



## **General Quality Agreement (GQA)**

between

**Business Area (BA) Surface Solutions (SSL)**

including the respective Legal Entities (LE) listed under this link:

<https://www.continental-industry.com/en/special-pages/locations>

(hereinafter referred to as „SSL“)

and

**SUPPLIER**

(hereinafter referred to as "Supplier")

(SSL and Supplier hereinafter referred to individually as “**Party**” and collectively as “**Parties**”)

The reproduction, distribution, and utilization of this document as well as the communication of its contents to others without express authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent utility model or design.

## Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>4</b>
1.1	Purpose.....	4
1.2	Area of Application .....	4
1.3	Scope .....	4
1.4	Basics.....	4
1.5	Validity.....	5
<b>2</b>	<b>General System Requirements.....</b>	<b>5</b>
2.1	Management System Requirements.....	5
2.1.1	Quality Management System (QMS) Requirements .....	6
2.1.2	Environmental Management System (EMS) Requirements .....	6
2.1.3	Occupational Health and Safety (OH&S) Management System Requirements (Optional) .....	6
2.1.4	Communication and Updates Regarding Applicable Supplier Certificates .....	6
2.2	Contingency Plans .....	6
2.3	Record Retention .....	7
2.4	Confidentiality .....	7
2.5	Environmental Requirements/Environmental Protection .....	7
2.6	Occupational Health and Safety Requirements .....	7
2.7	Sub-Supplier Control .....	7
2.8	Escalation Process.....	8
2.9	Supplier Performance Monitoring/Customer Satisfaction .....	9
2.10	Audits.....	9
2.10.1	Audits Conducted by SSL .....	9
2.10.2	Audits Conducted by the Supplier.....	10
<b>3</b>	<b>Advanced Quality Planning .....</b>	<b>10</b>
3.1	Feasibility Commitment/Supplier Component Review (SCR) .....	10
3.2	Advanced Product Quality Planning (APQP) (Optional) .....	11
3.3	Special Characteristics.....	11
3.4	FMEA (Failure Mode and Effects Analysis) .....	11
3.5	Calibration/Measurement System Analysis.....	12
3.6	Engineering Prototype Sample Submission.....	12
3.7	Production Part Approval Process (PPAP) .....	12
3.8	Product and Process Release Information.....	13
<b>4</b>	<b>Ramp up Process.....</b>	<b>13</b>
4.1	Pre-Production and Sample Part requirements.....	13
4.2	Safe Launch Concept .....	13
<b>5</b>	<b>Serial Production .....</b>	<b>14</b>
5.1	Engineering specifications .....	14
5.2	Changes to Approved Products and Processes.....	14
5.2.1	Product/Process Change Notification (PCN) .....	14
5.2.2	Life Cycle Coverage/Discontinuation of Production (Part Termination Notification - PTN) 15	15
5.3	Incoming Inspection .....	15
5.4	Process Capability and Control.....	15

5.5	Identification and Traceability .....	16
5.6	Packaging and Labeling .....	16
5.7	Shelf-Life.....	17
5.8	Certificates of Conformances .....	17
5.9	Approval for Product or Process Deviations .....	17
5.10	SSL Property .....	17
5.11	Annual Re-Qualification.....	17
5.12	Non-Conforming Products/Corrective Actions .....	18
5.13	Problem Solving Methods .....	18
<b>6</b>	<b>Reference .....</b>	<b>19</b>
6.1	Normative References.....	19
6.2	Annex 1: Referenced and Incorporated SSL Requirements .....	19
<b>7</b>	<b>Abbreviations .....</b>	<b>19</b>
<b>8</b>	<b>Miscellaneous.....</b>	<b>21</b>

## 1 Introduction

### 1.1 Purpose

This General Quality Agreement (GQA) is documenting the customer requirements and expectations of SSL with respect to the quality, environmental, occupational health, and safety management systems of Suppliers to the Business Area (BA) Surface Solutions (SSL).

### 1.2 Area of Application

This GQA shall apply to all Suppliers and sub-suppliers providing Contract Products, processes, and services directly and indirectly to all Legal Entities (LE) of the BA SSL (link to the LE-Overview: <https://www.continental-industry.com/en/special-pages/locations>).

### 1.3 Scope

The GQA is valid for the supply of any Contract Product to be manufactured, sold, delivered, and/or provided by Supplier to SSL or on SSL's behalf and related services, including but not limited to raw materials, off-take Contract Products, embedded software, and aftermarket Contract Products pursuant to the Supply and Purchase Frame Agreement (SPFA) and individual agreements of SSL.

It is also valid for services that may affect SSL Contract Product requirements, such as sub-assembling, sequencing, sorting, rework, and calibration services.

Supplier shall ensure that the GQA is applied along the Suppliers' supply chain (sub-suppliers) including SSL directed suppliers (directed buy).

It is the Suppliers' obligation to ensure that all rules set out in this agreement are communicated, implemented, and committed by the members of the Suppliers' sub-supplier panel before accepting an SSL purchase order.

