Huf Group

Corporate Supplier Manual

CSM-001 Rev. 04

… the **intelligent touch** to cars

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Approval

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1 General

1.1 Business Policy

The Huf Group with its locations as a supplier to the automotive industry faces stiff world-wide competition. Our customers judge Huf quality not only by the quality of the goods supplied. The overall assessment also covers reliability of deliveries, success with R&D, response behaviour, flexibility and service. As well as meeting customers' requirements, customer satisfaction is also the result of the fulfilment of the customers' expectations.

This means that the term "Huf quality" applies to all Huf services and Huf activities which Huf, as supplier, provides to its customers. By doing so the required quality and the customer satisfaction is influenced to a great extent by the parts purchased from our suppliers.

To ensure a constant development as a supplier for the automotive industry the Huf Group has defined long-term business objectives. We regard them as being valid not only for Huf but also want our suppliers to commit to them:

Customer Satisfaction
and
Profitability

Furthermore we are committed to environmental protection which we have defined as a business objective of equal importance.

The attainment of these objectives requires a mutual knowledge of the processes and expectations relevant for collaboration. By means of this document we wish to reveal to our suppliers the relevant Huf processes and expectations as well as to ensure a quality strategy common to both Huf and its suppliers via minimum requirements of our suppliers' quality management systems.

In addition we consider the prompt information of the partner if an agreement can not be observed as a basic rule for cooperation.

1.1.1 Compliance

It is compulsory for the Huf Group to comply with legal requirements and ethical standards. We have summarised our specific understanding in a Code of conduct for suppliers, available in our Partner Portal at http://partner.huf-group.com. We expect that our suppliers commit themselves to similar regulations and that they demand comparable provisions also from their sub-suppliers.

Furthermore we expect from our suppliers that they meet also special legal requirements e.g., the handling of conflict minerals, despite of the fact if they are immediately concerned by corresponding laws or not. Depending on the meaning of

these requirements we reserve the right to characterise them as "Special characteristics" according to chapter 3.3

1.1.2 Corporate Responsibility and Sustainability

We are aware that our company bears the responsibility for its impacts on the society. In regards to our Corporate Responsibility (CR) we are integrating besides economical aspects also ecological and business concerns in the business and the business activities as well as in the interrelation with our stakeholders. In doing so sustainable action is the basis of all further considerations and the basis for the implementation of CR.

We expect a similar understanding from our suppliers. At this point it should be noted that the degree of fulfilment of sustainability requirements can be relevant for awarding contracts.

Provisions for the disclosure of business and ecological information and for the reporting about this will be respected, and we presuppose the same at our suppliers.

A special focus in the context of sustainable action is the reduction of emissions. The reduction of the absolute total emissions in the supply chains can be achieved, for example, by increasing the proportion of renewable energy generation or by measures to increase energy efficiency.
We expect our suppliers to regularly check and optimise their CO2 emissions, to pass this requirement on to their subcontractors and to report on resource consumption.
The CDP program (www.cdp.net) is a generally accepted platform for recording resource consumption. CDP is a global non-governmental organization whose goal is to make energy and resource consumption transparent and to reduce it, thus counteracting climate change.

1.2 Scope

This guideline is valid for all suppliers delivering production materials or services in these materials as well as the suppliers who have indirect influence on the product quality and satisfaction of Huf customers. This also covers supplies within the Huf Group. This guideline has no bearing on any other Huf regulation. It also does not replace the requirements of the current valid release of the DIN EN ISO 9001, QS 9000, VDA volumes, EAQF, AVSQ, IATF 16949 and other customer standards, but is a customer-specific requirement in terms of the aforementioned norms.

In addition to the standards in this manual, enhanced regulations for detailed processes will be incorporated in special regulations.

This manual as well as enhanced regulations can also be found in our Partner Portal.

2 Supplier Management

Basically the responsibility for the supplier management lies completely with the Huf Group's business unit.

Huf aspires within collaboration in partnership to agree with the supplier about a contractual basis.

Therefore right at the beginning of a business relationship we will conclude into a non-disclosure agreement.

