QUALITY POLICY (QP)
SMALL SERIES / MOTOR SPORTS

CONTENTS

LIST OF ABBREVIATIONS

AIAG	Automotive Industry Action Group
APQP	Advanced Product Quality Planning
BM	Special features
BM DS	Safety-Relevant Characteristics Subject to Documentation
BM DZ	Authorization-relevant legal and official requirements
BM SC	Customer-relevant requirements and functions
CC	Critical Characteristics
CFK	Carbon Fibre Reinforced Plastics
COC	Certificate of Conformity
Cmk	Capability Machine Index (short-term capability)
Cpk	Capability Process Index (long-term capability)
DMC	Data Matrix Code
FMEA	Failure Mode and Effects Analysis
DS	Documentation required safety relevant
DZ	Documentation required certification relevant
EU	European Union
HWA AG	Hans Werner Aufrecht AG
IATF	International Automotive Task Force
ISO	International Organization for Standardization
PLP	Control plan
PPAP	Production Part Approval Process
PPF	Production Process Release and Product Release
ppk	Underlying Long-Term Data without Standard Deviation (unstable process)
Q-Support	Quality Support (Escalation Process HWA AG for Suppliers)
QM	Quality Management
QMS	Quality Management System
QS	Quality Assurance in Production and Services
QSV/QAA	Quality Assurance Agreement
REACH	Chemicals Regulation by the European Union concerning the Registration, Evaluation, Authorisation and Restriction of Chemical Substances
RoHS	Restriction of certain Hazardous Substances
SC	Special Characteristics
SFN	Series Capability Verification
SQA	Supplier Quality Assurance
SPC	Statistical Process Control
SVHC	Substances of very high concern
UGB	Corporate Code [of Austria]
VDA	German Association of the Automotive Industry
8-D-Report	Eight Disciplines (process steps) required for processing a complaint

PREAMBLE

Customer satisfaction and our products' associated perfect quality are affected, to a very great extent, by our suppliers' purchased parts. Thus, the quality capability of suppliers and their products' quality and reliability are, by definition, crucial decision criteria for contract awards. The contracting parties (SUPPLIER and CLIENT) agree that, in case of maximum competitiveness, high quality and reliability of technical products can only be realized if collaboration on a partnership basis will be improved, the Quality Management System is consistently applied and continuous improvements are made and sustainably and lastingly implemented.
This Quality Assurance Agreement is to contribute in implementing a joint quality strategy – based on standards, guidelines and sets of regulations – to ensure smooth processes between SUPPLIER and CLIENT.

The Quality Assurance Agreement presents a specific requirement by the CLIENT vis-à-vis the SUPPLIER. Matters and issues specified in this document do not present any restrictions on the indicated sets of regulations and on statutory requirements. Zero error target is to be reached by partnership-based collaboration within the entire supply chain.

PURPOSE

This Quality Assurance Agreement is a contractual instrument by means of which SUPPLIER and CLIENT amicably specify technical and organizational processes with the objective of manufacturing flawless products and delivering them on schedule and with correct quantities as well as in accordance with the product range. In this respect, jointly established measures regarding preventive maintenance and early detection of errors or defects will help significantly to keep the product's manufacturing costs low. The present Agreement includes rules regarding emergency and corrective measures in case of complaints and duties to enhance the performance of both contracting parties.

The Quality Assurance Agreement is concluded as an essential contractual document with the objective of establishing a mutual-benefit supply partnership oriented on a long-term basis. Both parties will reach "zero error targets" when the respective preliminary conditions for a product have been optimally coordinated in both the technical and the commercial area.

1. SCOPE

The following agreements shall apply for deliveries and services from SUPPLIER to CLIENT.

As far as additional product-specific agreements are required, they shall be documented. These agreements shall also be contractual components between CLIENT and SUPPLIER and additionally apply to the respective delivery contracts.

SUPPLIER shall engage its subcontractors to comply with the rights and obligations accepted by Supplier under this agreement. Upon request, CLIENT may inspect this agreement.

The parties agree that breaches against the obligations of this agreement shall entitle CLIENT – after an unsuccessful warning notice – to extraordinarily terminate effective immediately the contracts underlying the deliveries.

2. QUALITY OBJECTIVE

Customer satisfaction is the primary objective of all quality security activities. All deliveries and services to the CLIENT and/or its customers shall meet the agreed-upon and statutory requirements.

SUPPLIER and its subcontractors shall be committed to the zero error target. SUPPLIER shall continuously optimise its performance and services in this respect. This objective is aimed at through consistent quality planning and series monitoring with the priority and focus on error prevention and continuous improvement.

3. MANAGEMENT SYSTEMS OF THE CONTRACTING PARTIES

1. CLIENT is working according to the following certified management systems:

- ISO 9001 (current version)
- ISO 14001 (current version)

2. For all parts corresponding to CLIENT's A- and B-risk classification of parts shall apply that SUPPLIER works according to the following certified management systems (exceptions shall be agreed upon in writing with CLIENT):

- ISO 9001 (current version) or IATF 16949 (current version)
- ISO 14001 (current version)

SUPPLIER shall provide – at any time and without being requested to do so – written documentary proof of the management systems required by CLIENT.

4. CONTACT

According to ISO 9001 (current version), SUPPLIER shall designate a quality management officer from the top management level who is responsible for the quality and strategy policy and who shall coordinate execution of this Agreement and thus make or bring about decisions. He shall also be the contact for CLIENT at all times.

Person designated herewith _____

Email / Telephone _____

Deputy _____

Email / Telephone _____

CLIENT shall be notified, without being requested to do so, of any change of the contact.

5. SUBCONTRACTOR MANAGEMENT

SUPPLIER shall be responsible for securing the quality of the raw material used for CLIENT and of the individual parts purchased for CLIENT. This shall also include contract processing, such as heat treatment, surface treatment (e.g. galvanizing, painting, drilling, milling, lathing, etc.). SUPPLIER shall ensure that its subcontractors take suitable quality-control measures so that the quality of the products to be supplied to CLIENT is in compliance with contractual and statutory requirements. SUPPLIER shall ensure with its subcontractors that they introduce and maintain at least one quality management system in accordance with ISO 9001 (current version).