### 1.4 Basics

SSL supplier quality, environmental, as well as occupational health and safety system requirements are based upon the latest edition of IATF 16949 and/or ISO 9001 Quality management systems requirements, ISO 14001 environmental management systems requirements, and ISO 45001 occupational health and safety management systems requirements.

The Supplier shall comply with these requirements, the latest editions of documents (as applicable) referenced in this GQA; IATF 16949 and/or ISO 9001, ISO 14001, ISO 45001 as well as statutory, regulatory and safety requirements in the country of receipt, the country of shipment, and the country of destination as identified by SSL for all Contract Products or services (internal and external), if not otherwise mutually agreed between SSL and the Supplier.

SSL expects zero defects for every quoted Contract Product and a commitment from the Supplier to implement appropriate management systems and controls to ensure the 100% on-time delivery of conforming and defect free Contract Products.

## 1.5 Validity

As of the effective date this GQA embodies all the terms and conditions between the Supplier and SSL with respect to the subject matter hereof and supersedes and cancels all previous agreements and understandings. There are no verbal statements which have not been embodied herein.

Relevant incorporated documents (see Section 6.2 Annex 1: Referenced and Incorporated SSL Requirements Annex 1: Referenced and Incorporated SSL Requirements) shall become applicable with the release of the GQA. They become valid, if there is no objection received in writing within a three-month period from the date of being published.

In case of conflicting rules between the rules of this Agreement and any other agreement/document, the order of precedence of the documents is as follows:

- 1) Supply and Purchase Frame Agreement (SPFA)
- 2) Material specification and/or Component specification/drawing
- 3) General Quality Agreement (GQA)
- 4) Sourcing Agreement/Project and Tooling Agreement (as applicable)
- 5) Purchase Order

Deviations from the order of precedence are possible if the Supplier and SSL expressly agree to deviate in individual agreements and reflect that agreement by adding the following wording to each provision: "The following provision shall apply in expressed deviation to Chapter... of the ..."

## 2 General System Requirements

The Supplier shall assign personnel with the responsibility and authority to ensure that all SSL requirements are met. Supplier responsibilities and applicable qualification level regarding SSL requirements shall be documented and maintained by the Supplier and provided to SSL upon request.

All suppliers that are part of the Original Equipment Manufacturer (OEM) supply chain (tier 1 or tier 2, etc.) must participate in supporting the OEM supplier requirements. This includes, but is not limited to, appointing a trained and qualified Product Safety and Conformity Representative, named PSCR for all production locations. The suppliers' PSCR per location should be a member of the management team. It shall be documented and kept up to date. All information about current status and any change must be communicated to SSL. The evidence of training or certificate should be retained and submitted to SSL upon request.

The requirement should be also passed on in the supply chain.

### 2.1 Management System Requirements

The Supplier shall operate a Management System which covers quality, environmental, occupational health and safety, SSL specific as well as statutory, regulatory, and safety requirements of the Contract Product.

The Suppliers' Management System, shall include also respective corporate responsibility policies, also considering the requirements of the "Continental Business Partner Code of Conduct". All third-party certifications must be done by an accredited certification body.

### **2.1.1 Quality Management System (QMS) Requirements**

The Supplier shall provide written confirmation and objective evidence of third-party certification according to the valid version of IATF 16949 and/or ISO 9001 or as defined by the SSL. Suppliers who are not ISO 9001 certified must have a working plan to become compliant to ISO 9001 available for review, unless the Supplier has an approved exemption from SSL waiving such a plan.

### **2.1.2 Environmental Management System (EMS) Requirements**

The Supplier shall implement environmental systems in their facilities that are compliant to ISO 14001. 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 SSL waiving such a plan.

### **2.1.3 Occupational Health and Safety (OH&S) Management System Requirements (Optional)**

The Supplier shall also implement occupational health and safety system in their facilities that are compliant with ISO 45001. Suppliers who are not certified must have a working plan to become compliant to ISO 45001 available for review, unless the Supplier has an approved exemption from SSL waiving such a plan.

### **2.1.4 Communication and Updates Regarding Applicable Supplier Certificates**

Certified Suppliers must provide new certificate to SSL within 10 days after receiving their initial and renewal certifications from their registrar. The Supplier shall immediately advise SSL in writing as to possible changes regarding its certification, particularly in case of expiry, cancellation, or suspension.

This applies also for regulatory certifications or when the requirements for the issue of an official inspection mark or safety approval are no longer fulfilled independent whether this is due to changes in official regulations or for other reasons.

In addition, this applies the changes regarding to the certificates, registrations and approvals obtained for specific Contract Products sold to SSL or components used in these Contract Products.

## **2.2 Contingency Plans**

The Supplier is required to prepare contingency plans for continuity of SSL's supply in the event of any of emergency such as but not limited to key equipment failures; interruption of provided Contract Products, process, and services from their supply chain; recurring natural disasters; fire; labor shortages; infrastructure disruption or potential cyber-attack on IT – systems.

The Supplier shall develop a contingency plan for each Supplier manufacturing/shipping location. The plans shall include a risk evaluation, potential impact to SSL, and a notification process to SSL. The plans shall be periodically (at least annually) reviewed and tested for effectiveness.