Furthermore, the Central Function Purchasing – Supply Chain Risk Management with selected suppliers negotiates contracts which, amongst other things, covers regulations on development and labour, warranty and liability as well as indirect supplies, quality assurance issues and operating capital regulations. These may be supplemented or extended by project-specific agreements.

In this context we want to advise that the validity of the procuration at Huf is only legal for the respective functional area. Agreements with suppliers will therefore only be legal with the signature of the respective fields of expertise.

2.1 Supplier Portal

Huf maintains a supplier's portal through which the supplier must stay informed about the news, specifications, requests and his performance.

A login is required for individual applications.

For further details, see "FAQ Partner Portal".

2.2 Supplier Approval

2.2.1 Supplier Release – QM-System Requirements

The supplier's reception and release is concluded by the Central Function Purchasing - Supplier Management. For an inclusion in the supplier list the supplier has to run through the following process:

1. The supplier has to hand over a self-disclosure on the basis of the Huf questionnaire including confirmation documents (e.g., certificates).
2. The signing of a non-disclosure-agreement by both parties.
3. The submitted documents will be checked by Huf.
4. The submitted Huf contracts are checked and signed.
5. If necessary a potential analyse will be carried out, depending on both the result of the self-disclosure and also on as well as to the importance and the complexity of the product portfolio.

6. Huf decides on the approval of the supplier on the basis of the self-disclosure of the contract documents, the economic stability of the supplier, known risks and potential analysis if necessary.

The company language within the Huf Group is English. Especially International projects will be documented in English. Therefore we expect the supplier to be able to communicate in English (both written and spoken) within all communicative departments such as Sales, Quality, Development and Logistics.

2.1.1.1 QM-System Supplier for direct materials or services supplied

The supplier maintains a quality management system to IAFT 16949, certified by an accredited certification body. He will maintain and develop this system in accordance with the acknowledged state-of-the-art and requirements of the automotive industry. If the supplier does not have certification to IAFT 16949 he must at least present a certificate to DIN EN ISO 9001. In this case Huf reserves the right to carry out additionally an audit to VDA 6.3 or other customer-specific requirements with an A-grading as minimum to ensure compliance with specific automotive requirements. The costs for this higher qualification through Huf-Audits will be negotiated with the supplier. Existing audit results of other OEMs or 1st tier suppliers may be considered. Through these audits Huf will satisfy itself that the supplier is capable of meeting the requirements of IAFT 16949 within a reasonably short period.

Certificates always have a limited validity (normally 3 years). Unsolicited, the supplier must therefore send new or extended certificates to Huf. Huf must be informed immediately if a certificate is revoked or changed. Missing certificates will lead to a medium-term loss of approval at Huf and a direct blocking of new orders.

The supplier is obligated to the zero-defect-target and must continuously optimise his performance to this effect. “Zero-defects” means: no faults (complaints) and no erroneous parts. The following items must be considered when developing and implementing measures for continuous process improvement:

– Increasing the process capability by reducing dispersion
– Increasing productivity
– Centring processes
– Reducing the testing frequency
– Avoiding rework and scrap
– Complaint analysis

2.2.1.2 QM-System Sub-supplier

In his QM-System the supplier is obliged to define the management of his sub-suppliers and to obligate them accordingly. This applies to all sub-suppliers as per the supplier guidelines. The minimum requirement for the sub-suppliers should be a QM-System according to the current valid release of the DIN EN ISO 9001.

Huf may ask the supplier for supporting evidence showing that they are convinced of the effectiveness of the QM-System at his suppliers. Furthermore Huf may ask the supplier to present written evidence of his sub-suppliers' documents relating to testing and other quality aspects.

2.2.1.3 Tooling, Production and Testing Equipment from Huf

If Huf makes tooling and testing equipment available to the supplier he has to integrate them into his quality management systems as if it was his own if nothing other was agreed.

2.2.1.4 Product Safety Officer

The supplier must nominate a product safety officer and pass it on to Huf upon request. Likewise, the supplier must demand the appointment of a product safety officer in his supply chain.

