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HORTON

Quality Supplier Manual

Horton Europe

Quality supplier manual

between

Horton Europe GmbH & Co. KG

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- hereinafter referred to as Horton Europe-

Content

Preamble

Dear Suppliers,

Quality is not only a central component of our corporate philosophy, but also the foundation of our shared success. In a globalized and constantly changing market landscape, high quality standards are essential to ensuring customer satisfaction and sustainable growth.
This Supplier Quality Manual serves as a source of information and guidance to provide you with an overview of the quality-related requirements, expectations, and processes that may arise from applicable standards, legal requirements, and customer specifications.
The purpose of this manual is to create transparency and establish a common foundation for smooth collaboration. It is intended to help you understand our fundamental expectations and align your internal processes accordingly.
This manual outlines our customer-specific requirements.
If an order is placed without a Quality Assurance Agreement (QAA), the provisions of this Supplier Quality Manual shall be binding within the scope of the respective order.
Our goal is to maintain long-term partnerships with suppliers who share our passion for quality and are committed to continuous improvement. Your role as a supplier is of crucial importance in this regard, and we appreciate the work and commitment you demonstrate

1. Purpose and scope

1.1 Purpose

The purpose of this Supplier Quality Manual is to establish a clear and transparent framework for cooperation between our company and our suppliers. It defines the quality requirements and expectations that apply to all suppliers and provides you with the necessary information to meet these requirements efficiently and effectively.
This Supplier Quality Manual is intended to help you maintain the quality of your products and services at a high level and continuously improve them. It describes the processes, standards, and procedures designed to ensure that our shared quality requirements are met.
By adhering to the guidelines described in this Supplier Quality Manual, you play a key role in ensuring that our end products meet our customers' high expectations. Furthermore, it promotes close and trusting cooperation by enabling you to understand our company's requirements early on and integrate them into your internal processes.
Ultimately, this Supplier Quality Manual serves to create a common foundation for quality and innovation upon which we can build a successful and sustainable partnership together.

1.2 Scope

This Supplier Quality Manual applies to all suppliers who provide products or services to Horton Europe and are thus part of the automotive industry supply chain. This includes, among others, manufacturers of components, materials, semi-finished products,

accessories, tools, and services that are integrated into our production processes. The Supplier Quality Manual serves as a source of information for our existing and potential suppliers; it is subject to continuous improvement to meet state-of-the-art standards and our customers' requirements.
The requirements described in this manual apply to all phases of the supply process, including development, manufacturing, delivery, storage, transportation, and customer service. Our goal is to ensure consistent quality throughout the entire supply chain and to minimize risks associated with quality issues.

In addition to our requirements, the following apply (in their currently valid form):

- legal and regulatory requirements and provisions throughout the entire supply period,
- the agreed-upon technical specifications and standards of Horton Europe,
- ISO 9001,
- IATF 16949,
- Requirements from VDA 6.3 (process audit) and 6.5 (product audit).

Our supplier must obtain the relevant documents on its own responsibility and verify their validity at appropriate intervals.

2. Quality Management System (QMS)

Our supplier agrees to implement and maintain a certified quality management system in accordance with IATF 16949, as amended from time to time. The certification must be conducted by an accredited certification body. If the status of the supplier's QMS certification changes, Horton Europe must be notified immediately in writing.

3. Quality objectives and responsibilities

3.1 Quality objectives

The established quality requirements are critical to continuous improvement and to meeting customer requirements in accordance with the current revision of the IATF 16949 standard. The following quality requirements have been defined to ensure that our products and services meet the highest quality standards.

3.1.1 Product conformity

Horton Europe is responsible for its products and services provided to its customers. Responsibility for the components incorporated into the product lies with the supplier. Our supplier must take all possible organizational and technical measures to ensure product safety and minimize any risk of non-conformity. This requirement must be communicated throughout the entire supply chain. Upon request or in the event of damage, our supplier must provide

evidence that clearly demonstrates that our supplier has fulfilled its duty of care to prevent product defects.