Changes concerning these contingency plans shall be subject to the change management process (see section 5.2.1).

## 2.3 Record Retention

The Supplier shall be obligated to retain at a minimum Production Part Approval Process (PPAP) documentation, tooling records (including maintenance and ownership), product and process design records (engineering records), purchase orders and/or contracts and amendments, contract review records, annual layout and validation records, traceability records, corrective action records, quality performance records, engineering change records, Customer-authorized waiver, inspection and test results at least 15 years after SSL production has been terminated and tooling scrap authorization has been granted unless otherwise specified by the regulatory agency.

## 2.4 Confidentiality

The Supplier shall ensure the confidentiality of SSL Contract Products and projects under development, including related Contract Product information. This limitation applies to all third parties. In case such third parties require access to information related to SSL Contract Products and services, SSL needs be informed in advance.

## 2.5 Environmental Requirements/Environmental Protection

The Supplier shall document and comply with regulatory environmental and safety requirements in the country of receipt, the country of shipment, and the country of destination as identified by SSL, if not otherwise mutually agreed between SSL and the Supplier. The Supplier shall implement measures contributing to the protection of the environment. The Supplier should strive to minimize the adverse environmental impact of their Contract Products and services during the whole life cycle of the Contract Product.

The Supplier shall fulfill the requirements for the forbidden and restricted substances, recycling, and disposal of the supplied Contract Products. (e.g., ISO14001, IMDS, REACH, ELV, OEM specific requirements and applicable legal requirements).

## 2.6 Occupational Health and Safety Requirements

The Supplier shall implement and comply occupational health and safety requirements, if not otherwise mutually agreed between SSL and the Supplier. The Supplier should strive to improve employee safety, eliminate hazard, and reduce workplace risk including but not limited to preventing unsafe behaviors that can lead to accidents at work, standardizing health and safety requirements for all employees and service providers, and reducing accidental downtime in the supply chain and in Supplier management.

## 2.7 Sub-Supplier Control

The requirements set out in this GQA shall also apply to the Management Systems that the Supplier is setting up with its sub-suppliers. Upon SSL's request the Supplier shall submit sub-supplier product approvals and corresponding quality contracts with its sub-suppliers.

The Supplier shall notify SSL of any changes to their approved Suppliers and sub-suppliers used for the Contract Product and request SSL's approval following the rules set force in Chapter 5.2.1 Product/Process Change Notification (PCN).

When specified by SSL, the Supplier shall purchase Contract Products, materials, or services from SSL-directed sources.

Each Supplier is responsible for the control and continuous improvement efforts of their sub-suppliers. That responsibility as well applies to sub-suppliers nominated by SSL. The Supplier shall evaluate their sub-supplier's performance to ensure the conformity of the sub-suppliers provided Contract Products, processes, and services to SSL requirements.

SSL reserves the right after advanced notice to audit or to participate in audits and assessments of sub-suppliers regarding quality management systems, processes, Contract Products etc. jointly with the Supplier, SSL's customers, or a third party assigned by SSL.

## 2.8 Escalation Process

If the Supplier does not meet defined requirements and obligations relating to the Suppliers' Contract Product and/or audit corrective action request, causing a critical situation at SSL or at SSL customers, SSL will apply an Escalation Process related to the Supplier.

Based on the severity of the Supplier caused situation, SSL will announce defined escalation levels.

<b>Level 1:</b>	<b>Monitoring Level</b>	First warning level
<b>Level 2:</b>	<b>Alarm Level</b>	Second warning level
<b>Level 3:</b>	<b>New Business Hold (NBH)</b>	New Business Hold
<b>Level 4:</b>	<b>Phase out</b>	Highest escalation level

The information regarding the escalation level will be communicated to the Supplier by SSL with information of the defined exit criteria.

Based on the escalation level the Supplier shall allocate appropriate resources to ensure adequate communication, consequent definition, and follow up of necessary actions.

Repeated delivery of non-conforming Contract Products from the Supplier to SSL with same error/failure pattern may constitute that SSL announces Control Shipping Levels (CSL) to prevent that further non-conforming Contract Products are delivered to SSL.

### CSL 1

The Supplier shall implement all necessary measures to ensure that SSL receiving plants will not receive any non-conforming Contract Products. Such measures may include additional/redundant testing up to the need for 100% inspection.

### CSL 2

In case of failure re-occurring during CSL 1 or based on severity/risk of re-occurred failures/problems SSL may declare CSL 2. The Supplier shall hire an independent third party (approved by SSL), which shall carry out all measures defined in CSL 1 and any further required improvements as necessary. SSL also reserves the right to hire a third party which shall carry out all measures defined in CSL 1 and CSL 2. All costs will be charged to the Supplier.

The Supplier shall report to SSL the status of the introduced measures and their effectiveness during CSL 1 or CSL 2 status. Contract Products shipped under CSL 1 or CSL 2 shall be marked with a mutually agreed upon identification method.



## 2.9 Supplier Performance Monitoring/Customer Satisfaction

SSL monitors on regular basis certain key performance quality indicators and performs an annual Supplier evaluation.