If the subcontractor does not meet this standard ISO 9001 (current version), SUPPLIER shall obtain CLIENT's permission to use the company with the CLIENT. This release shall be requested from CLIENT's responsible quality supervisor.

This shall apply for all parts which are in accordance with CLIENT's A- and B-risk classification of parts.

6. ENVIRONMENTAL MANAGEMENT

Statutory specifications and threshold values shall be fulfilled as minimum requirements for all processes and all services to be rendered. Examination results shall be made accessible to CLIENT if required by the legislature. Concerning all processes and services to be rendered by SUPPLIER's subcontractors, the examination results shall be made accessible to CLIENT upon request.

The establishment of an environmental management system shall be a medium-term objective for Supplier and documentary proof thereof shall be provided by a certificate according to ISO 14001 (current version). SUPPLIER shall make available all data required concerning Directive 2000/53/EU on End-of-Life Vehicles as well as, if applicable, Directive 2002/96/EU on Waste Electrical and Electronic Equipment. With regard to the Directive on End-of-Life Vehicles, CLIENT shall be provided with material data via the International Material Data System (IMDS). On 1 June 2007, the REACH Regulation concerning Registration, evaluation, Authorisation (and Restriction) of Chemicals entered into force in the EU member states. The REACH Regulation is to ensure that approx. 30,000 of the most frequently used substances as well as all new

substances are registered and that adequate safety data are available in this respect. Moreover, for substances presenting a very high concern (included in the SVHC category), a license for use shall possibly be applied for.

Supplier shall be in compliance with these standards.

The RoHS directive regarding the restriction of use of certain hazardous substances entered into force on July 1st 2006 in EU member states. The RoHS directive (e.g. RoHS Directive 2002/95/EU) restricts the use of six hazardous substances and thus supports the efficient recycling of products no longer used; SUPPLIER shall be in compliance with these requirements.

7. AUDITS

The following shall apply: For all parts in accordance with CLIENT's A-risk classification of parts, SUPPLIER shall perform, at regular intervals, internal process and product audits according to the standards of Volume 6 "Fundamentals of Quality Audits" Part 3 "Process Audit" and Volume 6 Part 5 "Product Audit" issued by the German Association of the Automotive Industry ("VDA").

VDA volumes shall be valid in their respectively current edition. In this respect, CLIENT shall carry out regular evaluations of its suppliers according to the following criteria:

- Audit results/certification status
- Quality of initial sampling
- Frequency of complaints from CLIENT's incoming goods department and from the further process
- Number of sorting/rework/recall actions
- Reliability in meeting due dates/quantities
- Pricing conduct / price development
- Flexibility/service
- Number of (concession) requests for deviation permits

Results of the supplier assessment/evaluation shall be the basis for possibly further contract awards.

CLIENT or auditors commissioned by CLIENT shall be entitled to determine by means of audits as to whether the SUPPLIER's quality assurance measures ensure the client requirements. An audit may be carried out as a system, process or product audit and shall be agreed upon with the Supplier in good time (at least 5 workdays) before its planned implementation. System audits by accredited certification organisations shall be taken into account in this respect.

In case of quality defects during manufacture of the product at the supplier's plant or in case of system weaknesses within operating procedures, CLIENT shall be entitled to review compliance with client requirements at the SUPPLIER's or have it reviewed by commissioned auditors. Depending on the situation, this review may be carried out as a technical talk/meeting, quality talk/meeting as well as a system or process audit and shall be agreed upon with SUPPLIER at least 5 workdays before its planned execution.

SUPPLIER shall be obligated to agree on corresponding provisions with its subcontractor which will enable CLIENT, the auditors commissioned by CLIENT and, if applicable, the end customer's agent (definition see following paragraph) to also review compliance with client's requirements at the subcontractor's.

Moreover, CLIENT shall be entitled to review, as needed, SUPPLIER's quality assurance measures with representatives of CLIENT's customers after prior coordination of an appointment at the SUPPLIER's.

While maintaining secrecy, SUPPLIER shall permit access to the areas concerned and inspection of the corresponding documents to CLIENT, the auditors commissioned by CLIENT and, if applicable, the end customer's agents.

SUPPLIER shall bear the costs incurred by CLIENT for reviews regarding quality deficiencies. Requirements with regard to the audit shall be adjusted according to the complexity and the scope of the purchased parts (A/B/C).

1. Postaudits

If a C-classification according to VDA 6.3 is effected after a process audit, an automatic placement into CLIENT's escalation stage 2 shall follow. Moreover, costs shall be due for postaudits and/or controls of measures; the following daily rates shall apply:

Germany:
One-off costs (travel costs) EUR 1,800; every additional day EUR 1,200

European Union:
One-off costs (travel costs) EUR 2,600; every additional day EUR 1,200

Intercontinental:
One-off costs (travel costs) EUR 6,500; every additional day EUR 1,200

These costs shall be settled through the performance agreement and/or billed to SUPPLIER. These cost rates shall be inapplicable in case of audit classification to A or B according to VDA 6.3 or VDA 6.7.

8. ADVANCED QUALITY PLANNING AND PROCESS FMEA

The following shall apply for all parts which are in accordance with the A-parts risk classification: SUPPLIER shall always take into account the principle of "error prevention instead of error detection. Systematic advanced quality planning shall be implemented by means of APQP (Advanced Quality Product Planning).

Moreover, SUPPLIER shall be obligated to the "zero error target" and shall continuously optimize its performance in that respect. To this end, all internal and external quality data and quality-specific costs are to recorded, analysed and continuously improved by means of efficient measures until the objective has been reached. For specific features or characteristics, the quality objectives and implementation deadlines are to be coordinated with CLIENT in the spirit of a joint improvement program.

