QUALITY ASSURANCE AGREEMENT
Automotive

1. Foreword

This quality assurance agreement (QAA) defines the quality control requirements of suppliers. Thus, the REHAU QAA is a set of rules for assuring the quality of materials used in automotive industry in consideration of the relevant specifications and directives (e.g. VDA volumes). By way of applying the zero-fault principle to the supply chain, the fundamental interfaces, specifications, resulting tasks as well as reflection of standards, laws and end customers' requirements are stipulated.
The supplier ensures that appropriate REHAU requirements are understood and implemented within the supply chain along to the actual production location.
Case-specific changes or additions to the REHAU QAA are possible on agreement between the responsible commercial specialist according to the TDS and the supplier.

2. Quality management system

The supplier undertakes to maintain a certified quality management system (QMS) in accordance with ISO 9001 and to consider the requirements of IATF 16949 in their relevant valid version. The ultimate objective of the continuous improvement of the supplier's quality management system (QMS) is the certification according to IATF 16949. Further, the requirements of VDA shall be considered.

The supplier informs the responsible commercial specialist without delay of non-compliance or loss of a certificate.

In case of mergers, acquisitions or affiliations and similar activities that might affect the structure of the company or its organizations / plants, the supplier shall verify the QM system and inform the responsible commercial specialist without delay of the circumstances and the result of the verification.

3. Auditing / checking the QM system

REHAU has the right to carry out audits of the supplier and any sub-suppliers after timely announcement. REHAU reserves the right to carry out audits even in cases where certification has already been obtained from third parties. The supplier provides all necessary documentation / data and allows access to all areas that are relevant to REHAU. Audits and evaluation shall preferably be based on VDA specifications (e.g. process audit VDA 6.3) in connection with IATF 16949. If required, improvement measures will be agreed with the supplier, indicating the responsibilities and the dates by which completion is required. The effectiveness of the corrective measures may be monitored in a follow-up audit.

The supplier is responsible to carry out self-assessment audits. Self-assessment audits serve the supplier as verification relating to compliance with all requirements (e.g. IATF 16949, customer- and product specific requirements).
Self-assessment audits need to be performed from qualified auditors.
Results from self-assessment audits including improvement actions may be requested by REHAU in accordance with the supplier in specific cases (e.g. cluster of claims) and need to be presented upon request. As minimum the following self-audits are agreed:

- Product audits according to VDA6.5 for every product manufactured during a series production (product groups) once per year.
  This may also be part of the layout-inspection and functional testing.
- Process audit according to VDA6.3 for every product manufactured during a series production once under series conditions as well as during the development phase (P2-P4).

REHAU will treat gained information from audits or self-audits confidential.

4. Supplier evaluation / target agreement

The supplier is obligated to deliver fault-free products and services (target: zero-fault). If no specific targets are agreed (e.g. in the technical delivery specifications purchasing TDS, framework contract, agreements for ramp-up management) the target is understood to be zero ppm.

A specific agreement relating to ppm values does not imply a quality level that is accepted by REHAU. The agreement on quality targets and measures does not limit the supplier's liability for warranty claims and claims for damages by the customer as a result of defective deliveries. Defective deliveries / services will not be accepted and will be charged to the supplier.

Ongoing supplier performance is one of the factors considered in the supplier evaluation process. When placing and extending orders, suppliers that are assessed as efficient under the supplier evaluation process will be preferred.

If quality targets have been agreed (ppm targets for instance), then escalation shall ensue in case that targets are not met. In this case the supplier is obligated to agree on and implement an action plan setting out corrective measures for stabilizing the supply and for sustainable improvement of performance.

5. Sustainability, environment and safety

The supplier ensures compliance with all the relevant statutory regulations relating to industrial safety and environmental protection during the production and handling of the products / services to be supplied. This applies to required materials, machinery, equipment, workplaces, storeroom organization and transport service.
Responsible handling of natural resources must also be ensured. Health-promoting measures at the workplaces are to be supported.

6. Outsourcing to third parties / sub-contractor management

If services are transferred or outsourced to third parties, the supplier is obligated to transfer the quality assurance stipulations in adequate form to the sub-contractor and to satisfy himself verifiably of compliance with the stipulations. This includes providing the responsible commercial specialist with a supplier list, conveying customer-specific requirements (incl. end customer), continuous traceability of data and documentation as well as other specifications according to the supplier's assessment.

If required and after timely announcement, the supplier shall allow for viewing of the assessment documentation and audits of sub-contractors.

If the supplier intends to change sub-contractors, he must notify the responsible commercial specialist of this in good time in order to agree the required assessment and release processes.

7. Development

In the case of product- and / or process- development, the supplier shall employ on its own established methods (as appointing the project management, milestone plans, advanced product quality planning for prototypes / pre-series / series, associated monitoring mechanisms). The responsible technical specialist is to be kept informed of the development progress according to the TDS. REHAU reserves the right to check / inspect the development work also on-site at the supplier.

Series delivery may happen only after release in writing from REHAU (see Sampling).

