. Supplier must maintain denoting conformity to specifications.

### **6.2 Process Capability and Control**

Supplier is required to ensure that processes shall meet process capability and SPC requirements as defined in the AIAG PPAP and Statistical Process Control reference manual, unless otherwise specified by Stoneridge. Supplier is responsible for ensuring that control requirements are documented in the control plan and that capability indices are achieved and improved throughout production. If the required capability cannot be reached, then 100% testing by Supplier is mandatory and Supplier will be responsible for all costs associated with such testing.

Supplier is obligated to define samples ("golden" samples) to be used as reference for the manufacturing process and final product. Upon request of Stoneridge, Supplier shall provide measurement and traceability data for special characteristics.

Without the prior written approval of Stoneridge, Supplier shall not repair components. Rework/repair includes all activities on components outside the documented process flow.

### **6.3 Annual Re-Qualification**

Supplier shall re-qualify its components in case of changes, in addition to regularly re-qualifying components at least once a year. Upon PPAP approval, a component may be identified as "Dock to



Point of Use” (DPU) status, allowing the component to bypass receiving inspection. DPU status for each part number is awarded by achieving the following:

- a. Approved status in the Stoneridge Approved Supplier Database (and must be certified to ISO9000 or greater)
- b. No open Corrective Action Requests for dimensional (Fit-Form-Function) issues
- c. Approved PPAP (if applicable) on file for the part number
- d. Three (3) consecutive production lots received and inspected without any supplier fault non-conformances found during inspection/and or during the assembly process
- e. Required data/certification received from the supplier or evidence that the supplier is retaining required inspection data for the part number

A qualification-monitoring program for reliability and environmental tests has to be maintained by the supplier in order to ensure and demonstrate that the delivered components meet all the agreed requirements. Re-qualification documentation shall be archived by Supplier and shall be made available, at the supplier’s expense, for the following situations:

- 1) In response to a Corrective Action Request by Stoneridge
- 2) If the component cannot be returned to DPU status within a 12-month period (reference DPU criteria above).
- 3) If the material has not been shipped by the supplier in >12 months

If Supplier does not have design-responsibility, Supplier shall perform a lay-out inspection, verifying all characteristics as specified in the respective drawing or specification on a regular basis, at least once a year. Suppliers with PPAP documentation over one year old are required to re-PPAP if requested by Stoneridge.

Suppliers are expected to provide a copy of the annual layout inspection data within 24 hours of request for the situations noted above. If Supplier does not provide requested information in a timely manner, Stoneridge may, in its sole discretion, elect to complete the layout itself, in which case, the Supplier will be charged back for all related expenses. Additional actions may include:

- 1) Notifying Supplier’s IATF/ISO registrar of the lack of compliance
- 2) Placing supplier on a “no new business” hold

#### **6.4 Certificates of Conformances**

Upon request, a signed Certificate of Conformance shall be maintained on file at Supplier’s premises and Stoneridge may require Supplier to include a signed Certificate of Conformance with each shipment of specified components or materials. The Certificate of Conformance must contain the actual results of physical testing, measurements and/or analysis specified by the contract confirming compliance with all identified requirements. Stoneridge will give specific instructions during the APQP process or other formal communication. Supplier should have a system capable of retrieving and submitting the requested Certificate of Conformity within 24 hours after Stoneridge’s request.

## 6.5 Problem Solving Methods

Suppliers shall have trained (preferably certified) personnel with the ability to quickly and permanently resolve product and process issues using data driven problem resolution tools and techniques. Problem resolution must be conducted using a defined, structured process like the 8- Discipline process, Six Sigma DMAIC (Define, Measure, Analyze, Improve, and Control) process or any other process that includes verification of the root cause and validation of corrective action effectiveness.

Supplier must also use data-driven techniques should be used during the process design, verification, and validation phases of the APQP process in order to prevent problems with new or changing products and processes. These data-driven tools and techniques include but are not limited to: Failure Mode and Effects Analysis (FMEA), Measurement System Analysis (MSA), Statistical Process Control (SPC), Design of Experiments (DOE) and Taguchi Methods.