The Supplier shall review the performance status regularly to drive corrective and continuous improvement actions. These actions shall be pro-actively communicated to the concerned SSL receiving location and are subject to periodic review by SSL.

### Key performance quality indicators during the Product Life Cycle

#### Incidents

An incident is any Contract Product relevant disturbance generated by the Supplier influencing SSL or an SSL customer. An incident is equal to one quality notification (QN).

#### Parts Per Million (PPM)-Level

The PPM-Level evaluates the Supplier's performance in defect parts per million regarding failures at SSL incoming inspection, SSL manufacturing line and customer defects.

#### Cycle time

Cycle time is the calculated response time (in days) of the Supplier to a complaint issued by SSL.

#### On time delivery

On time delivery is to measure delivery performance and supply chain efficiency.

#### Basic Annual Supplier Evaluation

Suppliers' will be evaluated in a multi-disciplinary approach regarding the performance in the categories purchasing, quality, logistics and technology considering the actual performance and the Supplier potential (strategic view).

The evaluation may generate consequences regarding the future business relation between SSL and the Supplier. It shall be utilized by the Supplier to drive necessary corrective actions and continuous improvement activities.

## 2.10 Audits

Supplier's manufacture process review is done by audits. These audits include the audits conducted by SSL and/or the audits conducted by the Supplier themselves.

### 2.10.1 Audits Conducted by SSL

After prior notification, SSL reserves the right to carry out Supplier audits and assessments on SSL relevant quality management systems, processes, and Contract Products, with the SSL customer or a third party appointed by SSL.

These audits are typically based on IATF 16949, ISO 9001, VDA 6.3, and/or ISO 14001 standards. During such audits the Supplier shall provide necessary resources and documented information necessary to appropriately conduct the audits.

An audit summary report (including applicable scores) with corrective actions request to audit findings and observations will be provided to the Supplier by the respective auditor within two weeks after an audit. The supplier should submit corrective action report with supporting evidence within the defined time frame (usually one month) after receipt of the audit report and corrective action request. The audit results and response to corrective action request may generate consequences regarding the future business relation between SSL and the Supplier.

Based on identified significant supply risks (e.g., delivery shutdowns, customer shutdown, OEM shutdown, violation of safety requirements, violation of regulatory/statutory requirements etc.) as they relate to the Suppliers' Contract Products or services, SSL reserves the right to carry out assessments/audits on a short-term notice (typically within 48 hours).

### **2.10.2 Audits Conducted by the Supplier**

The Supplier shall have a documented process(es) to verify that internal auditors are competent and maintain a list of qualified internal auditors to ensure the internal audit was conducted effectively. The qualified auditors shall understand at a minimum applicable SSL specific requirement; standards requirements (ISO 9001 and/or IATF 16949 or VDA6.3); how to plan, conduct, report and close out audit findings.

All SSL Suppliers manufacturing processes shall be subject to a Supplier internal process audit within a time of 3 year (at a minimum) to review effectiveness and efficiencies of applied methods, controls, and processes. The preferred method for process audits is an assessment according VDA 6.3.

Based on occurred incidences and identified risks, SSL may require shortening the frequency. As embedded software is part of the Contract Product the software development capability needs to be part of the Suppliers' audit scheme.

Upon request of SSL the Supplier shall provide all audit results including documentation, updated action plans and supporting evidence.

The assessments according to Automotive Industry Action Group (AIAG) Special Processes (CQI) shall be part of the Suppliers' audit scheme as they are applicable for the Suppliers' Contract Product (see also Section 6.1 Normative References).

## **3 Advanced Quality Planning**

It is SSL's objective to pursue zero defect oriented and risk-based approach during the various phases of the product and process design & development with the overall target to avoid potential non-conformances and delivery issues during serial production.

### **3.1 Feasibility Commitment/Supplier Component Review (SCR)**

With its quotation the Supplier shall complete feasibility analysis and submit a feasibility commitment, where the Supplier shall analyze its ability to meet all specified requirements for the offered Contract Product. The analysis shall be regarding the project plan (timing), quantities, quality targets, technical, safety, environmental, statutory, and regulatory requirements.

The analysis shall also consider potential risks, risk mitigation measures, and lessons learned from previous (similar) projects/products.

The Feasibility Commitment will serve as input to the "Supplier Component Review" where SSL reviews and assesses together with the Supplier, if the offered solution fully meets the specific requirements regarding Technology (product/process design), Quality, and Logistics (including packaging).

### **3.2 Advanced Product Quality Planning (APQP) (Optional)**

The Supplier and its sub-suppliers shall have a comprehensive APQP process in place in accordance with the latest AIAG and SSL requirements. The Supplier shall maintain APQP status for each Contract Product development project.

Based on the applicable requirements SSL can verify the APQP process at the Supplier as well as at the sub-supplier's premises together with its customer.

The Supplier shall have a designated project engineer/manager for each Contract Product development project, who will be available upon request by SSL to be part of the overall project team.

### **3.3 Special Characteristics**

The Supplier shall use a multidisciplinary approach to identify special characteristics including those determined by SSL and the risk analysis performed by the Supplier.