Our supplier ensures and commits itself, as well as all its subcontractors, to the following:

- there is a strong commitment to quality throughout the organization,
- product safety is ensured during the development of components and products,
- a Product Safety and Conformity Representative (PSCR) has been trained in accordance with VDA Volume Product Integrity, has been appointed, and is designated by Horton Europe,
- a PSCR is known for every subcontractor in the supply chain and this information is kept up to date,
- the quality capability of the manufacturing processes is verified at the required frequency,
- in the event of deviating quality capability, appropriate measures are planned, implemented, and checked for effectiveness,
- to ensure the earliest possible detection of defective products in the production process from an economic standpoint.

3.2 Responsibilities

3.2.1 Product and Process Approval

Prior to the start of series production, our supplier must conduct a product and process approval. In doing so, the supplier demonstrates that the product and manufacturing process meet the agreed-upon requirements.
Unless Horton Europe specifies otherwise, approval is conducted in accordance with the Production Part Approval Process (PPAP) as set forth in the currently valid AIAG handbook. PPAP Level 3 applies as standard.
The scope of the documentation to be submitted is determined by Horton Europe as part of the project or change approval. Horton Europe may adjust the scope of the documentation depending on the project or risk.
If customer-specific requirements so dictate, approval is granted in accordance with a corresponding customer-specific procedure for product and process approval, for example in accordance with VDA Volume 2 (PPF) in its currently valid edition. In this case, Horton Europe informs the supplier accordingly.
Series deliveries are only permitted after approval by Horton Europe.
Changes to the product or process must be communicated to Horton Europe in advance. Further requirements regarding this are described in Section 3.5.

3.2.2 Safe Launch

As soon as a product or production process is transferred to series production for the first time, or if conditions arise that could significantly affect the stability of the product or process

(e.g., series production start-up (SOP), process or product changes, relocations of production volumes or key process steps), our supplier must apply a Safe Launch procedure in accordance with the applicable AIAG guidelines.
The Safe Launch procedure serves to ensure controlled series production capability by implementing targeted additional testing and monitoring measures beyond the regular series production control plan for a defined period of time.

3.2.2.1 Use Cases (Triggers for Safe Launch)

Our supplier is required to implement a Safe Launch procedure whenever changes or events occur that could have a significant impact on product or process stability.
This includes, in particular:

- the start of series production of a product or process (SOP),
- changes to the product (e.g., design, material, specification, or approved deviations),
- changes to the production process (e.g., new or modified machines, tools, test equipment, manufacturing procedures, or process parameters),
- relocations of production volumes or significant process steps (e.g., site or line relocations, as well as outsourcing of processes),
- the use of new or changed subcontractors for product- or process-related services,
- as well as quality-related escalations or special incidents as required by Horton Europe.

3.2.2.2 Safe-Launch-Control-Plan

Our supplier must develop and implement a Safe Launch Control Plan prior to the start of the affected series deliveries and keep it up to date throughout the entire Safe Launch phase.
The Safe Launch Control Plan must include at least the following:

- the clear identification of the affected part numbers, processes, production lines, and relevant process steps within the supply chain,
- the specification of the characteristics to be monitored, in particular those relevant to function, safety, certification, assembly, fit, and appearance,
- the definition of additional and more stringent inspection and monitoring measures (e.g., increased inspection frequencies, expanded sampling sizes up to 100% inspections, and additional measurement and testing methods),
- a description of the responsibilities for the implementation, evaluation, and approval of Safe Launch activities,
- the specification of documentation and the labeling of inspected goods during the Safe Launch phase,
- as well as a defined response and escalation plan for handling nonconformities.

The Safe Launch Control Plan must be made available to Horton Europe upon request.