Product design responsible Suppliers must use reliability methods during the product design, verification, and validation phases of the APQP process in order to assure the robustness and durability of their product design for the intended application or as specified by Stoneridge.

## 6.6 Non-Conforming Components / Corrective Actions

Supplier shall have a documented process to monitor and respond to all issues of non-conformances reported by Stoneridge. Root Cause Analysis and documented problem-solving techniques are to be used to address the non-conformances. Permanent corrective actions shall be verified for effectiveness. Preventative activities, such as Look Across, Read Across and PFMEA Review, are strongly recommended.

Supplier's initial response shall be received within 24 hours after the initial notification, with containment occurring within 48 hours. The final response is required with detailed action plans within ten (10) working days after the initial notification.

All corrective action reporting shall be submitted using an 8D format.

- Supplier shall respond within 24 hours after receiving issue notification and the defective products and shall issue the first part of the 8D with item D1 (Form a problem-solving team), D2 (Problem description) and D3 (Immediate containment actions) completed and submitted to Stoneridge.
- Containment actions by Supplier must be in place within 48 hours.
- Supplier shall complete the remaining part of the 8D report (D4: Root cause analysis; D5: Permanent corrective actions; D6: Validation of permanent corrective actions; D7: Preventive actions and D8: Team/individual recognition) and submit it within ten (10) working days after receiving the inspection report and the defective products.

- If sorting of non-conforming product is necessary, Supplier is liable for the arrangement and the cost for sorting and any related transportation. Sorting and handling charges performed by Stoneridge will be billed at a reasonable cost.

Supplier's representative shall be available within 24 hours in order to solve any Supplier related problems that may cause line stoppage at Stoneridge or Stoneridge's customer or that may cause field problems.

In case non-conforming product is received by Stoneridge or Stoneridge customers, subject to and consistent with Stoneridge's rights under the nonconforming material and chargeback sections of the Stoneridge Terms and Conditions, applicable appropriate actions will be taken.

### 6.7 Changes to Approved Products and Processes

Suppliers and sub-suppliers are not to make any unauthorized changes to a product (e.g., material, component, sub-assembly) or the process used to produce a product that has been previously PPAP approved by Stoneridge. Supplier shall notify Stoneridge in advance of any proposed change including (but not limited to) the following:

- Product and Design Specifications Changes
- Process and Tooling Changes
- Manufacturing Location Changes
- Sub Supplier Changes (location, process, or product)
- Product Containerization and Labeling Changes

Supplier must notify Stoneridge at least **6 months** prior to any scheduled product/process/location changes. In addition, qualification samples and qualification reports (PPAP file) must be delivered to Stoneridge before the scheduled product/process change, with an option for bridge buy. All product/process/location changes must be reviewed and approved by Stoneridge prior to implementation by Supplier or its sub-suppliers.

Supplier must notify Stoneridge at least **12 months** prior to a proposed termination of production of a component or such longer period of time as required under the Parties' supply agreement or Purchase Order and, in each case, Supplier must give Stoneridge an option for a bridge buy.

### 6.8 Deviation Approval for Product or Process Deviations

It is the policy of Stoneridge not to accept products that do not meet the requirements of the applicable drawings and specifications. Requests for deviations on nonconforming products shall be submitted to Stoneridge for review and approval, at Stoneridge's sole discretion, prior to shipment. Deviations shall be approved only for a specific time period or quantity of parts. No permanent deviations are permitted. A deviation request shall be accompanied by a Problem-Solving Report (8D).

This report shall include the identification of a clean point and the way products will be identified, including how traceability will be maintained.

Stoneridge will not approve deviations to safety critical characteristics (CTS) or regulatory requirements.

## 6.9 Identification and Traceability

The aim of traceability is to minimize the impact and consequences of quality concerns. Supplier shall maintain an appropriate traceability system for its own manufacturing and delivery process, including its sub-suppliers and service providers. Supplier is are required to utilize and ship material on a “first in – first out” basis.