Special Characteristics are characteristics with higher risks, requiring special attention by the Supplier. Deviations in these characteristics can seriously affect product safety, product lifetime, assembly capability, product functionality, quality and can violate official or legal regulations.

These characteristics require special consideration from the Supplier including process capability, error proofing, special controls, validation, documentation, and monitoring in all applicable planning steps.

Special Characteristics as defined by SSL will be identified on drawings/specifications or in a separate document that cross-references these characteristics to the drawings/specifications.

Special Characteristics shall be also determined, identified, and documented as result from the Suppliers' own risk analysis, (e.g., from the product and/or process Failure Mode and Effects Analysis (FMEA)) and/or based on the Supplier's experience and knowledge.

Special Characteristics shall be identified and specifically addressed in the Design-FMEA, Process- FMEA, Control Plans, Process Flow, Work/Process Instructions, and other associated documents.

The Supplier is responsible for ensuring that relevant Special Characteristics are explained, understood, and controlled by their sub-suppliers, where applicable.

### **3.4 FMEA (Failure Mode and Effects Analysis)**

The FMEA shall be carried out by the Supplier in a timely manner in accordance with the latest AIAG standard, so that the results regarding identified risks and resulting measures

can still be incorporated into the Suppliers' planning and necessary product/process documentation.

Special characteristics shall be identified when conducting a FMEA (e.g., Design-FMEA and/or Process-FMEA \*in accordance with the AIAG handbook\*).

The Supplier shall use FMEAs for all phases of the life cycle of the Contract Product, such as design, production, assembly, packaging, transport, customer usage, as well as recycling and waste disposal considering all SSL, environmental, regulatory and safety requirements related to the Suppliers' Contract Product.

The Supplier shall use the FMEA as a tool for risk assessment, lessons learned, continuous improvement, and shall update the FMEA regularly as new knowledge/experience has been gained also as it relates to sub-suppliers, especially as in case of a compliant by SSL, the Supplier shall review and update all affected FMEAs. The result of an FMEA must be considered as documented information and provided upon request by SSL.

### **3.5 Calibration/Measurement System Analysis**

Supplier shall implement calibration and/or verification activities for all measuring equipment. The record of calibration and maintenance activities for all gauges shall include employee-owned equipment, SSL and customer-owned equipment or on-site Supplier owned equipment.

Supplier shall evaluate the capability of the test equipment utilized for serial production. A Gage Repeatability & Reproducibility Study (GR&R) shall be performed. The rules as defined in the Automotive Industry Action Group (AIAG) MSA-manual or VDA Volume 5 shall be applied. MSA studies should focus on critical or special product or process characteristics.

The MSA requirements need to be assured by the Supplier during the complete life cycle of the Contract Product. This includes changes like e.g., changes to the Contract Product, process changes, measurement system changes, measurement system repairs or any other change which could influence the performance of the measurement system.

### **3.6 Engineering Prototype Sample Submission**

Engineering prototype Contract Products with documentation of specification conformance shall be submitted to SSL by the Supplier as instructed by the department at SSL responsible for prototype and engineering validation testing.

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 SSL via the APQP Kick-Off Meeting or other formal communication.

### **3.7 Production Part Approval Process (PPAP)**

A Contract Product qualification is done by PPAP. PPAP shall determine whether a product manufactured by a Supplier meets all SSL engineering design requirements, specifications, and process requirements. The production methods used for PPAP shall have the defined

capability to produce Contract Products consistently while running at the required minimum quoted production rate.

At the time of the PPAP submission the applicable Contract Product design outputs and the process design outputs of the Supplier shall be available. These outputs may be subject to a review by SSL (e.g., during Run at Rate).

PPAP shall be performed following the rules set out in the AIAG PPAP manual and related SSL requirements.

The default PPAP submission level of SSL shall be level 3, unless otherwise agreed.

Upon request by SSL, the PPF requirements as referenced in the VDA volume 2 manual shall be used. The default level is level 2 or agreed between the SSL and the Supplier.

PPAP documentation shall be submitted by the Supplier to the requesting quality department of SSL. Associated PPAP sample parts shall be clearly labeled as such.

### **3.8 Product and Process Release Information**

The Supplier Contract Product and processes are approved as the PSW has been signed and released or VDA report signed according PPF requirements by SSL.

SSL will only accept the Suppliers' Contract Products in series production after the PSW has been release. Any series production shipments from the Supplier to SSL prior to PSW release will be rejected.

An approved Supplier Deviation Request from SSL is required for shipping any Supplier Contract Product prior to full PSW release.

The signed and released PSW does not constitute Application or Manufacturing approval at SSL.

## **4 Ramp up Process**

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

The Suppliers shall meet and comply with SSL's Pre-production and Sample Part requirements as communicated during the APQP process or other formal communication.

All 'Pre-production' or 'sample parts' must be clearly identified by the Supplier.

The Supplier shall use labels that are different from regular production shipping labels, per the SSL receiving site requirements, to prevent a mix with "regular" production parts.

To ensure easy visible segregation of containers/parts, the part-packaging label shall clearly display:

Supplier Identification, Part Number, Engineering Level, and Quantity.