At least the following indicated five requirements shall be implemented for these parts/components: 1) Manufacturability; 2) Quality talks; 3) Project plan / milestones; 4) Test planning and test equipment planning; 5) Preparation of FMEAs.

1) Manufacturability

The following shall apply for all components/parts which are in accordance with the A-parts risk classification:

Together with the order, SUPPLIER shall receive technical documents from CLIENT. SUPPLIER shall be obligated to indicate any documents (such as drawings, test regulations, standards) which seem unclear, faulty or incomplete. CLIENT shall thereupon provide corresponding written instructions or make amended documents available. SUPPLIER shall ensure via an internal distribution system that all areas concerned always have at their disposal the most recently valid version of the documents delivered by CLIENT. Documents which no longer correspond with the most recently valid version shall be destroyed in accordance with DIN 66399 (current version) or sent back.

SUPPLIER shall examine the supplies and services specified in the contract order with regard to their manufacturability. In this context, manufacturability means that the requested product can be manufactured under series production conditions, particularly in terms of such requirements as:

- Capacities / quantities
- Due dates
- Tender specifications / performance specifications
- Drawings
- Specifications
- Capability process for special characteristics (see Chapter 14.)

Manufacturability shall be examined for all new and changed/modified parts / products. CLIENT shall be advised of any problems within 2 workdays.

2. Components/parts discussions / quality meetings

In the course of components/parts discussions, mutual understanding is reached between SUPPLIER and CLIENT regarding the product/process prior to the contract award, at the latest, however, at the beginning of the project. Any deviating agreements as of the start of the project shall be recorded in writing by SUPPLIER and CLIENT, they shall be signed by them and enclosed with the Quality Assurance Agreement.

Quality meetings shall serve not only for joint coordination of quality requirements to be fulfilled but also for the improvement of quality results. At the CLIENT's discretion, quality meetings may be called for in coordination with the SUPPLIER within the course of parts or process development and series production.

3. Project plan / milestone plan

The following shall be applicable for all components/parts which are allocated to the A-parts risk classification: SUPPLIER shall prepare a project or milestone plan for the purpose of project planning and project realization. The following milestones – content and extent to be coordinated beforehand – shall be included in the project plan, based on the CLIENT's development plan:

- Preparation of a process FMEA, beginning as of the process planning phase
- Preparation of a control plan or a production control plan (including special characteristics, critical characteristics CCs, significant characteristics SCs)
- Planning and provision of the test equipment, including verification of test equipment capability
- Manufacture of non-tool sample parts (if required)
- Manufacture of first tool sample parts/series production tools
- Determination of the capability machine and/or capability process (for special characteristics CCs and SCs)
- Implementation of first sampling pursuant to VDA Volume 2 / PPF
- Implementation of a capacity analysis (e.g. Run@Rate)
- Production start and system filling
- Delivery record from project management to the series
- Start and target dates; resources (run up to crest line)
- Schedule for milestones regarding quality assurance; the schedule being oriented on the overall project

At specified time intervals, SUPPLIER shall communicate the project status / project progress and the open-items list / action plan to the responsible quality representative at the CLIENT's.

SUPPLIER shall assess project risks and ideally eliminate them by means of suitable measures. In special cases – e.g. in complex projects or based on an end customer requirement – the product generation process may be followed by the maturity level method. For all components which correspond to the A-part risk classification and present a problem component, the VDA volume "Maturity Level Validation for New Parts" may be valid in this case. These components are only usable after announcement/approval by CLIENT's quality department.

4. Test planning and test equipment planning

By means of systematic test planning and test equipment planning, SUPPLIER shall ensure that – with new and/or changed products, manufacturing processes, etc. –

- all characteristics essential for quality are recorded;
- test procedures and frequencies to be applied are suitable; and
- test equipment is correctly designed and available in good time before the beginning of the zero series.

The characteristics essential for quality shall be included in drawings and specifications. Critical and significant product characteristics which are to be specially taken into account in test planning and in the test equipment planning shall be determined with consideration to FMEA-findings in coordination with CLIENT.

A test plan shall include the following information:

- Master data (such as manufacturer, designation/name, drawing no., technical change status, date)
- Documentation obligation and creator / user / date
- Test characteristic(s), (at least all special characteristics CCs and SCs)
- Test equipment
- Test frequency
- Test method
- Type of test (quantitative or qualitative)
- Sample size or 100% test
- Remedial actions in case of errors/faults occurring and persons responsible for carrying them out

The definition of special characteristics is oriented on the VDA volume "Product generation – Process description, special characteristics (BM)". Basically, however, the following three categories are distinguished:

- BM DS (CC) Special characteristics with safety requirements
- BM DZ (CC) Registration-relevant legal and regulatory requirements
- BM SC Customer-relevant demands and functions
- Character keys characteristics CLIENT (CPK-secured)
- CC -> Critical Characteristics
- SC -> Special Characteristics (significant, important characteristics)

5. Preparation of FMEAs

For all components corresponding to the A-part risk classification shall apply that – in accordance with the Production Process Release and Product Release (VDA Volume 2 / PPF), as well as demands of CLIENT's end customer – the required FMEAs are to be prepared or updated in case of the following processes:

- Development and manufacture of new products
- New manufacturing procedures
- In case of changes of products and processes
- In case of complaints

Design-FMEA (K-FMEA)

In case of SUPPLIERs without their own development / design, K-FMEA may be prepared by the developer and made available. It shall be terminated before the corresponding milestone plan for conclusion of the development. Deviating due dates shall be recorded in writing. If necessary, CLIENT shall be submitted the K-FMEA for perusal.

Process-FMEA (P-FMEA):

For components which correspond with the A-part risk classification, the process-FMEA shall be oriented on the important product and process characteristics specified beforehand. It shall be prepared before the procurement of plants/systems, operating material and tools. For all components which correspond with the A-part risk classification, PLPs (production control plans) shall be prepared. They should include Poka Yoke positions.