3.2.2.3 Nonconformity Management and Containment During the Safe Launch Phase

During the Safe Launch Phase, all nonconformities, anomalies, and deviations must be evaluated immediately and reported to Horton Europe.
Our supplier must ensure that, in the event of deviations, appropriate containment measures are initiated immediately to prevent the shipment of non-conforming products. This includes, in particular, the immediate blocking of affected inventory, expanded sorting, and—depending on the risk—a 100% inspection of the affected characteristics.
In parallel, a structured problem analysis and problem-solving process, as is customary in the automotive industry, must be carried out using appropriate methods and tools (e.g., root cause analysis, action planning, effectiveness verification).
The containment measures must be maintained until the effectiveness of the corrective and remedial actions has been demonstrated and confirmed as stable.

3.2.2.4 Duration, exit criteria, and approval

The scope and duration of the Safe Launch phase are determined by the requirements of Hor-ton Europe and the applicable AIAG guidelines.
Our supplier must define appropriate, measurable exit criteria for the Safe Launch. These may include, among other things:

- a defined period without quality-related nonconformities,
- a defined number of consecutive error-free production days or batches,
- as well as evidence of stable quality and process metrics.

The Safe Launch phase may only be terminated once the defined exit criteria have been met and—if required by Horton Europe—approval has been granted by Horton Europe.

3.2.2.5 Documentation and Supply Chain

All documentation created as part of the Safe Launch procedure (e.g., Safe Launch Control Plan, test results, nonconformities, corrective actions, proof of effectiveness, and approvals) must be documented and made available to Horton Europe immediately upon request.
Our supplier must communicate the requirements of this section to all relevant subcontractors and outsourced process steps within the supply chain and ensure their implementation.

3.2.3 Zero-Defect Production

Our goal is to reduce the defect rate to a minimum and ensure zero-defect production. This includes reducing defects in all phases of the production process, including design, manufacturing, and delivery. If zero-defect production is not possible due to manufacturing

technology, a different target may be agreed upon (PPM target agreement). Even for such agreements, our supplier is obligated to take appropriate measures to continuously improve the defect rate. These measures must be documented and provided to Horton Europe upon request.

3.2.4 On-Time Delivery

In order to meet the high standards of on-time delivery expected by our customers, we rely on our suppliers to meet the delivery deadlines set by Horton Europe. Any deviations from the agreed delivery dates must be reported to Horton Europe in writing as soon as possible. Horton Europe evaluates its suppliers' on-time delivery performance using the OTD (on-time delivery) metric. As described in more detail in the Supplier Manual, this metric influences the supplier evaluation.

3.2.5 Continuous Improvement (CI)

Horton Europe strives to work with its suppliers to achieve continuous improvement in products, processes, and services in order to sustainably enhance quality, reduce risks, and ensure customer satisfaction.
Our supplier commits to using appropriate procedures and methods to systematically identify opportunities for improvement, to analyze identified deviations, risks, and weaknesses in a structured manner, and to derive and implement effective improvement measures, promptly informing Horton Europe of these.
To this end, relevant key performance indicators, process and quality data, as well as insights from complaints, deviations, internal evaluations, and lessons learned, must be utilized.
The effectiveness of the implemented improvement measures must be reviewed regularly and documented in a traceable manner by our supplier. The results must be communicated to Horton Europe upon request.
The types of audits and audit procedures used as part of the continuous improvement process are described in more detail in Chapter 7 of this manual.

3.3 Responsibilities

Our supplier is responsible for ensuring compliance with quality and on-time delivery requirements, including with respect to its subcontractors. The requirements that Horton Europe imposes on its suppliers stem largely from the requirements that customers impose on Horton Europe. It is our responsibility to implement these requirements and pass them on to our suppliers. Accordingly, it is the responsibility of our suppliers to implement these requirements and, where necessary, pass them on to further subcontractors throughout the entire supply chain. To ensure the fulfillment of this responsibility, Horton Europe reserves the right to request supporting documentation.