### **4.2 Safe Launch Concept**

The Supplier shall apply a Safe Launch Concept (SLC) according to the Contract Product and process maturity. The SLC shall be based on identified risks from the Supplier and/or SSL during the product and process development process. The SLC shall be applied to mitigate these identified risks.

The purpose of the SLC is to document the Suppliers' applied enhanced controls during start-up and ramp-up phase. It shall enable the Supplier to quickly identify and quickly correct any quality issues that may arise at the Suppliers' location. SLC shall raise the confidence level to ensure that all Contract Products shipped initially will meet SSL's expectations.

SLC describes special verifications performed by the Supplier for a defined timeframe or quantity as determined together with SSL during the APQP process. SLC shall be documented in the Suppliers' Pre-Launch Control Plan.

The Suppliers' Pre-Launch Control Plan shall be available to SSL for approval prior to start of series production.

The Supplier is required to submit inspection data to SSL's plant. This should include variable measurement data, where applicable. The Supplier may exit the safe launch process after achieving the SLC targets, with agreement from SSL.

Missing achievement of the SLC targets within the mutual defined time or quantities may lead to a withdrawal of the PSW release and require the definition and application of corrective actions by the Supplier, which shall be communicated and agreed with SSL.

## **5 Serial Production**

### **5.1 Engineering specifications**

The Supplier shall have a documented process describing the review, distribution and implementation of the SSL engineering standards/specifications. Such as material specifications and Component specifications/drawings and related revisions based on SSL schedules, as required. The review should be completed within 10 working days of receipt of notification of engineering standards/specifications changes.

Supplier shall pass down all applicable statutory and regulatory requirements and special Contract Product and process characteristics to their Supplier chain to the point of manufacture.

### **5.2 Changes to Approved Products and Processes**

#### **5.2.1 Product/Process Change Notification (PCN)**

The Supplier shall evaluate all design changes after Contract Product approval, including those changes proposed by the Supplier, sub-suppliers, or SSL, for potential impact on fit, form, function, performance and/or durability. These changes shall be validated against SSL requirements.

The Supplier and its sub-suppliers shall not make any unauthorized changes to a Contract Product (e.g., material, component, sub-assembly etc.) or the processes (e.g., tools, equipment, process parameters, auxiliaries, control/inspection method etc.), used to produce or control a Contract Product. The Product/Process Change Notification (PCN) process shall apply to all production and prototype Contract Products and processes.

When required by the SSL, the Supplier shall obtain documented approval, or waiver from the SSL prior to change implementation.

### 5.2.2 Life Cycle Coverage/Discontinuation of Production (Part Termination Notification - PTN)

SSL is obliged to deliver replacement parts to its customers for a period of 15 years after the end of the mass production of SSL's Customer's Products.

In case of supplied Customized Contract Products (Contract Product with a specification with origin SSL or where SSL holds the exclusivity rights), a lifetime supply (series and aftermarket requirements) must be ensured by the Supplier according to the contractual agreements.

In case of unavoidable discontinuation of Standard Contract Product (Contract Product with a specification with origin Supplier, which is off the standard shelf and/or standard portfolio of the Supplier), the Supplier shall send a PTN to SSL in writing minimum 24 months prior to such planned discontinuation.

All affected part numbers/Contract Products of SSL shall be identified with the PTN. The Supplier shall specify alternative Products/solutions for replacement and determine necessary storage, handling and preservation methods in case the PTN leads to a last time buy by SSL.

### 5.3 Incoming Inspection

Upon receipt of Contract Products, SSL will check whether the Contract Products correspond with the quantity and type ordered.

Usually, this inspection is limited to the comparison between the SSL order documentation (e.g., order-number, product name, ordering text) and the delivery documentation of the Supplier (e.g., delivery note, labeling of packaging units...) and whether there is any externally visible defect.

SSL is not obliged to undertake any further checks. Non-conformities of supplied Contract Products may also be determined and found during processing (assembly) or Contract Product field behavior and can be claimed by SSL to the Supplier.

SSL shall notify the Supplier of any defect detected during incoming inspection, processing, or field failure behavior without undue delay of such defect being detected.

In case SSL complies with the afore-stated conditions the Supplier hereby waives any right it may have to reject delayed notification of deficiency.

### 5.4 Process Capability and Control

Special characteristics as identified by the Supplier and/or SSL during the APQP phase, require the proof of their capability. For this purpose, the Supplier shall monitor and control these characteristics with suitable methods (e.g., statistical process control (SPC), error-proofing methods etc.) and document the control requirements in the applicable control plan.

SPC shall be applied based on the definitions in the AIAG PPAP and SPC reference manual, unless otherwise specified by SSL.

The acceptance criteria for long term process capability are  $C_{pk}$  or  $P_{pk} \geq 1.67$  for automotive Contract Products' special characteristics and  $C_{pk}$  or  $P_{pk} \geq 1.33$  for non-

automotive Contract Products' special characteristics. The acceptance criteria for short term process capability should be better than long term process capability as specified above.