2.2.2 Supplier Portfolio

For each material group in the supplier portfolio, the Huf Purchasing Department defines the approved suppliers with whom Huf intends to work in future business. Important criteria for this are the performance of the supplier with regard to development, production, purchasing, his international orientation, his economical stability as well as ongoing performance. Differentiation criteria with special value for Huf will be of particular interest.

2.2.3 Audits at the Supplier and the Sub-supplier

Occasionally and with advance notice Huf will perform system audits, process audits and product audits at the supplier. The supplier is obliged to implement the measures defined and agreed during an audit. Huf reserves the right to review how these are dealt with.

Huf also reserves the right to audit sub-suppliers together with the supplier once a date has been agreed, especially if the subcontractor has caused any quality fall-offs.

In special cases, e.g., because of customer complaints, the audits may be carried out with the involvement of our customer.

In such a case the supplier is not released from his obligations towards Huf and the sub-supplier. It is his task to define together with his sub-supplier the necessary quality assurance actions and to monitor their efficiency. Huf will provide functional assistance if desired.

Reasonable restrictions taken by the supplier to safeguard his trade secrets will be accepted.

2.3 Awarding of Contracts

As preparation for the awarding of a contract the Purchasing Department will normally issue an inquiry via an Internet-platform. Huf expects its suppliers to provide a certificate of production, price optimisation proposals and measures to increase robustness. Similarly, the supplier must point out upstream potential risks from the supplier chain, including potential improvements.
In particular, the supplier must examine the long-term availability of electronic components or assemblies upstream. Where there are no other requirements, the following maturities may be assumed: 7 years of serial deployment + 15 years of spare parts.
In doing so, the supplier takes into account the guidance provided by the Huf Group's logbook (CLM 001). After receipt of the respective offers (incl. confirmation of feasibility) and after any possible clarifications and negotiations have been completed the Purchasing Department of the relevant Huf business unit will decide in coordination with the person responsible for the respective regional portfolio (Regional Purchasing Manager) about the awarding. Here the following criteria are of prime importance:

– The offer must be competitive and suitable.
– The supplier must be approved and part of the supplier portfolio
– The supplier must not be classified as “New Business Hold” in the supplier monitoring.

The degree of compliance with sustainability requirements can also be relevant for awarding contracts.

The supplier gives Huf the respective production location for own production as well as that of sub-contractors, if applicable.

2.4 Supplier Monitoring

The performance of the supplier will be monitored and evaluated monthly and documented by the procuring Huf Company. The evaluation in the Huf Group is based on common standards. The following criteria will be used:

– Logistics (e.g., handling of plan schedules, handling of advanced shipping notes, labelling, special transports, incorrect deliveries, delivery performance)
– Quality (e.g., delivery quality, number of complaints, handling of complaints)

The individual criteria will lead to a traffic light evaluation (green, yellow, red) and signifies the relevant Huf Companies’ level of satisfaction with the supplier

The results of the evaluation will be provided via the partner portal to the supplier accordingly. They will also be the basis for any supplier development activities deemed necessary. The supplier is obliged to check the performance monthly without any notice from Huf.

2.5 Escalation procedure

As part of supplier monitoring, Huf has established an escalation procedure, which means that based on the supplier performance different reaction take place, regarding significance of an incident by Huf or his customer.
The supplier can take the current escalation level from his monthly performance overview in the Huf portal.

The escalation levels are structured as follows:

Level 0	Normal performance
Level 1	Warning, further escalation threatens if no improvement occurs
Level 2	Deviation requires a process audit or other action
Level 3	Supplier development, signs of failure of the supplier's QM system (e.g. Errors over several products, repeat errors ….)
Level 4	Top Management Meeting, serious failures, strong disruption of cooperation, involvement of the management of the supplier required
Level 5	New Business Hold, the supplier is blocked for all new orders of the Huf Group

Level 0-3 are location-related performance indicators, from level 4 the central supplier management is involved. Escalation levels 4 and 5 are group-wide.