Forward Trace is the provision of any information required to identify suspect components already delivered in order to minimize the quantity of non-conforming components - as early as possible. Backward Trace is the provision of any information required to identify suspect source material and origin at the Supplier and manufacturer. Supplier must ensure appropriate Forward Trace and Backward Trace processes are in place at all times.

A traceability system shall ensure that its final components and subcomponents utilized in the product can be traced back to the manufacturing date, shift, equipment, tool number and the respective inspection/conformity results up to the trace information of manufacturer, sub suppliers and service providers. Based on internal risk assessment lot sizes shall be established minimizing the internal as well as the external risk.

The following requirements apply to safety critical parts. Suppliers shall have an effective system of traceability that ensures delivered product can be traced from a finished product in the customer application back to specific lots, sub-components, parts, blanks and raw material.

In addition to component/materials traceability, the system must be capable of providing the production history of a lot or serial number. This history must include:

- Rework operations or activity
- Product and process special characteristics
- Test records
- Process parameters influencing conformance
- Machine settings influencing conformance
- Maintenance activity of machines, equipment, jigs, gauges and test equipment
- Qualification records for personnel performing the work, calibrations/verifications and maintenance related to safety parts.

## 6.10 Packaging/Containerization/Labeling

Supplier must ensure that products are packed in a suitable manner in order to prevent any damage possible and to ensure safe handling. Supplier must communicate to Stoneridge on any deviations from original agreed packaging specifications. Supplier must document any changes to packaging/containerization with cause (s) and compliance time. Supplier should, if available at a reasonable cost, use returnable and recyclable packaging material. For returnable containers used, Supplier is responsible for tracking, cleaning, and repair (if it is needed). Supplier shall work towards reducing handling and packaging cost.

Supplier must label all product in accordance with Stoneridge receiving facilities requirements. Supplier shall label all product packages with Stoneridge's part number, Purchase Order number and the quantity of delivered products. Supplier must affix a legible packing slip next to any required master label (skid/pallet loads) and next to the individual container label (single loads). The information required includes (but not limited to): part number, revision level, quantity shipped, purchase order, Supplier address, customer address.

## 7 Supplier Code of Conduct and CSR/Sustainability Requirements

Stoneridge believes in doing the right thing...always. Our commitment to operating with the highest level of integrity includes ensuring we do business with partners that align with our Core values. Clearly communicating our expectations helps to achieve this goal. This **Supplier Code of Conduct and CSR/Sustainability Requirements ("Code")** sets forth our expectations for suppliers to do business with Stoneridge. This Code applies to any third party that provides goods or services to Stoneridge. Stoneridge expects that our suppliers will cascade similar expectations through their own supply chains. It is the responsibility of the supplier to verify and monitor compliance with this Code at its operations and its sub-suppliers' operations.

Stoneridge expects that our suppliers will satisfy contractual requirements, understand, and act consistent with Stoneridge's approach to integrity, responsible sourcing, and supply chain management using the principles and values of our Stoneridge Code of Conduct and this Code. Suppliers must comply with the following standards (please consult your procurement representative for additional regional requirements):

### Legal Compliance

Stoneridge is committed to complying with all applicable laws and regulations in the countries in which we do business. Suppliers are expected to comply with all applicable laws and regulations and prevent incidents or conditions that might result in a violation of law. This includes, without limitation, that all purchased materials used in manufacture of goods satisfy current governmental and safety constraints on restricted, toxic, and hazardous materials, as well as environmental considerations applicable to the country of manufacture and sale.

**Ethical Behavior**

Supplier will operate honestly and ethically throughout the supply chain and in accordance with all applicable laws and regulations in the countries in which the Supplier does business.

**Confidentiality and Intellectual Property**

In accordance with Stoneridge's Terms and Conditions, Supplier shall ensure the confidentiality of Stoneridge products and projects under development, and related product information, as well as intellectual property shared as a result of the working relationship. Stoneridge expects its Suppliers to respect and comply with all laws and agreements governing intellectual property rights, including protection against disclosure, patents, copyrights, and trademarks.

