EN

Supplier Guideline SG

EMEA - CHASSIS

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1. Preface / Preamble

1.1 Who are we

Internationally Positioned

SAF-HOLLAND SE, located in Bessenbach, is one of the leading international manufacturers of chassis-related assemblies and components, primarily for trailers and trucks. The Group is one of the few suppliers in the truck and trailer industry that is internationally positioned in most markets worldwide.

Partner for Industry and Fleet Operators

The product range comprises axle and suspension systems, fifth wheels, coupling systems, kingpins, and landing gear and is marketed under the brands SAF, HOLLAND, Haldex, Assali Stefen, KLL, Neway, Tecma, V.ORLANDI, TrailerMaster and YORK. SAF-HOLLAND sells its products to original equipment manufacturers (OEM) on six continents and works closely with fleet operators and trucking companies. As a development supplier, the company is just as valued by original equipment manufacturers as it is by fleet operators, who we support in minimizing operating costs with our innovations and service packages.

Future-Oriented Range of Services

We are among the top three suppliers worldwide in all of our product categories, and intend to continue to expand this market position. With our ideas and developments, we rely on continuous product innovation. In doing so, we concentrate on our customers' focus points: safety, efficiency and weight reduction as well as environmental-friendliness. Our lightweight construction solutions allow significant weight savings, and make a noticeable contribution towards reduced CO2 emissions in the trucker/trailer combination. The company provides special competence – both in development and production – in small-scale manufacturing and in application technology for individual solutions for special vehicles. Thousands of individual axle system constellations are available.

Strong Position in the Aftermarket Business

In the Aftermarket business, the Company supplies spare parts to manufacturers' service networks (OES), wholesalers, and, with the help of distribution centers, to end customers and service centers via an extensive global sales network and thereby ensures fast provision of spare parts and reduced downtimes.

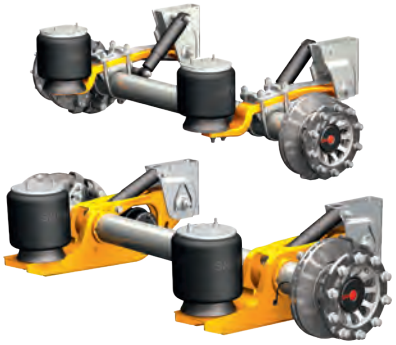
1.2 Cooperation in Partnership

SAF-HOLLAND GmbH aims to develop an intensive business relationship and partnership with its suppliers in order to be able to satisfy and even exceed the demands and expectations placed on the products by the global market. The continuous improvement of products and processes in order to ensure sustainable quality and reduce costs is essential if this is to be achieved. Only in cooperation with our suppliers can SAF-HOLLAND GmbH rise to the future challenges of the market and thus create a basis for the economic success of both sides.

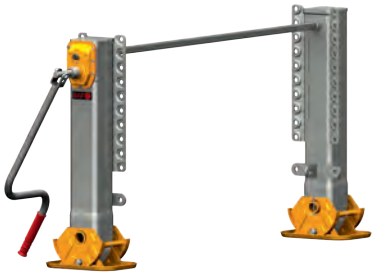
1. Preface / Preamble

1.3 What we need

SAF-HOLLAND GmbH procurement is geared towards optimizing performance worldwide, so that we can offer our customers high quality products at competitive prices. The picture below is a schematic representation of our purchasing program. It makes no claim to be complete



- ABS / EBS systems
- Axle tubes
- Fasteners
- Brake linings



- Bearing seals
- Turned parts
- Springs

- Grease
- Cast iron (gray and ductile iron)
- Stampings
- Shock absorbers
- U-bolts
- Fittings

1.4 Use of this Guideline

This Supplier Guideline (SG) is intended to serve as an aid to successful cooperation between SAF-HOLLAND GmbH, including SAF-HOLLAND Düzce and its suppliers and contractors. In this guideline, the quality assurance processes are explained and the different steps and requirements in the development, planning and implementation phases of projects are elucidated. The objective is to facilitate a frictionless business relationship between SAF-HOLLAND GmbH and its suppliers.

Bessenbach, 28.06.2024

i.V. Christian Staab
Director Sourcing EMEA Chassis

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Senior Director Operations Germany

www.safholland.com
Anything written in blue and underlined represents a link to the SAF-HOLLAND homepage.