2.6 Supplier Development

Huf's performance depends greatly on the performance of its suppliers. Therefore Huf expects to see improvements at the supplier and supports relevant measures or programs. In individual cases Huf itself will initiate such activities after recognising and identifying room for improvement. This will particularly apply to those suppliers with negative figures in the monthly analysis. Huf will then initiate the following process:

1. A target for the supplier development process must be agreed between Huf and the supplier.
2. Measures to achieve this target have to be defined in a detailed action plan and agreed with the supplier. Defining measures allows for target-orientated monitoring of the target achievement.
3. The supplier is responsible for the implementation of the agreed actions and, using the measuring criteria, updates Huf regularly on the level of implementation.

The process will be finished when the target is achieved and this is confirmed by Huf.

3 Product and Manufacturing / Process Development

3.1 Project Management

Huf follows the approach of involving the suppliers as soon as possible in new projects and asks the supplier to use a structured project management at his own responsibility in the planning stage for products, workflows and other trans-sectoral tasks. Upon request Huf has to be allowed to see the project timetable.

Each Huf and the supplier have to nominate a project manager; the contractual partner must be notified of any change.

If the customer asks Huf to use certain advanced quality planning instruments (e.g., forms, programs or systems) the supplier has to use them if requested to do so by Huf.

3.2 Specifications

As in the offer phase, especially during and after the awarding of the contract Huf has to make complete details of product or other specifications available to the supplier in good time. On the other hand the supplier has to check all documents immediately upon receipt to ensure that they are complete and consistent. Huf must be advised of any discrepancies.

If no objections are raised it will be deemed that the supplier has accepted the specifications.

Specifications are increasingly being sent by electronic means. This applies particularly CAD-Data. In accordance with our security guidelines the documents are encoded before being sent.

3.3 Special Characteristics

Special characteristics demand special attention as deviations from these characteristics may affect, most notably, the product’s safety, durability, assembly capability, the function or the quality of successive production or assembly processes or may even contravene legislation.

Huf defines these characteristics and/or they result from the risk analysis of the supplier. The supplier is expressly obliged to work actively on the selection and definition of the special characteristics and the security-relevant attributes if necessary. The special characteristics have to be marked in all relevant product and process documents e.g., drawing, FMEA, risk analysis, working plans, test plans and production control plans.

The presentation of the special characteristics in the drawings is described in the Huf norms:

– Characteristics with special proof / parts with special requirement for documentation: see HN 613 “Identification of features for mandatory documentation in drawings”
– Functional and process relevant characteristics: see HN 615 “Marking of testing, capability and SPC features”

For all special characteristics marked on the drawings a complete verification management of the requested process capabilities and inspections as well as of the delivery documents is necessary.

3.4 APQP Process

Awarding of contracts to suppliers and the subsequent product and manufacturing process development at the supplier are normally part of an extensive project at Huf and its customers. Because of the manifold dependencies it is of utmost importance for Huf and its project management to gain an overview of all important steps at the supplier and to intervene with revisions if necessary.

For this Huf uses the internet-based IT-tool APQP (Advanced Product Quality Planning) where all active suppliers will have access to their protected area inside the partner portal. Following an order transaction the responsible buyer will initiate an APQP process and inform the supplier by email about this. He will classify the affected part as follows:

Category 1:
The product design is developed by the supplier.

Category 2:
The product design is developed by Huf, but the part is classified as critical.

Category 3:
The product design is developed by Huf and the part is classified as non-critical.

Furthermore he will define important milestones and the reporting frequency consistent with the project timetable.

The supplier has regularly to check the corresponding criteria and deliver an adequate status report (The internet application includes a detailed explanation):

In addition if problems arise or deadlines are moved, Huf expects to be notified in writing immediately.

Huf will verify the information of the supplier to ensure that Huf’s requirements are met. If necessary we have to initiate suitable measures e.g., process audits.

3.5 Logistics

The supplier has to ensure that the products will remain to specification during his internal processing until they are shipped to the final destination. Therefore he has to consider requirements for labelling, handling, packaging, storing and protection.

The supplier also plans suitable means of transport to avoid damage during the manufacturing process until the risk has passed.

In any case the Corporate Logistics Manual of the Huf Group (available in our partner portal) shall apply. provided that no different agreement was expressly entered into.