**Preventing Bribery and Corruption**

Stoneridge prohibits suppliers from giving or promising to give anything of value to any third party for the purpose of obtaining or retaining business, or to otherwise induce them to act improperly. Suppliers must conduct business with integrity and in full compliance with all applicable laws pertaining to bribery and corruption. Stoneridge expects our suppliers to comply with all applicable statutes governing the prevention of money laundering and not to participate in any money laundering activity.

**Anti-competitive Practices**

Supplier must not enter into arrangements that unlawfully restrain competition or result in the improper exchange of competitive information. Price fixing, bid rigging, and improper market allocation are prohibited.

**Gifts and Entertainment**

If you wish to provide a Stoneridge employee with a gift or entertainment, you must ensure it is legal, has a valid business purpose, and is kept to a reasonable value. Suppliers are not permitted to provide gifts or entertainment to our employees for the purpose of influencing a decision that may benefit the Supplier. Likewise, Stoneridge employees are prohibited from accepting gifts beyond the common courtesies of accepted business practice. Stoneridge employees are prohibited from soliciting gifts and entertainment from suppliers. If you are aware of this type of solicitation, you should report it to Stoneridge immediately.

**Conflicts of Interest**

Employees are expected to act in the best interest of their company. Personal interests should not affect any business decision. Stoneridge as well as the Supplier will avoid any activity or situation which may lead to a real or perceived conflict of interest of a Stoneridge employee or Supplier and the business of Stoneridge. If Supplier becomes aware of a conflict of interest, they should notify Stoneridge immediately.

## **Human Rights and Working Conditions**

As part of our commitment to operate with integrity, we support and promote human rights throughout our operations, the communities in which we live and work, and our global supply chain.

- Supplier will not use child labor and shall employ workers of at least the minimum legal age. Stoneridge has zero tolerance regarding the employment of children where the age of employment is not in accordance with applicable laws.
- Supplier shall not exceed the lawful daily and weekly working hours. Employees must be paid in a timely fashion that meets or exceeds legal minimum standards. This includes minimum legal wage, overtime wages, and benefits.
- Supplier will not use slave, prisoner, servitude, or any other form of forced, compulsory, or involuntary labor, or participate in human trafficking (i.e., modern slavery).
- Supplier must take reasonable measures to ensure that all their employees understand the terms of their employment.
- Supplier will comply with applicable laws that recognize and respect the rights of employees to freedom of association and collective bargaining.
- Supplier shall ensure that any third-party recruitment agencies used comply with the provisions of this Code and applicable laws.

## **Harassment and Discrimination**

Stoneridge believes that diversity of employees is a source of strength for our company. Therefore, suppliers will not discriminate on the basis of race, color, sex, religion, age, disability, creed, national origin, genetic information, and other legally protected characteristics. Harassment or discrimination of any kind will not be tolerated.

## **Supplier Diversity**

Stoneridge is committed to supporting and respecting all communities where we work. A diverse supplier base leads to improved supplier performance, more competitive pricing, better risk mitigation, and enhanced creativity and innovation. Suppliers are expected to comply with all applicable DEI-related laws and consider how business decisions affect diversity, equity, and inclusion in their workplace.

## **Responsible Sourcing of Materials and Product Sustainability**

We source responsibly and take steps to ensure that materials used in our products do not directly or indirectly provide funding to conflicts or human rights abuses. We expect the same from our suppliers. We require our suppliers to comply with all applicable laws and regulations regarding ethical material sourcing, including those with respect to raw materials and production processes. We expect our suppliers to adopt best practices not only limited to production processes and securing the supply of materials and components, but also addressing environmental, social, and product safety aspects.

**Conflict Minerals**

Supplier must be aware of applicable legal requirements in relation to “conflict minerals” including tin, tantalum tungsten, their ores and gold originating from conflict areas and shall ensure compliance with such laws. Additionally, Supplier will take best efforts to avoid the use of raw materials in its product that directly or indirectly finance armed groups violating human rights.