If the required capability cannot be reached, 100% inspection or testing by the Supplier is mandatory. An approved waiver from SSL is needed. On site audit might be conducted.

Upon request of SSL the Supplier shall provide measurement and traceability data for special characteristics.

The Supplier shall inform SSL about any deviations from the average weekly First Pass Yield (FPY) of more than +/-10% for any Contract Product within two days after the deviation, or in a mutually defined time frame. The Supplier shall provide information regarding the current and past First Pass Yield upon request of SSL.

## 5.5 Identification and Traceability

The Suppliers' identification and traceability system shall consider its internal risk evaluation and shall ensure that the Contract Products (including sub-components) utilized can be traced back to the raw material, manufacturing date, operator, equipment, tool number and the respective inspection/conformity results.

The applied system at the Supplier shall include the trace information of sub-suppliers and service providers. Based on the Suppliers' internal risk assessment lot sizes shall be established, minimizing the internal as well as the external risk due to non-conforming Contract Products.

If there are no Contract Product specific requirements, the Supplier shall provide SSL its proposal for the applied identification and traceability system.

Details shall be agreed between SSL and the Supplier during the APQP process (e.g., Component Review).

## 5.6 Packaging and Labeling

The Supplier shall apply preservation methods, so that Contract Products shipped to SSL meet all specified requirements. If possible, recyclable, or re-useable packaging materials are to be used.

Any special storage conditions, exceeding normal state-of-the-art, must be specifically mutually agreed up-front for the Contract Product.

For packaged parts a maximum of 2 trace codes per packing unit (reel, tray, tube, etc.) shall be required. If applicable, SSL material codes should be used on the Supplier labels and barcode labels are preferable. In case double-language labels are possible, English, and local language are preferring to be used.

For Contract Products without enough marking possibilities on the Contract Products itself (bare die, small package size, etc.) the traceability data shall be placed on the packaging. One lot per packing unit shall be required with one exception: To facilitate deliveries of full packing units, it shall be allowed to use the subsequent lot to complete the packing units (e.g., reel).



## 5.7 Shelf-Life

The Supplier and their Supplier chain shall monitor Contract Products' shelf life. The Supplier shall apply the FEFO (First Expired First Out) or FIFO (First In – First Out) – principle for its internal processes and for Contract Products delivered to SSL.

SSL expects Contract Products delivered have a long remaining shelf life. 40% remaining shelf life is the minimum. If Contract Products have less than 40% remaining of shelf life, the Supplier shall notify SSL in writing prior to shipment, if not otherwise mutually agreed.

If Contract Products closing to expiration date, a re-qualification might be requested prior to shipment from the Supplier. Details need to be agreed in writing between the Supplier and SSL.

## 5.8 Certificates of Conformances

A signed Certificate of Conformance shall be maintained on file at the Supplier and needs be submitted electronically before receiving the Contract Product shipment. Otherwise, it may be requested to accompany each shipment of specified Contract Products. The certificate of conformance must contain the actual results confirming compliance with all identified requirements, especially the critical and special characteristics compliance must be part of the certificate. The Supplier should have a system capable of retrieving and submitting the requested Certificate of Conformity within 24 hours after SSL 's request.

## 5.9 Approval for Product or Process Deviations

Any deviations from agreed or approved processes and Contract Product requirements/regulations require an approval from SSL.

Requests for deviation approval for Contract Products or processes shall be submitted to SSL's receiving plant for review and approval prior to shipment.

Contract Product/Process Deviations should be requested or approved only for a specific time or quantity.

A deviation request shall be accompanied by a Problem-Solving Report (8D). This report shall indicate when the Supplier plans to return to normal production and the applied identification method of planned shipments, including how traceability will be maintained during and after the deviation time.

## 5.10 SSL Property

If applicable, the Supplier shall verify that SSL-own tools, manufacturing equipment, and test/inspection equipment are permanently marked in a visible location so that the ownership and application of each item can be determined.

The Supplier shall exercise care the property belonging to SSL, retain the documented information and report the condition of the property to SSL on timely basis.

## 5.11 Annual Re-Qualification

The Supplier shall re-qualify its Contract Products regularly, at least once a year, if not otherwise agreed with SSL.

The Re-Qualification consists of a layout inspection and a functional verification to applicable SSL engineering, material, and performance standards. The Re-Qualification shall be performed for each Contract Product as specified and documented in the control plan.

The results shall be documented and made available for evaluation by SSL. For this purpose, the initial sample inspection report forms according PPAP standard (see AIAG PPAP manual and 3.7) shall be used to document the results. If there are non-conforming test results, the Supplier shall inform SSL immediately.

Remark: Characteristics/Requirements verified, controlled regularly during normal production according to the control plan can be utilized and included in the annual Re-Qualification.

### **5.12 Non-Conforming Products/Corrective Actions**

The Supplier shall immediately notify SSL if nonconforming or suspected Contract Products have been shipped.

The Supplier shall perform failure analysis on SSL complaints, field failure, any returned parts as well as OEM field returns and complete problem solving and corrective action to prevent recurrence. (If applicable the supplier should implement a process for warranty part analysis including no trouble found.)