6. Technical cleanliness

In case of the manufacture of components which are sensitive to cleanliness (CLIENT designates it as a special characteristic in the specification), the VDA Volume 19 Part 2 "Technical Cleanliness in Assembly" shall be taken into account. Written coordination with the special departments shall be secured by the Supplier.

9. PROTOTYPE PARTS (IF REQUIRED)

If specifically required by CLIENT, the SUPPLIER shall implement prototype manufacture. In this case, SUPPLIER shall use the same subcontractors and processes which he had planned for series production.

1. Prototype Production Control Plan (Prototype Control Plan)

Objective: Ensuring prototype quality

Expectations:

- Type and scope of tests as well as the appropriate test equipment for prototypes are specified and, if necessary, coordinated with the customer
- All "special characteristics" are included
- Detailed and transparent breakdown of cost statement
  (e.g. component/ tools/ devices, etc.; price breakdown)

2. Manufacture and testing of prototype parts

Objective: On-time delivery of cost- and quality-conforming prototypes

Expectations:

- Due dates and quantities for prototype manufacture shall be planned, monitored and complied with
- Delivery of prototypes with test report (production process and product release procedure)
- Status in APQP Report (if requested)
- For non-conforming prototypes, the customer's approval (deviation permit) shall be obtained prior to delivery
- Detailed and transparent breakdown of cost statement
  (e.g. component/ tools/ devices, etc.; price breakdown)

10. QUALITY ASSESSMENT OF DESIGN RESULTS

For all components corresponding to CLIENT's A-part risk classification, SUPPLIER shall be obligated to perform a quality assessment of the realized design results (development concept, development sample) within the scope of design reviews in the sense of error-preventive production and continuous quality improvement.

The assessment shall be made vis-à-vis the tender specifications and performance specifications. If the realized results deviate from the quality requirements in tender specifications / performance specifications, SUPPLIER shall plan and implement corrective measures. The party having caused it shall bear any possibly additional costs resulting therefrom.

11. IDENTIFYING LABELLING, STORAGE AND PACKAGING

Concerning the identifying labelling of tools, products, parts and packages, any specifications stipulated with CLIENT shall be complied with.

1. SUPPLIER shall label the goods such that – from incoming goods (delivery note) continuously up to including outgoing goods – the product condition and the test status are discernible. Deviations from existing labelling obligations shall require a written agreement between SUPPLIER and CLIENT. Delivery notes and packaging units (outer packaging, individual packaging) shall be labelled at least with the following:

- Date
- Order / project number
- Drawing status
- Revision number
- Serial number
- Product name
- Supplier number; provided by CLIENT
- Quantity and unit
- Customer drawing number or customer standard with change status

Additional information, if applicable:

- Batch number
- Copy of the CLIENT-awarded deviation permit / special release
- Reference to partial or remaining deliveries
- Labelling of first series sample

Labelling of the packaging units may be done by means of a bar code or a data matrix code (DMC) and plain text. Precise coordination shall be directly with CLIENT.

2. The individual load carriers with goods ready for dispatch shall be provided with a completely filled out goods transport tag.

3. Identifying labelling of the goods shall be visible during transport and storage.

4. For the first 3 deliveries of new or changed parts, a new printed form shall be used additionally in which the quality status (Q-level) can be seen.

5. SUPPLIER shall ensure that products are delivered in suitable means of transportation so that damages and quality reductions are precluded. The packaging concept shall be proposed by SUPPLIER. The packaging concept shall be submitted as a document in due quality and environmentally neutral in combination with low recycling costs in accordance with VDA-Recommendation 4535. The concept shall be visually verifiable in the incoming goods area (WE). The quality of products to be procured may not be impaired by transportation, the packaging used or by storage.

6. If tools had been made which passed into SUPPLIER's possession, such tools shall be provided with special plates (labelling CLIENT) which show that it is the CLIENT's property.

12. TRACEABILITY AND DOCUMENTATION

SUPPLIER agrees to be able to demonstrate quality assurance documentation which is required for traceability. In case of a detected fault, unbroken traceability of the defective parts/products/batches/delivery lots shall be guaranteed.

For the preparation and safekeeping of documents, the VDA Recommendations in their respectively valid version (Volume 1 "Documentation and Archiving" and "Verification") shall be taken into consideration. Documents with special archiving – particularly concerning special characteristics of the "CCs" classification – shall be archived for 15 years; other documents shall be archived for at least 3 years.

In case of claims made by third parties, SUPPLIER shall grant CLIENT – for defending against such claims – the right of inspection of relevant quality documentation for this and make it temporarily available as far as this is required for providing exonerating evidence.

13. SAMPLING

Prior to the beginning of the series, sampling of the products shall provide evidence that the quality requirements determined in drawings and specifications are reached. Together with the orders, the purchasing department of HWA shall send the current status of drawings to the SUPPLIER.

Sampling shall be effected in accordance to VDA Volume 2 / PPF. The process to be used and the presentation level shall be agreed upon in writing with the SUPPLIER. At least one retention sample of the last sampled and released version shall be safeguarded by the SUPPLIER.

The retention or storage period shall be 5 years as of the sampling of the last sampled and released version. Absolute trigger for the necessity of new sampling or re-sampling shall be in particular:

- Changes in the production process
- Substitution of the subcontractor
- In case of relocation of production
- Changes in the test process and/or on the test equipment
- Construction and/or design changes
- Material changes
- Use of new tools
- Interruptions of production --> 24 months
- New software

If minor deviations from the drawing or the specification are detected upon the examination of sample parts and if they cannot be corrected short-term, a deviation permit is to be applied with CLIENT in good time before the specified sampling date.