2. Requirements / Expectations of Suppliers

2.1 Minimum Requirements

Criterion	Requirements	Implementation, methods
Code of Conduct	Compliance of Code of Conduct	Link to safholland.com
Quality management system	DIN EN ISO 9001:XXXX or a system, that complies with this standard	• Certification by neutral agency (3rd Party Audit) • Until successful implementation, SH* is entitled to take free special measures
Quality management system welding-technology	DIN EN ISO 3834-4 if not yet available, willingness to certification within 12 month after SOP	• Certification by neutral agency (3rd Party Audit) • Until successful implementation, special-measures can be commonly agreed
Quality assurance	Conclusion of a QAA	QAA – Quality assurance agreement
Error & complaint processing	Systematic problem solution in accordance with defined process	Application of e.g.: • 8D-method • 5 Why • Ishikawa, …
Approval of audit	Willingness to accept audits of systems / products / process	Auditing by SH* SQA** Implementation of the measures
Willingness of supplier to develop	Common improvement projects	Project work with SQA** and Value Analysis teams
Subcontractor	All subcontractors must meet the same requirements as the supplier	In the event of non-compliance with the requirements, the supplier must ensure the quality of the subcontractors' products by taking its own measures, e.g. by intensifying incoming goods inspections
Business language	German / English	German, English
Environmental management system	DIN EN ISO 14001:XXXX certification is desirable	Certification by neutral agency
Energy management	DIN EN ISO 50001:XXXX certification is desirable	Certification by neutral agency
Occupational safety and health protection	DIN ISO 45001: XXXX certification is desirable	Certification by neutral agency
COP (Conformity of Production)	Initial assessment and permanent safeguarding of COP	Certification / Auditing by the approval authority or a agency authorised by the authority

* SH = SAF-HOLLAND
** SQA = Supplier Quality Assurance

2. Requirements / Expectations of Suppliers

2.2 Quality management system

The Supplier shall be responsible to SAF-HOLLAND for the quality of its services. The supplier shall maintain a quality management system at least in accordance with DIN EN ISO 9001. SAF-HOLLAND reserves the right to audit the supplier's quality management systems, processes and products.

2.3 Environmental management

Due to the shared responsibility for the environment, the supplier is required to have an environmental management system in accordance with DIN EN ISO 14001. Suppliers that are not certified in accordance with ISO 14001 are expected to

- introduce a documented environmental management system
- to know and comply with the environmental laws, ordinances and regulations applicable in the respective markets
- drive forward the continuous and efficient improvement of environmental conditions within the company.

2.4 Energy management

Energy efficiency is an important building block for improving sustainability and reducing costs, including in the supply chain. The associated careful use of resources and resources and the continuous increase in energy efficiency can be implemented through a systematic energy management system in accordance with ISO 50001 or an energy audit. The supplier is therefore obliged to seek certification in accordance with ISO 50001 or an energy audit or to implement activities to increase energy efficiency.

2.5 Occupational safety

Ensuring the health and safety of employees in the context of occupational health and safety is a top priority. We therefore expect our suppliers to at least comply with the legal requirements. Certification in accordance with ISO 45001 or OHSAS 18001 is desirable.

3. Contracts and Agreements

3.1 General

The number of contracts negotiated depends on the extent and depth of the cooperation between SAF-HOLLAND GmbH and its supplier. The various different contract documents are listed and described briefly below. Skeleton (draft) contracts can be downloaded from our website under **“SUPPLIERS”.**

3.2 Non-Disclosure Agreement

A non-disclosure agreement is concluded at the beginning of any business connection between potential suppliers and SAF-HOLLAND GmbH.

The purpose of this agreement is to ensure that confidential information is not disclosed to third parties by either of the contractual parties.

The supplier undertakes to treat all information he has gained or will gain directly or indirectly in the course of the cooperation with SAF-HOLLAND GmbH confidentially, and to use it only within the context of the cooperation, regardless of whether this information is or was designated either explicitly or implicitly as secret or confidential.

The supplier also gives SAF-HOLLAND GmbH its assurance that it will not pass this information on to third parties, nor make it accessible to third parties in any way, and that it will take all reasonable measures to preclude unauthorized third party access to this information.

The above provisions shall also apply to both contractual partners for any information transferred from the supplier to SAF-HOLLAND GmbH.

3.3 Purchase Terms and Conditions

The Purchase Terms and Conditions comprise all basic conditions and provisions for the purchasing of goods of any sort by SAF-HOLLAND GmbH.

3.4 Skeleton Contract

A skeleton contract regulates the general terms and conditions of Business between SAF-HOLLAND GmbH and the supplier.

3.5 Quality Agreement (QA)

The purpose of the QA is to ensure that the supplier carries out his quality assurance measures in such a manner that his products comply with the drawings and specifications of SAF-HOLLAND GmbH and that he supplies each product

- in the agreed quantity
- at the agreed time
- at the agreed location
- in the agreed design/version.

This requires the implementation of a zero-defect strategy, and a commitment to the continuous improvement of performance and quality. Another objective is the reduction of the intensity of incoming goods inspections at SAF-HOLLAND GmbH.

The QA regulates the following things among others:

- Product and process quality assurance (inspection and inspection schedules)
- Process capability
- Sampling (initial samples, other samples, etc.)
- Agreed targets for quality on delivery (ppm-rate)
- Documentation and traceability
- Duty to inform in the event of changes (“SCR”=Supplier Change Request)
- Complaints handling (8D-reports)

3.6 Special Agreement on Handling of Field Failures

The “Special Agreement on Handling Field Failures” governs the handling of failures in the field during the agreed warranty period with regard to meeting the costs of working time, replacement parts and transport. The agreement also lays down how the deficiencies are reported by SAF-HOLLAND GmbH to the supplier and how the defective parts are assessed.

3.7 Consignment Warehouse Agreement

This agreement governs the handling of storage and payment for products stored in a consignment warehouse. Payment is made when the products are removed from the consignment warehouse. Consignment Warehouse Agreements are negotiated individually with the suppliers.