3.5.1 Contingency Planning

For processes where disturbances may lead to an interruption of the supply capability, an emergency supply strategy must be defined and sent to Huf as a contingency plan. This is especially relevant for machines, tooling and equipment which are available non-redundant. Practicable safety stocks have to be negotiated between Huf and the supplier.

3.6 Prototypes

For development and testing of our products only top-quality parts to specification are used, therefore knowledge of actual values of the product characteristics is necessary. Essential process changes during the production of the prototypes have to be notified to Huf in advance. Additionally the product characteristics defined as per Huf Standard HN 615 “Marking of testing, capability and SPC characteristics” must be 100% checked and documented in a test report by the supplier for prototypes and pre-series shipments, until the sample submission of the purchased part is approved. If necessary Huf will arrange an enlargement of inspection and an extension of the documentation by additional characteristics with the supplier. In some cases Huf will also demand a confirmation of the process capability.

The documentation has to be assignable to the parts, i.e. the actual state of the supplied parts must be easy to comprehend at all times. An appropriate marking of the parts, the packaging units, the packets and the delivery documents has to be ensured. Any guidelines of the Huf Companies have to be considered.

3.7 Tool Release

Tool release at the supplier results from Initial Sample Inspection with sample parts produced under series conditions.

Tools ordered by Huf are marked as the property of Huf unless specified otherwise. Huf also acquires the tool design data and other components included in the price, e.g., specific software including source code.

3.8 Product-/Production Release – Initial Sample Inspection

Initial Samples are products which are produced and tested under series conditions (machines, plants, operating and inspection device, processing conditions).

3.8.1 Reasons for Initial Sample Inspections

An Initial Sample Inspection is generally required in the case of:
– New product
– Change of part, material, process or tool
– Changes to drawings or specifications
– Relocation of production
– Change of sub-supplier
– No supply for more than one year
– Deviations from requalification

A sample submission may also be necessary, if as result of the quality supplied and the extent of quality issues, Huf asks the supplier to submit new proof that he is able to supply products which conform to specification.

3.8.2 Standard Requirements

As the customers and projects are from different countries Huf normally requires the sampling procedure to be based on Production Part Approval Process (PPAP) and in English.

Range and kind of documentation depend on the submission level according to the attached chart. This will be notified to the supplier within the order and is valid for later initial sampling initiated by the supplier, too.

By numbering of the first samples and a suitable reference of the test results to the drawing characteristics the traceability has to be ensured.

3.8.3 Process of Initial Sampling for Serial Production

Normally Huf initiates the initial sampling process with the order. This also indicates the nature and extent of the initial sampling.
The initial sampling indicates the conformity of the supplied products as per the order and the suppliers present this to Huf without any deviations from the standard requirements are noted on the corresponding order. The supplier takes into account any activities necessary to achieve the requirements.

3.8.4 Material restrictions

It is a worldwide goal of the environmental legislation of minimizing negative environmental influences from cars throughout their total lifespan. For example the use of diverse metals is prohibited.

To simplify the use of the varied legal regulation in terms of substances, the automotive industry created the Global Automotive Declarable Substance List (s. www.gadsl.org). Huf treats the specified restrictions on substances and the duty of declaration in this list as binding and requires the compliance also from its suppliers.
Furthermore the substance restrictions according to the EU directive 1907/2006 (REACh) have to be considered. These substances must be avoided in new developments. If this is technically not feasible a consultation of reach@huf-group.com is required.
In addition for other legal developments (e.g., TSCA from the US), the supplier must comply with due diligence in order to avoid any subsequent materialisation.
Legislative material discontinuation must be immediately notified via the following email address: riskmanagement@huf-group.com / reach@huf-group.com

3.8.5 International Material Data System - IMDS

The automotive industry has created the International Material Data System (www.mdsystem.com) for the simplification of the appropriate documentation of the ingredients. Huf requires its suppliers to input the necessary data, acoording to the parts revision, directly into the internet-based IMDS-System (www.mdsystem.com). This should be done as quick as possible. We will inform our suppliers if our customer requires the IMDS data entry within a fixed period. A correct IMDS data entry is the prerequisite for product release.
Please also note the Huf Corporate Supplier IMDS Manual (CIM), which can be viewed in our partner portal at http://partner.huf-group.com.