**Environment, Health, and Safety**

Supplier will provide clean, healthy, and safe environments for their employees. Supplier must maintain and operate its manufacturing/production facilities and processes in a manner that meets or exceed legal standards. At no time shall any Stoneridge or other person be exposed to hazardous materials or unsafe conditions as a result of Supplier’s shipments to a Stoneridge location, or while visiting Supplier’s location. For items with inherent hazards, safety notices must be clearly visible. As applicable, documented safety handling and protection information must be provided.

**Sustainability**

We believe sustainability means “meeting the needs of the present without compromising the ability of future generations to meet their own needs.” Our goal is to reduce our impact on the environment while ensuring the long-term success of our company. We expect our suppliers to support our sustainability efforts by complying with all applicable environmental laws and to use resources wisely. Suppliers are expected to operate responsibly and strive to develop and implement an environmental sustainability program focused on conservation of natural resources, including but not limited to:

- GHG emissions reduction
- Energy efficiency
- Water quality, consumption, and management
- Air quality improvement
- Recyclability and waste reduction
- Hazardous material and chemical management and control
- Sustainable resources management
- Renewable energy
- Decarbonization

**Quality, Counterfeit Parts and Materials**

Supplier must take due care to ensure its work product meets Stoneridge's quality standards. Stoneridge expects its Suppliers to have in place quality assurance processes to identify defects and implement corrective actions, and to facilitate the delivery of products that meet or exceed all Stoneridge quality and contractual requirements. Supply of counterfeit parts and materials is strictly prohibited. Stoneridge expects its Suppliers to develop, implement, and maintain methods and processes appropriate to their products to minimize the risk of introducing counterfeit parts and materials into deliverable products. Effective processes should be in place to detect counterfeit parts and materials, provide notification to recipients of counterfeit product(s) when warranted, and exclude them from Supplier's delivered products.



**Records Management and Privacy**

Stoneridge expects suppliers to honestly, accurately, and timely record and report all business information including, without limitation, financial records, to ensure that such information is maintained in a manner consistent with applicable laws and regulations and that effective internal controls are in place to protect and comply with these same requirements. In addition, Supplier is expected to protect the confidentiality and privacy of these records, allowing for their use only by authorized personnel and for authorized business purposes. We expect to be advised immediately of any clerical or accounting errors as they become known and when there may have been an inadvertent disclosure of confidential or private information.

**Compliance, Monitoring, and Reporting**

We comply with all applicable laws and regulations in the countries in which we do business. We monitor our operations and our suppliers for potential violations and take appropriate action if violations occur. We have established a process for reporting concerns, including but not limited to; ethics, compliance, safety, or quality through the [Stoneridge Integrity Helpline](#). Employees, suppliers, and business partners can make anonymous reports in their respective language via a toll-free phone call or online website. You may report anonymously where permitted by local law. This service is available in multiple languages, 24 hours a day, 365 days a year. We have a strong anti-retaliation policy and will not tolerate retaliation against anyone who in good faith raises a concern, reports misconduct, or participates in an investigation.

## 8 Reference

### 8.1 Reference Documentation

- Stoneridge, Inc. Terms and Conditions
- AIAG PPAP: Production Part Approval Process
- AIAG APQP: Advanced Product Quality Planning and Control Plan
- AIAG FMEA: Potential Failure Modes and Effects Analysis
- AIAG MSA: Measurement Systems Analysis
- AIAG SPC: Fundamental Statistical Process Control
- AIAG CQI-9: Special Process “Heat Treat Assessment”
- AIAG CQI-11: Special Process “Plating System Assessment”
- AIAG CQI-12: Special Process “Coating System Assessment”
- AIAG CQI-15: Special Process “Welding System Assessment”
- AIAG CQI-17: Special Process “Soldering System Assessment”
- AIAG CQI-23: Special Process “Molding System Assessment”
- AIAG CQI-27: Special Process “Casting System Assessment”
- VDA 6.3: Quality Assurance of Suppliers
- IATF 16949: Automotive Quality Management Systems
- ISO 14001: Environmental Management Systems
- ISO 9001: Quality Management Systems
- ISO 21434 – Road Vehicles - Cybersecurity Engineering
- Customer Specific Requirements for IATF 16949 (e.g., Ford Q1, GM BIQS)