3.4 Nonconformity

3.4.1 Reporting Deviations

Deviations from applicable drawings, specifications, or the agreed-upon quality assurance measures, as well as repairs or rework on the product, production process, molding tools, materials, or purchased parts for the products, and on testing procedures or equipment, are subject to the mandatory written approval of Horton Europe and must be reported prior to implementation and approved by Horton Europe.
The relocation of an approved production site requires a thorough review and approval by Horton Europe. All information necessary for the review must be provided by the supplier. Agreed-upon deliveries and services remain in effect even in the event of an approved relocation. Should delivery bottlenecks threaten to occur during the change process, despite thorough safeguards, these must be reported immediately to Horton Europe.

3.4.2 Detection and Rectification of Defects

At Horton Europe, incoming goods inspections are limited to checking for externally visible damage, as well as verifying product identity and quantity. In addition, random samples are tested for compliance with technical requirements. Any defects identified during the incoming goods inspection are reported to the supplier.
Defects discovered during further processing at Horton Europe or by subcontractors are reported upon detection. Our supplier waives the right to object to a late complaint.
The same procedure applies to field or zero-mile complaints regarding products distributed by Horton Europe that are attributable to defective products from our suppliers. Additionally, Horton Europe reserves the right to forward any recourse claims from our customers to the party responsible.

3.4.3 Complaint Handling

Our supplier must immediately and systematically rectify the defects reported by Horton Europe and demonstrate the sustainability of the measures taken. Horton Europe reserves the right to record complaints in the GLOBAL8D portal. Our supplier undertakes to create and provide an 8D report for each complaint. In addition, our supplier undertakes, upon request by Horton Europe, to process the complaint further in the portal.
Our supplier must define immediate corrective actions within 24 hours (1 business day) of receiving the complaint to contain the defective parts (D 1-3) in a verifiable manner.
Our supplier undertakes to implement at least the following measures within 48 hours of receiving the complaint:

- Immediate suspension and sorting of inventory at the supplier’s and, if necessary, at the sub-supplier’s
- Sorting of inventory at Horton Europe

- Implementation of 100% inspection at the supplier's to prevent further shipments of defective parts,
- Maintenance of these measures until the root cause of the defect has been systematically analyzed and permanently resolved,
- Documentation and visual marking of all shipments until the corrective measures have been fully implemented and the 8D report has been approved by Horton Europe. (e.g., "Quality inspected and approved")

If our supplier is unable to implement these measures, Horton Europe is entitled to engage an external service provider at the supplier's expense. Any costs incurred by Horton Europe as a result of sorting the goods itself will be billed to the supplier.
Permanent corrective measures (D5) must be defined following the root cause analysis (D4) and communicated to Horton Europe no later than 4 weeks after receipt of the complaint.
Upon completion of all measures and verification of the sustainable resolution of the issue, all measures and root cause analyses must be made available to Horton Europe. Horton Europe reserves the right to review the corrective measures implemented.

Regardless of the supplier's cooperation and response time, Horton Europe is entitled, in the event of imminent or actual quality risks, delivery interruptions, or customer escalations, to immediately implement appropriate immediate and emergency measures to contain and prevent further damage, in order to avert harm to Horton Europe and/or its customers.
To this end, Horton Europe is entitled to use its own resources or external service providers. Such measures shall be implemented in accordance with the principle of trust-based and cooperative partnership and with the aim of keeping the resulting costs as low as possible.
Our supplier agrees to bear all costs associated with the complaint.
Any further legal or contractual claims by Horton Europe remain unaffected by this.

3.5 Supplier Change Request

Our suppliers must notify Horton Europe of any planned changes to the design, process, or location, as described in the current AIAG PPAP Manual. Suppliers may not implement any of these planned changes until Horton Europe has granted approval. Horton Europe determines whether a PPAP is required and which PPAP level must be submitted for the requested change.

4. Supplier Evaluation

Horton Europe has an internal supplier evaluation process in place to regularly monitor our suppliers' quality performance and on-time delivery. If any deviations from the expected quality performance or on-time delivery are identified, Horton Europe reserves the right to require the supplier to implement additional improvement measures. In general, Horton Europe expects its suppliers to independently initiate and implement sustainable measures when their rating is lower than A, in order to achieve continuous improvement in quality performance and on-time delivery.