8. Invest / tool-kick-off:

Before invest or kick-off of series-tools the supplier shall compare the binding data / drawing / models and shall request a written release from REHAU.

9. Advanced Product Quality Planning

The supplier is obligated to perform an advanced product quality planning under consideration of suitable methods (e.g. APQP, VDA 2, maturity level assurance). The advanced product quality planning needs to start at the earliest date.

The supplier ensures with actions and usage of suitable risk analysis (e.g. FMEA) on its own responsibility throughout all project phases that all requirements for the products are fulfilled and the quality goals are met. A process for handling the

findings gained, e.g. from recall campaigns, audits, field warranty claims, complaints etc. must be implemented in the sense of “lessons learned”.

The supplier is responsible for planning and determining the scope of the tests (characteristics, number of random samples, capability parameters etc.) under consideration of statistic methods for quality assurance. In individual cases (e.g. risk classification for products according to the TDS), the scope of inspections can be stipulated by REHAU (e.g. in the TDS). The series production accompanying inspections defined with advanced product quality planning must be suitable for verifying the conformity of the products with the specifications at any time.

If no special characteristics requiring statistical process control and associated capability limit values (e.g. in the drawings, TDS) are specified, the supplier shall be responsible for selection and assessment of special and for the intended use essential product characteristics and process parameters.
The required and continuous identification of special characteristics in relevant documents (e.g. drawings, technical documentation, FMEA) is the responsibility of the supplier.
For special characteristics the short-term or long-term capability study needs to be provided. If the capability for a special characteristic cannot be shown with a capability study proof needs to be presented via secondary characteristics or a 100% inspection needs to take place.
Production processes must include methods to avoid errors (e.g. functional check of equipment, error simulation).

During the advanced product quality planning the Supplier prepares a measuring plan and agrees it with REHAU on time.
As part of the test equipment planning, the Supplier defines its needs of test equipment on its own responsibility.
The supplier shall develop test equipment concepts under consideration of special characteristics and present them to REHAU. Gauges and part-fixtures are to be discussed and need to be released by REHAU.

Upon request the Supplier shall provide evidence proofing test / inspection planning documents to REHAU (e.g. control plan for prototypes / pre series / series, capability studies).

10. IMDS

In the case of products intended for EU member states the supplier shall confirm compliance with all relevant EU directives (e.g. REAHCH) associated with material composition.
All data on the composition of the supplied products is to be entered into the IMDS (www.mdsystem.com) under REHAU AG + Co, company ID 210. Target for an approved IMDS entry by REHAU is at least 4 weeks prior to the agreed sampling date.
In case that national directives and stipulations are applicable, additional to EU directives, the supplier has to consider these regulations and shall agree a way of necessary data-exchange with REHAU.

11. Packaging / identification

Packaging and corresponding identification for high-quality delivery, treatment and traceability need to be proposed and presented by the supplier on its own responsibility if not provided (e.g. drawing, TDS). Adjustment and release for packaging and identification take place within advanced product quality planning and sampling.

Materials and corresponding packaging need to be marked with the part-change-level if technically possible and commercially acceptable.

If the supplier considers that further information are needed for the purposes of tracing or limiting any defective production batches and consignments, it needs to be agreed with REHAU.

Any changes the supplier plans to make to the agreed specifications for packaging and identification require consultation with and approval of REHAU at an early stage (also see sampling).

12. Sampling / PPAP

The formal sampling process serves for technical verification of degrees of readiness and as proof of suitability for bought-in products / provided services.
Before the start of serial delivery, initial samples based on the product and process specifications must be submitted to the responsible technical specialist.

Sampling is based on the specifications of VDA 2 or PPAP process. The documentation has to be presented in German or English language.

Details / requirements for sampling (e.g. submission level / number of samples / forms to be used / file formats) are specified during the sampling coordination discussion with the supplier.

The supplier must assess the effects of the changes prior to implementation (e.g. measures for validation, complying with customer requests).
If a change of the technical standards / specification results in a development change to the product/process, a statement regarding the implementation of the change in form of a feasibility study must be issued within 10 working days of receipt of the notification.

Every type of change made to components, manufacturing process or manufacturing place, which might affect the agreed specification or the product quality, is to be communicated with a sampling process. The execution and scope of new sampling is to be agreed with the responsible technical specialist at an early stage.

If the supplier intends or foresees that products supplied will no longer be available, it must be communicated to the responsible commercial specialist at least 9 months in advance in order to agree required measures (e.g. sampling of alternative products).

Require insufficient or incomplete PPAPs from the supplier special efforts at REHAU (e.g. rejection of customer-PPAP caused by insufficient supplier-PPAP) these special efforts might be charged to the supplier after information and chance of reaction.

13. Protection of quality performance at preseries and series

The supplier is obligated to record the quality assessments required for the implementation of and the compliance with the agreed specification in an agreed format and to verifiably safeguard it by means of suitable documentation / data control (e.g. control plan, inspection protocols).