3.8 Development Contract

A development agreement between SAF-HOLLAND GmbH and a supplier is always negotiated individually, and lays down the conditions for the development and, where applicable, the delivery of a product between the two parties.

4. Product & Process Quality

4. Product & Process Quality

4.1 Qualification Process

4.1.1 Manufacturing Feasibility Analysis / Self-Assessment for Serial Production

For safety-relevant parts (see 5.3.), the supplier is obliged to carry out a manufacturing feasibility and process capability analysis of the manufacturing systems and inspection equipment used and to send these to SAF-HOLLAND GmbH during the bid submission phase.

This inspection gives the supplier the opportunity to bring in his experience and make suggestions geared towards mutual success. You will find the SAF-HOLLAND GmbH form “Manufacturing Feasibility Analysis” on our homepage under “SUPPLIERS”.

For all products, the supplier must carry out a self-assessment of serial production with regard to its technical feasibility including tolerances and submit this as part of PPA process the initial sample inspection. You will find the SAF-HOLLAND GmbH form “VDA Self-Assessment Matrix” (German association for the automobile industry) on our homepage under “SUPPLIERS”.

4.1.2 Production Process and Product Approval (PPA)

With the Production Process and Product Approval report (PPA), the supplier provides evidence demonstrating that its products and processes meet the required quality standards and specifications. SAF-HOLLAND GmbH expects these to be met even for initial samples.

A PPA product is one that has been manufactured and inspected under standard conditions for serial production (machine, plant, operating, inspection and processing conditions are geared towards serial production). The inspection results must be documented in a VDA initial sample test report. SAF-HOLLAND GmbH determines the number of parts to be included in the sample (usually 3 parts).

The PPA is used in the following cases:

- for new parts
- for new suppliers
- for new sub-suppliers
- when the process is moved or changes are made to the process
- for changes in existing parts or components
- for changes having an impact on fit, form and function of product and / or process

The initial sample must be clearly marked as such in accordance with the PPF document provided by SAF-HOLLAND GmbH with all the documents and documentation required therein. First sample parts including the documentation must be sent both to the address in the order and to the following email address: **SAF-HOLLAND GmbH, QPW PPAP@safholland.de**

The label for identifying the initial sample shipment can be found on the SAF-HOLLAND GmbH homepage under the heading “SUPPLIERS”.

4.1.2.1 Table PPA Submission Levels

Serial no.	Requirements
0	Cover sheet for Initial Sample Inspection Report (ISIR)
1.1	Geometry, dimension check
1.2	Function check
1.3	Material check
1.4	Surface check for conformity with SAF standards
1.5	Appearance check
1.6	Overview of individual parts in supply chain
1.7	Materials data sheet in paper form
1.8	Written self-evaluation
1.9	Welding process test (WPT) and welding procedure specification (WPS)
1.10	Reliability inspection
2	Number of samples
3	Technical specifications (e.g. approved customer- /supplier drawings, CAD data, specifications, approved design modifications)
4	Product FMEA
5	Design and development approval for supplier where responsible for development by agreement
6	Confirmation of compliance with legal requirements (e.g. environmental, health & safety and recycling regulations, country-specific certificates)
7	Odour check
8	Software test report, process conformity
9	Process FMEA
10	Process flowchart (production and inspection steps)
11	Production control plan
12	Confirmation of process capability
13	Confirmation of labelling of safety-relevant parts (legibility of text, size/dimensional accuracy of lettering, 2D matrix readable electronically)
14	Test / inspection equipment list
15	Confirmation of inspection equipment capability
16	Tool overview
17	Confirmation of agreed capacity (process validation)
18	Part history
19	Confirmation of suitability of transport equipment incl. storage
20	Acoustics check
21	Haptic check
22	Approval of coating systems
23	Others, e.g. salt spray text, mechanical tests, x-ray inspection, Welding procedure qualification*

V: Submission to SAF-HOLLAND, one copy to be kept by supplier
D: Documentation and archiving on supplier's premises, must be made available at the request of SAF-HOLLAND
A: by agreement with SAF-HOLLAND
na: not applicable, is not required at the moment

*Welding procedure qualification:

The welded joint to which the welding procedure relates in production must be represented by a test piece. A WPS (Welding Procedure Specification) in accordance with ISO 15614 or ISO 15613 must be created for this and qualified using a WPQR (Welding Procedure Qualification Report). In the event of significant changes to equipment, parameters, materials, etc., a new qualification may be necessary

The organisation shall specify the number of moulds used to manufacture the products. This also includes, for example, the number of nests or cavities per mould in the case of injection moulding or vulcanisation moulds. Furthermore, the reference between the moulds and the production lines must be shown.

Assembly and machining experiments are also carried out on the SAF-HOLLAND GmbH premises.

The production process and product approval (PPA) can be completed with the following usage decisions:

Approved (suitable for series production): Meets all agreed requirements completely, approval for series production is granted.

Conditionally approved (not suitable for series production): Does not meet agreed requirements completely. The product can be delivered if certain conditions are met and for a limited period or in a limited quantity. Follow-on submission is required before the end of the defined period. The PPF for resampling will be provided by SAF-HOLLAND GmbH after the corrective measures have been determined.