Prior to the dispatch of the deviation permit, its contents shall be coordinated with the CLIENT. If a presentation is rejected or released only upon conditions (deviation permit) and after the results have been obtained, the SUPPLIER shall submit to CLIENT at short notice a plan of activities to reach unrestricted release with CLIENT. The date for required re-sampling shall be agreed upon in writing. Any delivery of products to the CLIENT (even after changes) shall only be possible after the effected sampling release and/or submission of a deviation permit/special release by the CLIENT.

14. VERIFICATION OF CAPABILITY PROCESS

Upon placement of the component into CLIENT's A-part risk classification, it shall be called for – independent of the determination of other test characteristics for series monitoring – that the SUPPLIER must carry out capability process examinations for special characteristics.

The selection and determination of characteristics – for which verification of the capability process is to be rendered – shall be effected according to the CLIENT's development plan. Special characteristics are to be correspondingly designated in the drawings and/or specifications and shall be documented in the control plan.

Verification of the capability process for the specified test characteristics shall be provided by the SUPPLIER. Implementation of the capability process examination shall be effected on the basis of VDA Volume 4 "Assurance of Quality Prior to Series Application". If necessary, CLIENT shall be entitled to inspect the corresponding documentation (control charts, SPC) upon request.

If the required process capabilities are not reached, measures by the SUPPLIER and/or the subcontractors shall be immediately introduced for process optimization and suitable test methods shall be used so that the quality objective can be met. Verification of the capability process shall be a binding component part of first sampling.

1. Verification provided prior to the series application

The following provisions shall apply with regard to verification concerning compliance with quality requirements prior to series application:

- Certification verification according to ISO 9001 (current version) or IATF 16949 (current version) shall be required
- Internal system audits, process audits and product audits
- Advance quality planning (VDA / Reference manuals of QS9000; corresponding customer-specific requirements)
- Schedule / project plan
- Possible performance of audits at the SUPPLIER's
- Required FMEAs in accordance with PPF as well as customer request

- Auditing, evaluation and safeguarding own subcontractors
- Parts/characteristics subject to documentation
- Test production / prototype parts
- First sample release (at the SUPPLIER) / Prior to the beginning of the series, all starting materials of SUPPLIER's subcontractors shall be sampled; in case of a conditional release, HWA shall be informed and measures be defined

2. Verification after series application

The following provisions shall apply with regard to the verification concerning compliance with quality requirements after series application:

- Scheduled critical internal system audits, process and product audits
- As presented, DS as well as DZ characteristics shall be realized without deviations
- Due to the low quantity, SC (significant characteristics) may also be verified by 100% test and corresponding documentation. If needed, corresponding verification may be requested at any time
- Verification of capability process for specified characteristics:
  - Function-relevant and assembly-relevant characteristics
    Capability machine Cmk ≥ 1.67
    Capability process Cpk ≥ 1.67 at the beginning of the series
    Capability process Cpk ≥ 1.33 for the running series
  - Characteristics as well as safety and certification-relevant (DS / DZ) characteristics
    Capability machine Cmk ≥ 2.0
    Capability process Cpk ≥ 2.0 at the beginning of the series
    Capability process Cpk ≥ 1.67 for the running series
- PPT (Parts Per Thousand) – Programs as evaluation method for the continuous improvement process; product/ process error rate with the obligation of zero error strategy at the beginning of the series, or other suitable arrangement.
- Auditing, evaluation and safeguarding own subcontractors
- Following consultation, one annual requalification sampling / test, for all components corresponding to the A-part risk classification (full sampling)
- Regular unrequested information with regard to certification activities, as well as current certificate transmission at least once annually

15. PROCESS VERIFICATION

For review and assurance that – with the procedures used and the state of the art – the capability process of parts or components can be achieved according to the quality requirements (defined quality characteristics in drawings and specifications) and the requirements from VDA Volume 2/ PPF, that the current manufacturing processes correspond with the production control plan and that the contractually stipulated quantities can be produced in a defined unit of time (quantity per shift and/or workday), CLIENT shall reserve the right to perform a process verification for all components corresponding to the A-part risk classification.

In this respect, the quality capability test of the production process has the following scopes:

- First sampling
- Verification of capability process
- Planning documents
- Production processes

Note: For implementation of a process verification, all standard production tools and systems shall be in use. Deviations therefrom shall be correspondingly coordinated beforehand in writing.

Reaching the planned performance shall be verified with the assignment of the personnel scheduled for series production and with the required facilities.

The date and scope of the review shall be agreed upon in writing between SUPPLIER and CLIENT.

SUPPLIER shall be responsible for the preparation and implementation, with cooperation and subsequent evaluation by CLIENT. Deviations shall be recorded in an action plan and shall be handled by SUPPLIER. If necessary, the process shall be repeated in case of substantial deficiencies. In case of a positive result, verification shall result in the release of series production.

Should no satisfactory result have been reached with the first two verifications, CLIENT shall be entitled to bill SUPPLIER for the costs incurred regarding the other necessary verifications (e.g. transportation, expenses, accommodation, per diem).

16. MONITORING PROCESSES AND PRODUCTS

Upon its own responsibility, SUPPLIER shall establish a test concept which is suitable to ensure compliance with the required specification.

SUPPLIER shall be obligated to monitor and document the manufacturing process such – through the use of suitable statistical methods – that the capability process of special characteristics can be verified at any time over the entire production period. Special characteristics whose capability process is not given shall be monitored 100 %.

According to technical possibilities, monitoring methods shall be used which, obligatorily, prevent the delivery of defective parts (poka yoke).

If it becomes apparent that agreements made (specifications, due dates, quantities) cannot be kept, SUPPLIER shall be obligated to immediately inform CLIENT thereof. In the interest of quickly finding a solution, SUPPLIER shall be obligated to disclose all data.

For the implementation of its quality assurance measures, SUPPLIER shall prepare records – especially of measuring values and test results (documentation) – and keep them, as well as possible samples, available in a clearly ordered arrangement.

17. PROCESS AND PRODUCT RELEASE (PPF)

CLIENT shall reserve the right of a comprehensive on-site process inspection and acceptance at any time – if and to the extent required by CLIENT.