4 Series Production

4.1 Logistics

4.1.1 Storage, Preservation and Transport

Raw parts, purchased parts from sub-suppliers and in-house production parts must be stored, handled and transported in a manner that prevents damage and contamination (also from packaging). If preservation is required, this must be discussed and agreed between the supplier and the Huf receiving plant. To avoid batches from being mixed and to allow traceability, product must be stored and shipped on a “first in first out” basis and with the batch number marked on the container.

4.1.2 Electronic Data Interchange (EDI)

Huf sends delivery schedules and receives delivery and transport information mostly via EDI. Huf wants to extend the paperless communication in general and specially the Electronic Data Interchange. For this reason we expect the willingness of actively support from our suppliers.

4.2 Supplier Quality and Product Reliability

In general series production deliveries are only allowed if the initial sample submission was successful. The supplier is responsible for supplying top quality parts meeting specifications. Huf expects from its suppliers that the series supply corresponds to the approval level of product and process.

The supplier checks according to the control plan using methods suitable for quality monitoring (SPC). Test and measuring equipment must be verifiable capable of checking the characteristics defined in the production control plan. Huf reserves the right to approve the supplier's control plan. If so required Huf must be allowed access to all quality records according to the control plan.

If proof of process capability is required, this must be reported on regularly as discussed and agreed with Huf. If the process capability of cpk ≥ 1,67 is not achieved, the supplier must implement improvement actions immediately. A 100% check on the respective characteristics is required until it is possible to provide proof of process capability. If agreed with Huf, the temporary use of additional or other testing methods is permitted.

4.3 Incoming Inspection at Huf

Huf checks the incoming goods only in respect of quantity, identity number and obvious transport damages as well as checking that agreed test reports have also been received.

If a defect is found, Huf informs the supplier immediately. Defects not found during the Goods In inspection will be notified to the supplier as soon as they are detected during normal business.

4.4 Identification and Traceability

The supplier is obliged to mark the product using suitable means so that it can be clearly identified during the whole product process from raw material to delivered product. This requirement also applies to the product status in relation to monitoring and measurement requirements. The labelling on packed goods must also be readily identifiable during transport and storage.

Markings directly on the product itself will be specified between Huf and the supplier.

In the event of damage or loss, traceability right back to the raw material serves to minimise damage. Traceability should be carried out in a practicable way incorporating production processes at the sub-supplier.
A clear link between products and their production batch as well as their inspection batches incl. quality records must be ensured.
Mixed batches are basically not permitted. In the case of deviation or non-specification products it must be possible to restrict the number of affected parts.

Beyond the batch restrictions a traceability is generally expected back to the production day.

Especially for products and characteristics where special proof is required, the securing of the traceability beyond the batch restriction must be guaranteed right back to the production day/shift. Sub-suppliers must also be involved.

4.5 Deviation Concession

In exceptional cases Huf permits the supplier to deliver products which are not to specification. This deviation concession, which must be in writing, always relates to a defined delivery period, to a defined volume of parts or to a defined batch. Deliveries with deviation concession must be labelled clearly with reference made to the deviation concession granted.

The supplier must always submit the application for a deviation concession to Huf in good time before scheduled delivery. Delivery of non-specification products without deviation concession is not permitted and will lead to a complaint.

For a deviation concession to be granted, there must be strict compliance with the following conditions:
– The deviation must not affect the function or performance. Data and test results which confirm this must be available at Huf.
– The deviation does not significantly affect sub-processes or subsequent production processes including assembly processes at Huf's customer.
– Measures are introduced by the supplier to prevent the recurrence of this deviation.

The granting of a deviation concession by Huf does not mean that the supplier‘s products are free from defects with regard to the approved deviation. If defects occur the liability claims of Huf follow the contractually agreed specification.

4.6 Faulty Products

A “faulty product” does demonstrably not meet the defined requirements. In this case the product is defective.