The entire production process is to be monitored. The supplier ensures verifiable the stability of the production processes for the entire production time with suitable process control or monitoring for not stable processes. At noncompliance of required capabilities a 100%-check of special characteristics needs to take place.

The control of the production needs to be done with suitable inspection methods and measurement equipment.
The dimensional stability is checked using CNC coordinate measuring system commencing with the first off-tool part. Alignment is based on RPS specification.

Upon request the supplier shall provide evidence proofing documentation / data for quality at series condition (e.g. Control Plan, capability studies) on a case-by-case basis.

The product quality is to be certified on request. Requested characteristics, required level of proof and way of providing the data (e.g. attachment of the certificates / inspection certificates for each lot / delivery) will be agreed in the TDS.

If the supplier notices any quality deviations in products / services or suspects any quality deviations in products / services that have already been delivered / supplied, the responsible technical specialist must be informed immediately and further actions will be agreed in order to minimize potential subsequent losses.

If in case of usage the materials a risk for life and limb cause by a product failure cannot be excluded the supplier must avoid faulty deliveries with its utmost endeavor.

14. Layout-inspection and functional testing / Requalification

The supplier agrees to perform a “layout-inspection and functional testing” / requalification test (complete measurement of all product dimensions shown on related specifications) at regular intervals, annually unless specified otherwise in the TDS. The result of the “layout-inspection and functional testing” / requalification test will be communicated by the supplier upon request.

15. Traceability, documentation and archiving

The supplier is responsible for ensuring suitable archiving and traceability of the relevant documentation (quality related specification and records). The basic filing period is at least 15 years.

In the case of products with risk classification (in accordance with the TDS), the minimum filing period is 15 years after the last order.

A complete part-history with documentation of the change level, reason for change and timing of change needs to be prepared. The deliveries of changed parts, reason for the change and object of the change have to be agreed for documentation within the part-history.
Changes at parts (e.g. material, geometry, part-adjustment) or process lead to a rising of the change level which has to be documented clearly within the part-history. The documentation of the change level needs also to be marked at the parts (if possible).

Upon request, the supplier grants inspection of the relevant documentation.

16. Goods inward inspections at REHAU

The supplier is liable to provide REHAU with defect-free deliveries. REHAU therefore strives to minimize goods-inwards inspection. Unless agreed otherwise, goods-inwards inspections are designed merely to check identity and quantity as well as to identify any obvious transport or packaging defects. REHAU has no obligation to carry out more detailed inspections.

The results of goods-inwards inspections and delivery performance are factored into the supplier evaluation process (see above).

17. Complaints

In case of a complaint about products delivered / services provided, the supplier shall provide REHAU with an initial written response including immediate actions for handling the complaint without delay, at the latest within 1 working day following the notification by REHAU. The supplier shall provide REHAU with a written interim report including short-term actions for handling the complaint at the latest after three working days in the form of an 8D report.

Unless agreed otherwise in particular cases, the supplier provides a supplemental / final 8D report to REHAU latest two weeks following receipt of the complaint.

In case of deadlines for written responses not being met by the supplier, REHAU reserves the right to undertake immediate actions (e.g. sorting or return of complained goods) even without the explicit agreement of the supplier in order to minimize potential subsequent losses (e.g. line stoppage / production interruption, e.g. at the OEM).

The supplier applies suitable methods (e.g.5-why method, Ishikawa diagram) as part of the cause analysis.
The supplier assesses the effectiveness of the corrective measures in order to avoid the possibility of repeat complaints and provides REHAU with a formal final report for 8D processing. Introduced measures resulting from complaints need to

be introduced to other production lines / products in use for REHAU if applicable preventive. In individual cases, REHAU reserves the right to verify the effectiveness of the communicated corrective measures on-site at the supplier.

The field damage part analysis process is supposed to ensure that the cause for the damage parts has been clarified and a recurrence is avoided.

18. Supplier's quality performance

If delivery performance, quality level or (justified) doubts concerning the supplier's quality assurance measures result in extra costs in the form of goods inwards inspections, further processing and market service, these costs can be charged to the supplier, once the supplier has been notified of this and has been given opportunity to respond.

If an end customer (OEM) in the automotive industry revokes a quality commendation or official supplier status, in accordance with the OEM's directives, the supplier is obliged to inform the responsible commercial specialist of this without delay (e.g. Ford Q1 revoked / Daimler Q-Help 3).

19. RQC (REHAU Quality Cooperation)

The high-quality performance of the supplier is an essential basis for REHAU success and secures sustainable the cooperative and trusted teamwork.
In case of problems with the quality performance of the supplier REHAU Quality Cooperation RQC (Doc.5470) is an accepted cooperation model which is introduced at the supplier during development and / or series delivery. It supports the supplier to achieve the stipulated requirements for quality performance.
Information regarding to RQC are available at the responsible commercial specialist department.

20. Decisiveness

In case that components of referred documents are contradictory or obsolete the other components of the referred documents persist valid.
In case of contradictory components, the specifications of the drawing shall be valid with priority.