1. Process acceptance / release (as needed)

- Production of 2 components under serial conditions
- Specific requirements by CLIENT

2. Product release / first sampling (basic requirement)

First samples are parts entirely manufactured under series conditions and which are examined by the manufacturer with regard to all stipulated characteristics. First sampling shall be fixed in the time schedule on the basis of the following criteria:

- VDA Volume 2
- Reference manuals of QS 9000 (PPAP)
- Specific requirements by CLIENT's end customer
- COC (Certificate of Conformity)

First samples shall be presented to CLIENT on a due date to be respectively agreed upon. In terms of quantity, at least two components / products shall be fully presented according to the specification level (1x design/ installation trial; 1x retention sample). The samples shall be unambiguously labelled and allocated to the measuring report.

For determining the capability process, a suitable number per production lot shall be presented to obtain an overall release; moreover, the capability process shall be verified by self-assessment (series maturity process). The retention sample shall be stored and integrated into the change service. The series capability verification (SFN) shall be determined via series capability characteristics. Series capabilities shall be presented by SUPPLIER to CLIENT – taking into account the drawing specifications or comparable documents, as well as the specific joining factors.

In case of production from several tools or production routes, SUPPLIER shall be obligated to ensure that all possible variants are presented and identifiable as such.

With any change of the product or changes in the production process which affect the quality of the components, SUPPLIER shall be obligated to immediately advise CLIENT of these consequences and present new first samples.

In annual intervals, a requalification sampling/ test shall be transmitted to CLIENT in writing for all components corresponding with the safety and/or DS or DZ characteristics (to the full extent of the first sampling). The written form shall be required for content changes and supplements of the requalification sampling/ test.

18. INCOMING GOODS INSPECTION

The issue and/or execution conditions specified in the order shall be decisive for determining as to whether the goods or services delivered by the SUPPLIER are in accordance with the stipulated quality and implementation conditions. SUPPLIER shall be obligated to submit in writing / digitally – together with the delivery of goods and/or services – all documents, such as instructions, drawings or other documentations, which are required for the intended and proper use of goods and/or services. If SUPPLIER's quality status deviates from the specification values, CLIENT shall be entitled to perform an incoming goods inspection. The costs for such inspection shall be billed to SUPPLIER. SUPPLIER shall immediately inform CLIENT about any defects detected and take all measures in order to minimize any damage resulting by the defect.

If production standstills are pending at the CLIENT or its customers – as a result of defective deliveries, SUPPLIER shall be obligated to immediately provide for a remedy (substitute deliveries, binning or rework). In urgent cases, CLIENT itself may do the rework or have it done by a third party. SUPPLIER shall fully bear the costs incurred thereby.

A confirmation of receipt of a delivery shall not be considered a confirmation of its absence of defects or its completeness. Neither shall the payment of the purchase price be an acknowledgement of a proper and defect free delivery or service by the SUPPLIER. No waiver shall be derived from this with regard to any damage claims or other claims to which CLIENT is entitled as a result of a deficient delivery.

19. SERIES DELIVERY

SUPPLIER shall be responsible for the use of efficient systems for monitoring process and product quality. According to the current state of technology, SUPPLIER shall be obligated to effect a long-term evaluation of its production processes, measured against the specifications.

In case of unstable processes, SUPPLIER shall define and implement measures for stabilization. SUPPLIER shall ensure the qualitative as well as the quantitative delivery capability.

1. Internal Audits

For the evaluation and improvement of its internal processes as well as its management system, SUPPLIER shall perform corresponding system, process and product audits. Upon request, CLIENT shall be submitted the relevant documentation.

20. COMPLAINTS / OBJECTIONS

Supplier's own inspection of outgoing goods shall be agreed upon with SUPPLIER. CLIENT shall not be obligated to do any incoming goods inspection. CLIENT shall not have any obligation of inspection and complaint pursuant to Section (§) 377 UGB. However, the objection of delayed or insufficient examination as well as the plea of late notification of defects shall also be waived explicitly. Should defects be detected within the scope of processing SUPPLIER's product by CLIENT, they shall be immediately advised to SUPPLIER after their detection.

Immediately after detection, SUPPLIER shall be obligated to start the problem analysis and ensure deliveries with flawless or defect-free goods. Furthermore, SUPPLIER shall be obligated to replace the entire delivery batch against a defect-free batch. This shall be clarified in detail with CLIENT.

SUPPLIER shall immediately react to complaints due to defective deliveries/services. SUPPLIER shall transmit a report (8D Report). CLIENT shall specify the 8-D disciplines or steps, with timings and the corresponding form; this shall be obligatory for all A- and B-SUPPLIERS. In this respect, the following reaction times shall be complied with:

- (D3) Problem description, including fault isolation and risk assessment, Taking emergency actions to prevent additional faulty products at the CLIENT (feedback within 2 workdays); clean point delivery CP1
- (D5) Cause of error regarding occurrence and non-detection of the problem; definition of remedial measures (within 5 workdays)
- (D7) Confirmation of introduction of remedial measures and preliminary proof of efficacy of the measures taken (within 20 workdays)
- (D8) Efficacy of remedial measures confirmed (within 60 workdays or application for an extension), unless due to design

Minimum requirements for C-SUPPLIERS shall be:

- Immediate Q-response which must be concluded after 2 working week days
- Traceability of the affected products
- No dispatch of affected products
- Understanding the error pattern and/or root cause analysis
- Sorted and reworked parts shall be separately designated

CLIENT shall advise SUPPLIER of a complaint in writing or in text form, e.g. in form of a test report with complaints; enter into the supplier assessment.

Complaints accepted by SUPPLIER shall be charged by CLIENT to SUPPLIER with a flat handling fee of EUR 280.00. Should test costs and/or reworking costs be incurred by CLIENT within the scope of the complaint or if SUPPLIER does not respond or react, these costs shall be charged to SUPPLIER at EUR 95.00/hour.