Not approved (not suitable for series production): Fails to meet the agreed requirements. Approval for series production is not granted and a follow-on submission is required. This also always means that the supplier will be invoiced for the total costs to SAF-HOLLAND GmbH of the PPA process. The PPF for resampling will be provided by SAF-HOLLAND GmbH after the corrective measures have been determined.

The result of the PPA forms part of the subsequent supplier assessment.

4.1.3 Changes to Products and Processes

In the event of a change in the agreed characteristics of a product or process as well as for changes having an impact on fit, form and function of a product and / or process the supplier is obliged to inform SAF-HOLLAND GmbH immediately and at least 6 months before implementation of the change by completing a Supplier Change Request (SCR) form for external suppliers. The changes may be implemented by the supplier only after they have received approval from SAF-HOLLAND GmbH.

The change request must be sent to the responsible purchaser in good time. The changes may only be implemented after approval by SAF-HOLLAND GmbH.

The Supplier Change Request (SCR) form can be found on our homepage under the heading “SUPPLIERS”..

4.1.4 Process and Machine Capability

We expect our suppliers to ensure that only machines and processes certain to meet the required specifications are used.

The supplier is obliged to comply with the following values for all marked characteristics (e.g. oblong holes) and, where appropriate, to ensure product quality.

Method of examination	Description	Mark & capability	Formula
Machine capability test	MCT XX	CmK ≥ 1,67	$\frac{(\Delta \text{ krit})}{3\sigma}$
Short term process capability	PCT	PpK ≥ 1,67	$\frac{(\Delta \text{ krit})}{3\sigma}$
Long term process capability	PCT	CpK ≥ 1,33	$\frac{(\Delta \text{ krit})}{3\sigma}$

[Δ krit = ***smallest distance between average and specification limit;***

σ = ***standard deviation*****; μ =** ***average*** **;]**

In the event that the supplier fails to achieve these values for reasons for which the supplier is responsible, the supplier is obliged to submit to SAF-HOLLAND GmbH a schedule of measures (e.g. 100 % inspection) with which product quality will be achieved in another way.

4.1.5 Production and Inspection Planning

In order to achieve the required product and process quality, the supplier must specify a production and inspection concept that meets the quality objectives and specifications agreed with SAF-HOLLAND GmbH.

The supplier's production and inspection schedule shall include the following elements:

- Specification of key product and process characteristics
- Process FMEA if agreed/requiredt
- Production control plan
- Inspection equipment planning
- Sourcing and capacity planning
- Process capability checks (short-term/long-term) if agreed/required
- Staff training and qualification
- Material flow and transport planning
- Quality planning for sub-suppliers

4. Product & Process Quality

The supplier shall submit to SAF-HOLLAND GmbH either a production control plan, or an inspection schedule to include at least the following points:

- Product/process characteristics
- Inspection methods/inspection equipment
- Inspection frequency/size of random samples
- Defined documentation
- A reaction plan to deal with deviations

Other documents and records relating to the inspection schedule must be made available to SAF-HOLLAND GmbH on request and re-adapted where necessary.

4.2 Incoming Goods

The supplier is responsible for the effective inspection of outgoing goods and thereby for the delivery of defect-free products. SAF-HOLLAND GmbH will inspect incoming goods with regard to identity, quantity and damage arising during transport. Quality control checks will be carried out on the basis of random samples. The supplier will be informed of any defects found.

All incoming goods delivered must be labelled in accordance with the specifications given in the SAF-HOLLAND GmbH packaging manual (see 6.1). As a matter of principle, all shipping units must be marked with a clearly visible goods label in accordance with VDA Recommendation 4902.

Samples and specially approved parts must be marked clearly as such with an additional shipping label. The shipping label is to be found on the SAF-HOLLAND GmbH homepage under “SUPPLIERS/ Logistics”.

4.3 Complaint Processing

A complaint is justified when a supplied product fails to match SAF-HOLLAND GmbH specific guidelines such as drawings, company standards or specifications, and/or fails to comply with legal regulations.

After receiving a complaint from SAF-HOLLAND, the supplier must take immediate measures to correct the deficit and document it in an 8D-report. You will find the “8D-Report” form on the SAF-HOLLAND GmbH homepage under “SUPPLIERS”.

The immediate corrective measures taken to resolve the issue must be reported to SAF-HOLLAND GmbH within 24 hours after having received the information of the error in a preliminary 8D-report (D1 – D3 completed).

In the mid- to long-term, SAF-HOLLAND GmbH expects suitable remedial action to be taken, and the effectiveness of the measures implemented to be confirmed. The measures taken and the examination of their effectiveness form an essential part of a complete complaint process.