SSL retains ownership rights of all Contract Products returned for analysis. If destructive testing is required to determine root causes, SSL shall be notified prior to the testing by the Supplier.

The destruction of any Contract Products returned for analysis without permission from SSL is not allowed. Material associated with a complaint, wherein responsibility of failure is indeterminate or under dispute, shall be returned to SSL for retention unless otherwise agreed.

In case of a Non-conformity, SSL reserves the right to claim, charge and allocate cost related to non-conformity determination, elimination and affection to the Supplier including but not limited to the cost of additional testing, sorting, replacement, logistics, downtime, and warranty costs charged by SSL customers.

### **5.13 Problem Solving Methods**

The Supplier shall have authorized and trained (preferably certified) personnel with the ability to resolve Contract Product and process issues quickly and permanently. Problem resolution must be conducted using a defined, structured process like the 8-Discipline process, Six Sigma DMAIC (Define, Measure, Analyze, Improve, and Control), A3 or any other process that includes determination of the root cause and validation of corrective action effectiveness. Design responsible Suppliers' must use reliability methods during the product design, verification, and validation phases of the APQP, to assure the robustness and durability of their Contract Product design for the intended application or as specified by SSL.

## 6 Reference

Only the latest edition of each referenced document shall be used, unless otherwise specified by SSL.

### 6.1 Normative References

- IATF 16949 Automotive Quality Management System standard
- ISO 9001 Quality Management System standard
- ISO 14001 Environmental Management Systems standard
- ISO 45001 Occupational Health and Safety Management System standard
- VDA – German Association of the Automotive Industry Standard and Rules [www.vda-qmc.de](http://www.vda-qmc.de)
- AIAG (Automotive Industry Action Group) Standards and Rules including CQI Guidelines [www.aiag.org/](http://www.aiag.org/)

### 6.2 Annex 1: Referenced and Incorporated SSL Requirements

- Continental Business Partner Code of Conduct
- Supply and Purchase Frame Agreement (SPFA)

## 7 Abbreviations

<b>8D</b>	Eight Disciplines (Problem Solving Process/Report)
<b>A3</b>	Structured problem-solving approach/Report
<b>AIAG</b>	Automotive Industry Action Group
<b>APQP</b>	Advanced Product Quality Planning
<b>CQI</b>	Continuous Quality Improvement (Guidelines based on AIAG)
<b>DMAIC</b>	Define, Measure, Analyze, Improve, Control (Six Sigma)
<b>CSL1/2</b>	Controlled Shipping Level 1/2
<b>FMEA</b>	Potential Failure Mode and Effects Analysis
<b>FPY</b>	First Pass Yield
<b>GQA</b>	General Quality Agreement
<b>GR&amp;R</b>	Gage Repeatability and Reproducibility
<b>IATF</b>	International Automotive Task Force
<b>ISO</b>	International Standards Organization
<b>MSA</b>	Measurement Systems Analysis
<b>Off-Take</b>	Purchase or sell Finish goods

<b>PCN</b>	Product or Process Change Notification
<b>PPAP</b>	Production Part Approval Process (AIAG)
<b>PPF</b>	Production Process and Product Approval (German VDA Volume 2)
<b>PPM</b>	Parts Per Million
<b>PSW</b>	Part Submission Warrant
<b>QN</b>	Quality Notification
<b>REACH</b>	A regulation of European Union
<b>SCR</b>	Supplier Component Review
<b>SLC</b>	Safe Launch Concept
<b>SPC</b>	Statistical Process Control
<b>SPFA</b>	Supply and Purchase Frame Agreement
<b>SQM</b>	Supplier Quality Management
<b>VDA</b>	German Association of Automotive Industry

## 8 Miscellaneous

Any changes and modifications of this Agreement shall only be valid if made in a written supplement signed by both Parties.

Any invalidity or unenforceability of individual provisions of this Agreement shall not affect the validity or enforceability of other provisions of this Agreement. In case of such invalidity or unenforceability, the Parties shall agree upon new valid and enforceable provisions which most closely achieve the economical purpose of the invalid or unenforceable provisions.

This Agreement becomes effective upon signature by both Parties and can be terminated by either Party by giving 3 months prior written notice, the termination however taking effect not earlier than the expiry of termination of the supply agreement for products to which this Agreement is an addition takes effect.

This agreement supersedes all prior versions of this agreement.

Unless otherwise agreed to in the supply agreement, place of jurisdiction is Hanover, Germany. This Agreement is subject to German Law with the exclusion of the UN convention on the International Sale of Goods.

☐ accepted with Vendor Addendum

☐ accepted without Vendor Addendum

Signed for and behalf of the <b>Supplier</b> and its belonging Legal Entities	Signed for and on behalf of <b>Business Area Surface Solutions</b> and its belonging Legal Entities
Signature Supplier:  _____	Signature Supplier Quality:  _____
Date/Name/Position (in printed letters)  _____	Date/Name/Position (in printed letters)  _____
Signature Supplier:  _____	Signature Purchasing:  _____
Date/Name/Position (in printed letters)  _____	Date/Name/Position (in printed letters)  _____