If CLIENT receives a complaint from the customer and if this complaint can be unambiguously allocated to SUPPLIER, a flat handling fee of EUR 1,000.00 shall be charged to the SUPPLIER – in addition to CLIENT's additional claims due to the complaint.

In case of quality problems incurred, CLIENT may commission an internal or external expert who will ensure safeguarding and ability as a SUPPLIER with quality capability. For this measure, CLIENT may charge a daily rate in the amount of EUR 980.00. CLIENT shall reserve the right to further claims, particularly statutory damage claims.

21. REJECTION OF DEFICIENT DELIVERIES/SERVICES

In order to minimize potential damages SUPPLIER and CLIENT shall coordinate the further course of action prior to sorting out, rejection or reworking.

Allowing for ensured production and supply capability, corresponding measures shall be taken:

- Return or replacement within 2 work days
- Sorting by sorting company, SUPPLIER or CLIENT
- Reworking by sorting company, SUPPLIER or CLIENT
- Replacement by CLIENT

The next three shipments of parts, following deficient shipment and subsequently performed revision, shall be specifically labelled and coordinated with CLIENT.

22. REPEATEDLY OCCURRING QUALITY OR DELIVERY PROBLEMS

In case of repeat quality or delivery problems and considerable failure / rejection rates which can be attributed to SUPPLIER's fault, it shall be admissible following coordination, to have internal or external employees of CLIENT perform a problem analysis or process audit according to VDA 6.3, VDA 6.7 or currently applicable standards at the SUPPLIER.

23. ESCALATION PROCESS AND Q-SUPPORT

CLIENT uses an escalation process in order to recognize problems at an early stage and guarantee a frictionless production and project process.

In case of disruptions caused by SUPPLIER, this process makes it possible to define standardized corrective actions and ensure their execution.

This escalation initiates in a neutral manner the gradual delegation of a project's problem area to a higher authority. Generally this happens if the escalating level of authority does not have the necessary means, room for manoeuvre or competences to implement measures that address the issue. If no solution can be achieved on the operative level, the members of this level shall have the obligation to escalate this issue to steering committee. Both parties, SUPPLIER and CLIENT, agree that the steering committee of the two parties shall address the escalated problem at the latest following 10 workdays.

Reasons for an escalation process may be:

- Repeated errors
- Production disruptions due to defective purchased parts at CLIENT
- Complaints
- Non capable production processes
- Insufficient fault localization or problem solving via 8D report
- Impending production standstill
- Process audits for C supplier classification
- Insufficient execution of measures and/or delay
- Failures or complaints in the field and or car racing sports

Q support / qualification

Q support describes temporary tests that are implemented in addition to the normal tests, e.g. additional 100% tests for specified characteristics if SUPPLIER is in escalation process. CLIENT reserves the right to place SUPPLIER in Q support. SUPPLIERS that are placed in Q support shall bear all costs connected therewith.

Q support status may only be lifted following test and approval by CLIENT. Independent of Q support level, SUPPLIER shall amend all relevant documents to prevent repeated occurrence of errors (e.g. process FMEA, control plan, process flow diagram, work instructions, inspection instructions, training certificates). Amended documents are to be presented to CLIENT.

24. CHANGES

SUPPLIER shall inform CLIENT of any changes (e.g. process, material, location, also see VDA volume 2 / Production process and product approval (PPA) Triggering criteria for samplings) a minimum of twelve weeks prior to their implementation so that CLIENT may examine their implications. Approval of changes shall be done in accordance with the sampling provisions (VDA volume 2 / PPA) and thus comprise a validation of the change prior to release as well.

Parts histories are to be kept from the beginning of prototype creation until the end of series production. Parts histories shall comprise all internally and externally initiated product or process changes, as well information to parts designation, parts number, revision status of drawing or construction phase, change description, date of delivery for samples, date of delivery, series, samplings, etc. Parts histories are to be made available to CLIENT upon request.

25. EXEMPTION PERMIT

Delivered goods or services shall comply with the quality and implementation conditions specified in the order. Quality and implementation conditions may be determined, in the order, by making reference to standards (e.g. ISO, operating standards), catalogues and/or drawings, etc.

Should the Supplier be temporarily unable to do so because of minor deviations, SUPPLIER shall immediately inform CLIENT about problems arising which may impair the reliability, processability or applicability of the contractual products or services, irrespective of claims on the part of CLIENT.

The request shall be sent, within 2 workdays, to the competent partner in CLIENT's quality management and purchasing department. A permit for deviations may only be granted if the parts' safety, function and durability are not impacted. The request shall be checked for its implications by CLIENT or the authorised departments. CLIENT's written statement in this respect shall be provided within 2 workdays.

For their validity, exemption permits shall always require the written form and be limited to a specific number of parts or a specific delivery period.

The request for a deviation permit shall include at least the following items:

- (see – Deviation Permit / Concession Request - to find on the homepage of the CLIENT (www.hwaag.com))

Any release by CLIENT shall not discharge Supplier from its obligation to deliver parts in conformity with the specification. In any event, prior to the dispatch of a delivery of non-conforming parts, Supplier shall be obligated to inform CLIENT in writing / electronically about the deviations and obtain CLIENT's written / electronic approval.

26. PREVENTIVE MAINTENANCE, EMERGENCY PLANS, EMERGENCY STRATEGY

SUPPLIER shall develop and implement a system for pre-emptive maintenance of production facilities and tools. Performance of scheduled systematic pre-emptive maintenance shall be substantiated where necessary.

Scheduled/pre-emptive and proactive maintenance means the use of all findings resulting from maintenance, inspection and repair of production facilities and tools according to the current state of the art, thus guaranteeing availability of operating materials.

Written emergency plans or strategies are to be kept available, based on the risk analyses for bottleneck machines, equipment and systems prepared by CLIENT or SUPPLIER. (Minimum stocking requirement for spare parts, flow of information, contingency plans, personnel planning, energy failures, field failures, etc.)