4.3.1 8D-Report

		Step	Implementation
Complete 8D-report (within 14 workdays)	Preliminary 8D-report (within 24 hours)	**D1** Forming a team and addressing the problem	• Form a team, select a team leader • Address the error: notification no., quantity, material, date
		D2 Describing the error	• Record the error, describe it in detail, delimit it
		D3 Finding short-term solution (action)	• Define short-term solution, test and introduce it (e.g. 100 % inspection) • Eliminate all affected parts from process chain
	Preliminary 8D-report (after 5 workdays)	**D4** Finding cause of error	• Find cause of error • Establish cause and effect relationships (using appropriate methods: 5W, Ishikawa,.)
		D5 Finding long-term solution (measures)	• Develop, evaluate, select and schedule long-term corrective measures
	D6 Establishing corrective measures in organisation		• Embed corrective measure in organisation • Rescind short-term immediate measures implemented
	D7 Taking preventive measures		• Make findings available for other existing/ future products/processes
	D8 Concluding problem-solving process		• Check successful implementation of the agreed measures • Conclude problem-solving process

4.4 Supplier assessment and monthly defect rate

SAF-HOLLAND GmbH carries out an annual assessment on all of its suppliers who meet specific criteria. These criteria are established internally by SAF-HOLLAND GmbH.

The evaluation takes place in the categories as A-, B-, C-, D- or E-supplier. An assessment in **cat. D or E** requires a plan of action to remedy the deficits, which must be received within 10 working days.

Designation for criterion	Weighting with COP in %	Weighting without COP in %
Quality	55	65
• Incoming goods inspection	15	15
• Certificates	5	5
• QA	20	20
• parts per million	30	30
• Complaints quota	30	30
Logistics	20	20
• Adherence to deadlines	75	75
• Packaging	25	25
Environment	10	10
• Certificates	100	100
Energy / Occupational safety	5	5
• Certificates (weighting 50% each)	100	100
COP	10	/
• Initial assessment / Features relevant to approval *(only applies to components relevant for approval)	100	/

Additionally to the annual supplier assessment SAF-HOLLAND GmbH is carrying out a monthly defect rate based on the PPM-rate for a supplier rating.

4.5 PPM-Determination

The quality score is determined in parts per million **(PPM)**. All complaints are taken into account in determination of the score, regardless of the seriousness of the defect or error.

Calculation Formula $$PPM = \frac{\text{Defective units}}{\text{Units delivered}} * 1.000.000$$

Units Delivered
Quantity delivered during the period under consideration.

Defective units
Defective units are for example parts/components that deviate from the specification (requirement book, drawing, statutory requirements, etc.), units delivered with incomplete or incorrect accompanying documentation (e.g. initial sample test report, factory inspection certificate, etc.), or units that do not comply with packaging stipulations. Whether deviations are PPM-relevant is decided on the basis of the criteria described in Appendix 8.2

To be taken into account are all parts and components for which a deviation is found in any of the following places/areas:

- Incoming goods inspection area
- Warehouse
- Production
- Assembly
- Test-bench
- Outgoing goods/shipping
- OEM (0km)

0km-PPM

- Failures in the field

field-PPM

4.6 Special Approvals

SAF-HOLLAND GmbH (incoming goods inspection department) must be informed immediately of any known defects or errors determined at the supplier's premises before delivery. Subject to certain conditions, SAF-HOLLAND GmbH may after prior consultation grant special approval temporarily in this case.

For special approval to be granted, product characteristics such as the functionality and reliability of the product may not be impaired in any way.

For approval to be granted, the following data must be provided as a minimum:

- Nature of defect
- SAF-HOLLAND item no.
- Order no.
- Serial no., batch no. Or other marking
- Photo of the defect where appropriate
- No. Of units for which special approval is to be granted
- Delivery note where applicable

If special approval has been granted, the delivery lots must be marked clearly with the "Special approval" label. This label is to be found on the SAF-HOLLAND GmbH homepage under "SUPPLIERS".
In addition, SAF-HOLLAND expects a detailed error analysis including suitable corrective measures. These corrective actions must be verified and documented by means of an 8D report in accordance with 4.3.1.

4.6.1 Reworking / Repairs

The supplier must use risk analysis methods (such as FMEA) to assess the risks in the post processing process before making a decision about reworking the product. If required by SAF-HOLLAND, the supplier must first have received / received approval from SAF-HOLLAND GmbH before starting to rework the product.

For the approval / commissioning of rework, the supplier must create a documented process that ensures that conformity with the original specification is verified in accordance with the PLP or other relevant documented information.

Work instructions for dismantling or reworking, including requirements for inspection and traceability, must be accessible and must be followed by the responsible employees.

The supplier must keep documented information about the further use of reworked products, including quantity, whereabouts, date of distribution and relevant traceability information.

If for a temporary period repairs must be carried out on products or they must be reworked in order to fulfil the specifications, SAF-HOLLAND GmbH must be informed in writing of the nature, testing and approval of the reworking and of the extent of the work necessary (no. of items, time period), and the work must be approved by SAF-HOLLAND GmbH.

Approval can only be given if the retrospective work carried out has no negative effects on the dimensions, function, strength, appearance or service life of the products.

Deliveries of products that have been reworked or repaired must be clearly marked with the appropriate label.

The “reworked” label is to be found on the SAF-HOLLAND GmbH homepage under “SUPPLIERS”.

4.7 Supplier Audit

Before entering into a business relationship, SAF-HOLLAND GmbH carries out a supplier audit in order based on VDA 6.3 “Process audit” for the approval of the supplier. This can be done as an “ on-site audit” or as a “remote audit” if necessary. Depending on the quality level, this may be followed by others.