Further details can be found in the Horton Europe Supplier manual.

5. Special Characteristics

All feature requirements noted on the drawing must be fully met. It should be noted that there are specific features that require special attention for reasons of functionality, regulatory approval, or safety. These specific characteristics are of critical importance to ensure that the product or system properly fulfills its intended purpose, meets all regulatory requirements, and guarantees the highest level of safety for end users. These are minimum performance requirements. In individual cases, the requirements may vary.

5.1 Definition and Identification

Our supplier agrees to identify, label, and document all special characteristics in accordance with our specifications and to incorporate them into process and production development steps.

Horton Europe defines special characteristics as follows:

- Key Control Characteristic (KCC): ◆
- Key Product Characteristic (KPC): ◇

5.1.1 Definition KCC

KCCs are identified through the P-FMEA. Characteristics designated as KCCs must achieve a process capability of CpK ≥ 1.33 in the manufacturing process that produces the characteristic. To this end, the statistical process control (SPC) method must be applied, and the results must be documented. Furthermore, verification of process capability must be repeated at regular intervals, at least every 3 years, to demonstrate process capability throughout the entire production period. The documented test results and capability verification records must be made available to Horton Europe upon request.

5.1.2 Definition KPC

For characteristics designated as KPCs, a process capability of CpK ≥ 1.67 is required. KPCs are identified through the D-FMEA and are characteristics that are critical to product performance or necessary for compliance with regulatory requirements. These specific characteristics require validated statistical methods to ensure the reliability of Horton Europe's products throughout their entire service life. The Statistical Process Control (SPC) method is applied here. Furthermore, process capability verification must be repeated at regular intervals, at least every 3 years, to demonstrate process capability throughout the entire production

period. The documented test results and proofs of capability must be made available to Horton Europe upon request.

5.1.3 Inspection Dimensions

In its drawings, Horton Europe specifies inspection dimensions that must be inspected and documented by our supplier to an appropriate extent for each production lot and measured by Horton Europe during the incoming goods inspection. Horton Europe requires at least an initial and final piece inspection for each production lot and a re-approval of production in the event of changes to production parameters, tools, or shift changes. These documented measurement results must be made available to Horton Europe upon request.
The marking in drawings may be indicated by an “M in a hexagon” (see Fig. 1) or in the form of a “Zeppelin (rounded frame)” (see Fig. 2).
Horton Europe does not require a process capability study for these characteristics.

Fig. 1

Fig. 2

6. Cooperation with Sub-Suppliers

Our supplier agrees to pass on all requirements that Horton Europe communicates to the supplier to the relevant subcontractors throughout the entire supply chain. This includes, among other things, all legal and regulatory requirements as well as customer-specific requirements. All of these requirements must be known and complied with throughout the entire supply chain.
Horton Europe reserves the right to verify compliance with these requirements throughout the entire supply chain, as necessary.

6.1 Transparency in the Supply Chain

Production process and product approval documents, quality management plans, production control plans, inspection plans, and work instructions, as well as the results of evaluations of its subcontractors, must be provided to Horton Europe upon request.

7. Audits

Audits are regular reviews and assessments of processes, procedures, and systems. Through them, we ensure that the highest quality standards are achieved and maintained in order to meet all relevant legal and regulatory requirements of our customers. We view audits not only as a way to identify non-conformities, but also as an opportunity to confirm best practices and identify areas for improvement. Audits are an integral part of our corporate culture and help strengthen our customers' trust and solidify our reputation as a reliable partner.
Audits of our suppliers and subcontractors throughout the supply chain must be conducted by a certified VDA 6.3 auditor, whose qualifications must be verified by Horton Europe upon request.

7.1 Potential Analysis

Horton Europe reserves the right to conduct a potential analysis in accordance with VDA 6.3 at the supplier's facility prior to awarding new projects. This serves to identify potential opportunities and risks before the project is awarded and to factor them into the award decision. Since series production is generally not yet underway at the time of a potential analysis, the audit must be based on other, comparable production processes. In individual cases, a potential analysis may also be conducted by the supplier itself. Audit results, action plans, and the associated documentation must be made available to Horton Europe upon request.