The supplier informs Huf immediately via self-notification if defects and suspect deliveries are found. Huf also expects to receive advance information if it is likely that quality agreements reached cannot be met. The supplier must ensure timely replacements for defective or suspect goods to prevent production downtime or line stoppages at Huf.

As soon as a defect appears or Huf submit a complaint, the supplier initiates a root cause analysis and implements consequential corrective actions. If defective products have already been shipped to Huf, the supplier is entitled to an after-fulfilment. If Huf´s complaint so requires, the supplier has to immediately implement containment actions In any case the deadlines provided by Huf have to be met. Otherwise and/or in particularly urgent cases Huf may pass on the necessary measures at the supplier's expense (e.g., costs for rework and sorting) to limit damage. The supplier must immediately inform all Huf Plants which are affected by the NOK shipments.

The supplier is responsible for carrying out an immediate check on suspect stocks at Huf and at his own premises. Therefore the supplier has to ensure that only qualified and trained personnel are assigned to do this. Checked goods must be clearly marked.

For every issue raised by Huf, regardless of where it is discovered (incoming inspection, production / assembly process, customer) Huf requires that the supplier employs the 8D method to ensure a structured problem-solving process. A 5 Why and a Ishikawa analysis have to be submitted upon request. If possible Huf makes the rejected goods available to the supplier. Huf requests that the 8D report is submitted within the agreed time. The supplier defines, verifies, implements and validates the required corrective actions and verifies the effectiveness. Huf reserves the right to verify the corrective actions on site at the supplier.

In addition, Huf also reserves the right to ask the supplier to carry out additional 100% checks in line with Control Shipment Level 1 or 2. The trigger could be the extent of the respective complaint or repeat complaints.

In Control Shipment Level 1 (CSL1), Huf requires 100% checks for a defined period of time depending on the action taken by the supplier to permanently eliminate the issue. The type and extent of the checks as well as the decision regarding the use of an external service provider is done by the supplier after consulting Huf.

If the quality issues are very serious or if the supplier was not able to monitor and eliminate the problem during CSL 1, Huf requires the supplier to implement Control Shipment Level 2 (CSL2). In Control Shipment Level 2, Huf provides the supplier with guidelines regarding duration of the 100% checks together with information on type and extent. The additional checking is carried out by an external service provider either specified by Huf or approved by Huf if the service provider was proposed by the supplier.

4.7 Product/Process Changes

The procedure for approval of product and process changes is, in principle, equivalent to the Initial Sample Inspection procedure. The relevant submission level depends on type, extent and significance of the change and is coordinated by Huf and the supplier. In any case, the reason for the sampling must be stated on the PPAP documents.

4.7.1 Product/Process Change by Huf

If Huf or our customers request product or process changes, Huf sends an order to the supplier. Huf sends the supplier respective specifications for manufacturing feasibility assessment and quotation preparation.

4.7.2 Product/Process Change by Supplier

Product changes can, for example, be changes of the further product development for quality improvement which has been initiated by the supplier.

Process changes are as follows (list is not exhaustive):
- Production process change
- Production flow change including local relocation of production equipment
- Change or replace of production equipment and tools
- Change in test procedure or use of different test equipment
- Relocation of production lines or tools
- Change of the production location
- Change of sub-suppliers
- Use of alternative materials or components

If the supplier requests product or process changes, Huf must be informed in writing at least six months before implementation.

The supplier and the relevant purchasing department discuss whether the intended change is permitted and which approval requirements have to be met. The minimum requirement, in any case, is always a cover sheet submission which documents the change.

Product / Process changes incl. changes at the sub-supplier may only be made in the series production process, if the approval requirements discussed beforehand with Huf are met.

The supplier is wholly responsible for direct or indirect damage to the product, if product/process changes are made which have not been agreed with or not approved by Huf.

Should Huf incur costs owing to the changes initiated by the supplier, it shall be borne by the supplier. In particular, expenditure on the modification of documentation or testing and qualification costs resulting from the release of the product.