The purpose of the audit is to establish and to evaluate the suitability of the processes for the production of products of suitable quality at the supplier's premises. For this, the supplier agrees to give SAF-HOLLAND GmbH employees access to all relevant areas and to all required documents necessary for the purpose, and to act in a supporting capacity. The findings are recorded in the subsequent audit report.

An audit report contains the following points:

- Approval decision (OK / conditional OK / not OK)
- Documentation of the process steps
- Common definition of the deviations / improvement potential
- Scheduling of corrective measures

The structure and details of the audit questionnaire as well as its evaluation can be found in VDA Volume 6.3 Process Audit. SAF-HOLLAND GmbH expects the agreed measures to be implemented as scheduled and for this to be confirmed in writing.

4.8 FMEA

The supplier shall, if required to do so, carry out a risk assessment for the avoidance of errors and provide confirmation of this to SAF-HOLLAND GmbH.
A Failure Mode and Effects Analysis (FMEA) is carried out to discover and investigate potential risks and to assess their significance and probability of occurrence.
The FMEA is to be carried out in good time, so that the results and measures can be integrated even at the planning stage.

The FMEA must take account of all stages of the product life cycle, i.e. development, construction, production, assembly, packaging, transport and use by the customer, as well as recycling and disposal.

4.9 Quality Assurance Measures

Apart from carrying out the inspections laid down in the inspection schedule the supplier must implement further systematic quality assurance measures to ensure that all products meet the specifications (zero-defect strategy).

Examples of such measures are:

- Statistical Process Control (SPC) for capable processes
- the recording and evaluation of defective goods
- the carrying out of regular internal audits
- CIP method at product and process level
- staff training with all those involved in the process

4.10 Requalification

Upon request, the supplier will ensure that all OEM product families are requalified at annual intervals and that this documented. This test corresponds in type and scope to that of the initial sampling according to VDA Volume 2 (in the currently valid version) and serves to prove compliance with the quality standards and their monitoring. The test results must be made available to SAF-HOLLAND GmbH free of charge.

The aim of this requalification is to ensure and comply with the requirements of the COP (Conformity of Production) and the general quality level by the supplier.

4.11 Quality Assurance with Sub-Suppliers

The supplier must ensure that only flawless products from sub-suppliers are permitted to enter its production process. For this it must be ensured that all sub-suppliers meet the same requirements as the supplier itself.

4.12 CoP

The partner is obliged to fulfill all legal or regulatory requirements and to take the necessary measures to obtain and maintain the required product and/or location-related certifications in a timely manner (e.g. application for audits of production sites/technical inspections of parts). The aforementioned requirements depend on the market or markets for which the deliveries are intended.

4. Product & Process Quality

The partner is responsible for ensuring that the relevant documents (certificates, type approvals, etc.) are up to date and valid. The partner must submit these documents to SAF-HOLLAND GmbH in good time and without being requested to do so.

The partner must ensure the supply of parts that meet all legal or regulatory requirements over the entire life cycle, i.e. even after the end of production (EOP) the component during the spare parts supply period - until further notice (including recertification).

If the partner becomes aware of a change in the production process and/or the company name and/or the address of a production site, including that of sub-suppliers, which may affect the validity of the certifications (e.g. relocation of production facilities, tools or entire production sites, change of address, closure of production sites, end-of-life stocks at suppliers or name changes), the partner must notify SAF-HOLLAND GmbH of this change without delay.

5. Documentation & Identification

5.1 Documents

The supplier will be provided with the relevant documentation at an early stage by SAF-HOLLAND GmbH. At the same time, all documents necessary for development or production (drawings, CAD-data, requirement books, specifications....) must be checked by the supplier for their completeness and consistency. Should the supplier become aware of shortcomings or see potential for improvement, it must notify SAF-HOLLAND GmbH in writing immediately. The supplier is responsible for the procurement of external standards and guidelines. Only the appropriate valid editions may be used.

5.2 Works Standards

SAF-HOLLAND GmbH uses works standards to ensure the quality of products and processes. Suppliers receive the required works standards in each case from the sourcing department. A works standard is a confidential, company-internal document that may under no circumstances be duplicated or passed on to third parties without the explicit prior consent of SAF-HOLLAND GmbH.

You will find a reference to which works standard is to be applied on the SAF-HOLLAND GmbH drawings or in the technical documentation. Only the appropriate valid editions may be used.

5.3 Safety-Relevant Products

Safety and homologation-relevant products are subject to increased documentation. The regulations to be complied with here are described in SAF-HOLLAND GmbH Works Standard 212.001. The relevant products are marked S in the documentation.

Throughout the serial production, the supplier must continuously document its compliance with the required quality standards for the characteristics specified in the inspection schedules. The documentation must be carried out in a manner that permits traceability back to specific production and inspection batches and that quickly provides evidence of the care exercised.

Other stipulations on the subject of safety-relevant products/products requiring documentation are to be found in chapters: **4.1.1. , 4.1.. , 5.5. , 5.7..**

5.4 Parts Identification and Labelling

Generally, the products must be marked in accordance with the specification on the drawing and with SAF-HOLLAND GmbH works standard WN 208.001 / 211.001.