7.2 Process Audits

To maintain the process of continuous improvement, the supplier undertakes to regularly conduct self-audits of its processes in accordance with VDA 6.3. If Volkswagen and its brands have customer-specific requirements for the products in question, Horton Europe will notify the supplier accordingly. In this case, the self-audit must also be conducted in accordance with the currently valid Volkswagen Formula Q standard. The currently valid Volkswagen self-audit documents must be used for this purpose, which will be provided to the supplier by Horton Europe upon request. The resulting areas for improvement must be analyzed, and corrective actions must be taken if necessary. Audit results, action plans, and the associated documentation must be provided to Horton Europe upon request. Audits must be conducted at regular intervals of no more than 12 months.

7.3 Product Audits

Our supplier agrees to conduct regular internal audits of its products in accordance with VDA 6.5. Any resulting areas for improvement must be analyzed, and corrective actions must be taken as necessary. Audit results, action plans, and related documentation must be provided

to Horton Europe upon request. Audits must be conducted at regular intervals of no more than 12 months.

7.4 Supplier Audits

The requirements that Horton Europe imposes on its suppliers under Section 7, Audits, must be passed on to all subcontractors in the supply chain to the same extent.

7.5 CQI – Assessments

For all production methods relevant to the manufacturing process of the products, the currently applicable AIAG CQI standards must be applied (e.g., heat treatment, welding, plating, coating, molding, etc.).
Our supplier is required to conduct the corresponding CQI assessments regularly in accordance with the current AIAG guidelines.
These requirements also apply to all relevant subcontractors and outsourced processes.
The results of the CQI assessments, including action plans, must be documented and made available to Horton Europe upon request.

8. Traceability

To ensure the traceability of products or components, parts must be clearly marked. This helps to isolate identified defects after or during production. The type of marking is defined in the specification documents (e.g., drawings, packaging instructions, etc.). It must be ensured that traceability is possible throughout the entire production process, even for products or components that are processed by subcontractors or through otherwise outsourced processes.
Our supplier must use a material traceability system to be able to contain the effects of identified defects when necessary. Documentation from this system must be provided to Horton Europe upon request.

9. Material Compliance

By complying with the applicable guidelines and regulations, we help protect the environment, ensure the health and safety of our customers and employees, and promote ethical standards throughout our supply chain. Common tools used to ensure compliance include IMDS and CDX. At the request of Horton Europe, these material declarations must be made available on the respective portal.

9.1 REACH (Regulation (EC) No. 1907/2006)

Horton Europe is committed to complying with the requirements of the REACH Regulation to ensure the safe use of chemicals and to protect the environment and human health. This includes the registration, evaluation, authorization, and restriction of chemicals, as well as the provision of safety data sheets for all relevant products. We expect the same from our suppliers.

9.2 RoHS (Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment)

Horton Europe's products are manufactured in accordance with the requirements of the RoHS Directive 2011/65/EU to ensure that they are free of certain hazardous substances, such as lead, mercury, cadmium, and certain brominated flame retardants. We expect the same from our suppliers.

9.3 Conflict Minerals

Horton Europe is committed to ensuring that its supply chain is free of minerals that could contribute to the financing of armed conflicts. Upon request from Horton Europe, a certificate of compliance in accordance with CMRT and EMRT must be provided.

Revision history

Rev	Date	Changes	Processed / Tested	Released
A	11/12/24	New creation	D. Geis	T. Witha
B	05/18/26	Layout changed 3.1.4 CIP – Completely revised 3.1.5 Safe Launch – New entry 3.3.3 Complaint Handling – Addition 7 Audits – Editorial correction 7.2 Process Audits – Addition / more detailed description 7.3 Product Audits – Addition / more detailed description 7.5 CQI Assessments – New addition	J. Seitz	D. Geis