4.7.3 Product or raw material discontinuations

In the case of discontinuation of electronic components, assemblies or raw materials such as plastics or varnishes (PTN process), Huf must be informed as soon as possible and at least 15 months before discontinuation. This information must be sent in writing, along with the Huf part number to the following email address:

riskmanagement@huf-group.com

This does not relieve the supplier of its supply obligation. The supplier will take appropriate safeguards at his expense to meet this supply obligation. Planned quantities can be requested by Huf.

4.8 Requalification

The supplier must ensure the product-related compliance with requalification requirements to the current valid version of the IAFT 16949. The product must be completely checked as per with Huf agrreed production control plan in terms of dimensions and functions. The overall results must be made available to Huf immediately at the end of the requalification.

4.9 Preventing and Predictive Maintenance

To safeguard supply capability at any time, the supplier must develop and maintain a preventive maintenance system for the production equipment. Maintenance frequency must be specified and implemented by the supplier on a consistent basis.

5 Risk Management

Huf expects its supplier to ensure active risk management in relation to its own processes and subcontractors involved with the aim of ensuring a smooth production and supply process. These include, among others, the conclusion of appropriate contracts with suppliers and knowledge of the supply chain, in particular the production sites of materials.

As part of the product development process, potential risks in the supply chain should be identified and measures taken if necessary.
Huf must be presented with such information upon request.

In addition, Huf must be alerted about any expected disruptions to the supply chain, using the following email address:

riskmanagement@Huf-group.com

6 Product-specific Software

Suppliers supplying products or components with integrated product-specific software must have a well-maintained quality assurance process of their products in place (e g. analogue automotive SPICE). Upon request, Huf must be presented with self-assessments.

6.1 ERRATA related electronic products

The supplier has to inform about known failure constellations in typical used applications in form of an “ERRATA SHEET”.
Huf expects the supplier to automatically notify the product manager in Huf Supplier Management.

7 Retention Periods and Archiving

In general documents, quality records and reference samples must be retained for 15 years.

The archiving period for specifications as well as for records and documents incl. reference samples for process and product approvals (e.g., PPAP) begins with the delivery of the last product, which has been described in these documents, or after a document has been updated.

For quality records from the production phase the archiving period begins with the delivery of the product to which the records for the product and relevant process relate. The archiving period for spare part quality records after series phase-out begins once spare part production has ended.

With regard to the statutory periods of limitation for product liability claims it is recommended that documents be retained for longer periods (up to 30 years), especially Documents with Special Archiving (DwSpA).

DwSpA are defined as per VDA Volume 1 „Quality Evidence – Guidelines for the Documentation and Archiving of Quality Records“ with regard both to statutory provisions (e.g., for safety critical characteristics) and customer and/or Huf requirements. All DwSpA are identified in Huf drawings to Huf Standard HN 613 “Identification of characteristics for mandatory documentation in drawings”.
These regulations do not replace any individual agreement between the supplier and Huf or any legal requirements.

Archive areas must be safeguarded against unauthorized access and must provide adequate protection from water and fire. All relevant requirements to VDA Volume 1 „Quality Evidence – Guidelines for the Documentation and Archiving of Quality Records“ must be taken into consideration.

8 Special Guidelines – Huf Standards

– HN 613 „Identification of characteristics for mandatory documentation in drawings”
– HN 615 „Marking of testing, capability and SPC characteristics“

9 List of Literature

Standards
– IATF 16949
– ISO 9001
– VDA Volume 1, 2, 4, 5, 6 (Part 1, 3, 5)
– QS 9000

Internet Links
– www.ts16949.com
IAFT 16949 Information
– www.qs-9000.org
QS 9000 Information
– www.vda.de
VDA Information
– www.vda-qmc.de
VDA and IATF Information
– www.aiag.org
QS 9000 and IAFT 16949 Information
– www.fiev.fr
FIEV Information
(French Automotive Manufacturer)
– www.anfia.it
ANFIA Information
(Italia Automotive Manufacturer)
– www.smmt.co.uk
SMMT Information (Great Britain)
– www.mdsystem.com
IMDS Information
– www.gadsl.org
GADSL Information

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