If the position of the marking is not specified in the drawing, the nature, size and position of the marking must be approved by SAF-HOLLAND GmbH.

5.5 Traceability

The Supplier shall maintain a system for the traceability of its products (in particular the safety-relevant parts in accordance with WN 212.001). The verification system must be such that the associated quality records (e.g. test reports, process parameters, acceptance test certificate in accordance with DIN EN 10204-3.1) can be assigned to a product at any time. At the request of SAF-HOLLAND GmbH, these quality records/evidence will be made available in full.

5.6 Identification and Labelling of Part Sorting Measures

In the case of part sorting measures or special approvals, labelling of the products must be consistent and clearly regulated throughout the entire process chain. For this it must be ensured that defect free products are clearly marked (i. O./ ● blue dot) on the component/transport container. SAF-HOLLAND GmbH specifies the position of the mark here. It must also be ensured that defect parts are not sent to SAF-HOLLAND GmbH.

The form “Colour Coding for Part Sorting Measures (Rejections)” is to be found on the SAF-HOLLAND GmbH homepage under “SUPPLIERS”.

5.7 Retention Periods

The supplier must comply with the statutory and standard retention periods for records and documentation. The following table shows the minimum requirements of SAF-HOLLAND GmbH for the retention of documents. The rules according to VDA Volume 1 apply: “Documentation and Archiving”.

5. Documentation & Identification

The following minimum requirements must be complied with:

Form type	Retention period	Form (Examples)
QM-requirement	e.g. 1 year after EOP*	Product- and process approvals, tool inspection report, order documents, product changes
	e.g. 2 years after EOP	Quality control chart, test results, ppm-evaluations
	e.g. 3 years after EOP	Management valuation, audit reports (internal/external)
Documents relating to critical characteristics	At least 15 years after EOP	Control plan, process capability documents, test process confirmation, etc.
Development and construction documents	At least 15 years after EOP	Requirement books, calculation reports, drawings, stock lists, test reports, FMEA documents, product specifications, change requests
Contracts with customers, suppliers	15 years	Confidentiality agreement, offers, quality assurance agreement, general agreement, development contract, logistics agreements, etc.
Test data, inspection reports	15 years after EOP	Initial sample test reports, internal sample inspections, procedure tests, material certificates, screwing data

**EOP = End of Production*

The SAF-HOLLAND GmbH requirements for retention periods do not replace any statutory or standard regulations. Statutory regulations for the retention of documents are to be found under: **https://www.bmjv.de/**

5.8 Data Protection

The supplier must maintain a system that ensures that any technical documentation, information and other knowledge it receives from SAF-HOLLAND GmbH are not passed on to third parties.

6. Logistics / Shipping

6.1 Shipping and Packaging Regulations

To ensure the safe, reliable delivery of products, details of packaging and smooth shipping operations must be agreed in advance. For this, suppliers must use the SAF-HOLLAND GmbH shipping and packaging manual, which lists all the necessary regulations. If the shipping and packaging regulations are not sufficiently defined, approval must be sought from SAF-HOLLAND GmbH before commencing series deliveries.

Any deviation from the packaging and delivery regulations may be included in the PPM statistics and thus in the supplier assessment.

The packaging manual is to be found on the SAF-HOLLAND GmbH homepage under “SUPPLIERS”.

6.2 Delivery Instruction / EDI

SAF-HOLLAND GmbH has a strong interest in using electronic data interchange (EDI) with its suppliers for as many ordering and order processing transactions as possible. The aim is to minimise costs, time and risks in the processing of delivery call, shipping and invoicing data for both parties through the efficient exchange of data. It also continues to be possible to coordinate orders by e-mail.

If the maintaining of stock capacities for certain products has been agreed with the supplier, orders or delivery calls shall not require separate order acknowledgement. If no objection to the delivery call is received by SAF-HOLLAND GmbH within two working days, the order is deemed to be a binding individual contract

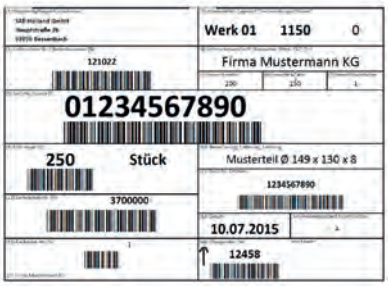
For all other orders and delivery calls a copy or print-out of the delivery request document shall be dated, stamped with the company's official stamp, signed by an authorized person and sent by post or electronic means to SAF-HOLLAND GmbH within 2 working days of receipt of the order by the supplier as acknowledgement of the order.

6.3 Single-Batch Delivery

To ensure the traceability of safety-relevant parts (see 5.3.) deliveries are to be made in delivery units containing material from a single batch only.