SUPPLIER shall be obligated to prepare and implement such emergency strategies or plans as are necessary to ensure delivery and quality of the promised parts. These are to be made available for inspection to CLIENT upon request.

Resulting TOP 5 risks, established by internal assessments by CLIENT or SUPPLIER, shall be analysed (by means of FMEA), determined and assessed. Transparent measures and resulting plans of actions are to be prepared.

27. REQUALIFICATION TESTS

In coordination with CLIENT, SUPPLIER shall perform a yearly requalification that is free of charge for all parts corresponding to A-parts classification. Results of this test shall be made available to CLIENT without further request or charges.

28. SECRECY

The parties mutually agree in writing (Secrecy Agreement) to keep secret any information and knowledge which they had obtained – in whatever manner – from the respectively other party and not to make same accessible to third parties without the other party's written consent or use same for another purpose than that for which such information and knowledge had been transmitted. This obligation shall still remain in existence over a period of three (3) years as of the point in time of the termination of this Agreement (see - Secrecy Statement – to find on the homepage of the CLIENT (www.hwaag.com))

29. FINAL PROVISIONS, LAW, LEGAL VENUE

Should individual provisions of this Agreement be invalid or unenforceable or become invalid or unenforceable after contract conclusion, the validity of the Agreement shall remain otherwise unaffected. The invalid or unenforceable provision shall be replaced by such valid and enforceable regulation whose effects come closest to the economic objective which the contracting parties had intended with the invalid or unenforceable provision. The provisions above shall apply mutatis mutandis in the event that the agreement proves to have gaps. In the event of a gap, the parties shall agree on a valid provision which is equivalent to that which would have been agreed upon according to the meaning and purpose of the present provision if this matter had been considered beforehand.

The Agreement shall be governed by the laws of the Federal Republic of Germany.

For all contractual and non-contractual disputes, the local and international exclusive jurisdiction shall be agreed upon as being at the ordering party's registered office. This jurisdiction shall also exclude, in particular, any other jurisdiction which is provided by law due to a personal or material nexus.

30. ADDITIONALLY APPLICABLE DOCUMENTS

Additionally applicable documents are part of this contract. SUPPLIER shall be obligated to keep itself informed about and implement innovations. The currently applicable VDA volumes are generally to be taken into account.

31. GENERAL

Upon considerable deterioration of SUPPLIER's financial situation, CLIENT shall be entitled to immediately cancel the contract parts not yet performed.

With its signature, SUPPLIER shall explicitly attest to having read these present conditions attentively, being in agreement with the full extent of the content and acknowledging the present conditions' validity and binding character for all of CLIENT's orders and contracts concluded between CLIENT and itself with regard to such orders. These conditions shall be valid even in the case of contrary statements in the supplier's terms of delivery.

Offsetting of receivables or exercise of a right of retention shall only be admissible for undisputed or legally binding claims of SUPPLIER vis-à-vis CLIENT.

The Quality Assurance Agreement shall become legally binding as of the parties' signature and shall remain valid for an indefinite term.

Any termination by SUPPLIER shall only be admissible if CLIENT severely violates the Quality Assurance Agreement's obligations, if SUPPLIER informs CLIENT thereof in writing and CLIENT does not remedy this fact during a reasonable period of time. CLIENT shall be entitled to terminate this Quality Assurance Agreement at any time subject to a term of two months.

Changes to this contract are to be made in writing and are to be signed off in writing by the parties' authorised signatories. This shall also apply to the waiver of the written form requirement.

CLIENT's supplementary contracts shall remain valid in their respective current versions. If contradictions should arise between the aforementioned contracts and this Quality Assurance Agreement, the agreements concluded in this Quality Assurance Agreement shall apply, unless explicitly provided otherwise in the supplementary contracts. To ensure the necessary coordination, SUPPLIER shall appoint a quality assurance officer within 2 workdays and inform CLIENT of his/her name in writing.

The quality assurance officer is authorised to accept all statements in connection with the performance of this agreement and has to be an authorised signatory of supplier within the meaning of the corresponding legal provisions of CLIENT's direct recipient factory. All statements of the contracting parties in connection with the performance of this agreement shall be prepared in the German language.

Responsibility of SUPPLIER for the freedom of defects of products supplied by supplier shall not be infringed by this Quality Assurance Agreement.

ANNEX

Annex 1

ADDITIONALLY APPLICABLE DOCUMENTS, STANDARDS, GUIDELINES (CURRENT)

CLIENT

HWA RV 1 Drawing Standards
General Conditions of Purchase
Sampling Templates VDA Volume 2
Component Parts Documentation
Scaling Component Parts Risk Classification
8D Report
Test Specifications
Delivery and Packaging Regulations
Dispositional Requirements, Logistics Requirements and Logistics Guidelines
Reference Sample Catalogue

General

ISO9001	Quality Management Systems, Requirements
ISO14001	Environmental Management Systems
IATF16949	Quality Management System; Special Requirements in the Application of ISO9001 for Serial and Spare Parts Production in the Automotive Industry
OHSAS 18001	Occupational Health and Safety Assessment Series
DIN10204	Types of Test Certificates

VDA Regulation Codes

VDA Volume 1	Documentation and Archiving
VDA Volume 2	Quality Assurance of Deliveries
VDA Volume 3	Part 1 and 2: Reliability Assurance with Automotive Manufacturers and Suppliers
VDA Volume 4	Quality Assurance in Process Environment
VDA Volume 5	Test Process Suitability
VDA Volume 6	Part 3 Process Audit; Part 5 Product Audit; Part 7 Individual Production and Workshop Production
VDA RGA	Maturity Level Validation

AIAG Regulation Codes

AIAG PPAP
AIAG APQP
AIAG MSA
AIAG FMEA
AIAG SPC

The mentioned documents in this agreement are available on the CLIENT's homepage (www.hwaag.com) for further processing.