For this it is necessary to comply with the following stipulations:

- Single-batch delivery units on the basis of full delivery units
- For batch transitions, the batches within the delivery unit must be separately labelled. With cage pallets, the batches can be separated using cardboard boxes, for example. Where this is the case, the uppermost layer must always be the earlier batch, which should be labelled accordingly
- Delivery units must be identified with a goods label on the basis of "VDA label 4902", including batch information (Field 16) and also displaying barcode 39. The supplier must ensure that the data can be read automatically



7. References

VDA Volumes

VDA Volume 1	Documentation and Archiving
VDA Volume 2	Quality Assurance for Supplies
VDA Volume 3	Parts 1 and 2: Ensuring the reliability of car manufacturers and suppliers
VDA Volume 4	Quality Assurance in the Process Landscape • General • Risk Analysis • Methods • Procedure Models
VDA Volume 5	Capability of Measuring Processes
VDA Volume 6	Guidelines for Audits and Auditors
VAD Volume 6.3 P5-7	Extension of supplier self-disclosure

Further information is available under **http://www.vda-qmc.de**

8. Documents/Forms

8.1 Where can I find the documents/forms?

On the SAF-HOLLAND GmbH homepage you will find all the forms mentioned in these supplier guidelines and subsequently under **www.safholland.de - Downloads**

Forms

- Feasibility study
- Non-disclosure agreement
- Terms and conditions of purchase
- Change request for external suppliers (SCR)
- AA 112 34 0202 00 Reworking of components
- Self-assessment matrix VDA
- Supplier self-assessment
- 8D Report
- Initial sample label
- Initial sample label Design change
- Start of series production
- Special release label
- Test sample label
- Rework label
- 100% Tested

8. Documents/Forms

8.2 Appendix: Determination of the PPM Complaints Quota for Production Materials

Decision	Usage Decision	Description	Counting Method	Examples	PPM-relevant
Sorting	Sorting at expense of supplier (e.g. on SAF-HOLLAND or on supplier's premises)	Parts / Units that deviate from the specification. After sorting, a decision can be made on continued use (rejection, re-working or use with submission of application for deviation approval).	No. of parts/units to be sorted. No. of defective parts/ units after completion of sorting. For shipments returned to the supplier, the identified number of items can be reduced to the actual number of defective parts after sorting if a conclusive 8D report is submitted.	Outer diameter exceeds target value, inner diameter less than target value, surface too rough, parts unlabelled	YES
Rejection	Rejection at supplier's expense	Parts/units that deviate from the specification and cannot be reworked or approved via submission of an application for deviation approval.	No. of parts/units which are actually scrapped. For shipments returned to the supplier, the identified number of items can be reduced to the actual number of defective parts after sorting if a conclusive 8D report is submitted. With prior agreement, it is permissible to estimate PPM in which the entire batch is scrapped as the costs of scrapping are cheaper than returning it.	Outer diameter less than target value, inner diameter exceeds target value, corroded parts, mixed up screw sizes, claim for parts with low value	YES
Reworking	Reworking at supplier's expense	Parts/units which deviate from the specification and are reworked to comply with the specification.	No. of parts/units which are actually reworked. For shipments returned to the supplier, the identified number of items can be reduced to the actual number of defective parts after sorting if a conclusive 8D report is submitted. With prior agreement, it is permissible to estimate the PPM quantity in cases in which the entire batch is scrapped as the costs of scrapping are cheaper than returning it.	Outer diameter exceeds target value, inner diameter less than target value, surface too rough, corroded parts, parts unlabelled cleaning of contaminated parts	YES

8. Documents/Forms

8.2 Appendix: Determination of the PPM Complaints Quota for Production Materials

Decision	Usage Decision	Description	Counting Method	Examples	PPM-relevant
Usable	Incomplete delivery	Parts/units corresponding to the specification, but accompanying documentation or packaging (in as far as requested) is not satisfactory.	1 part/unit	Initial sample inspection report/ factory inspection certificate is missing	YES
Reservation	Wrong delivery, wrong part identification	a. Wrong deliveries caused by the supplier that have a negative impact on productivity. b. Wrong deliveries caused by the supplier that do not affect productivity.	a. Stock is 100 % PPM-relevant. b. Regular stock and stock of incoming goods department counts the first time as PPM-relevant with one part. In the event of re-occurrence, it is 100 % PPM-relevant.		YES
Reservation/ Condition	Application for deviation approval submitted by supplier	Parts/units that deviate from the specification and for which an application for deviation approval is submitted by the supplier before delivery to SAF.	None		NO
Reservation/ Condition	Application for deviation approval submitted by SAF-HOLLAND.	Miscellaneous	No. of parts/units that deviate from the specification. The PPM-relevant quantity may not deviate from the quantity named in the application for deviation approval. A statistical determination of the PPM-relevant value is permissible where the actual number of items is unclear and if both parties agree. In the case of complaints arising in connection with re-qualification measures, the ppm-relevant quantity is limited to max. 10 provi-ded the defect is rectified by means of change inspection procedures by the next consignment or the supplier submits an application for design change.	Outer diameter ex-ceeds target value Inner diameter less than target value, surface too rough	YES

Engineering Your Road to Success

The SAF-HOLLAND Group is one of the leading international manufacturers of suspension-related assemblies and components for trailers, trucks and buses. Our innovative products increase the efficiency, safety and environmental friendliness of commercial vehicles, contribute to the success of our customers. With around 5,900 employees worldwide, we are at the forefront of shaping the future of the transportation industry.

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