	Vorgaben **Quality Assurance Agreement**	Code: VO_0084 Version: 5.0

Geltungsbereich:	02 Banner GmbH, , , , , , ,
Gültig ab:	02.01.2018
Kategorie:	Norm \ 7. Produktrealisierung \ 7.4. Beschaffung durchführen \ 7.4.1. Beschaffungsprozess \ 7.4.1.2. Lieferantenmanagement, , , ,
Prozess:	Ressourcenprozess\Einkauf & Logistik, , , ,
Verfasst:	Thomas Kaminski
Überprüft:	Gerold Fritz 29.12.2017, , , , , ,
Freigegeben:	Thomas Schmidt 02.01.2018

This document has been completely revised

1 Introduction

Changed customer expectations and global competition demand the constant improvement of every product and service, as well as all processes and company procedures.

Customer satisfaction induced by quality in every regard constitutes a decisive success factor for Banner as a major subsupplier to the international automotive industry and therefore equally for you as our contractor [supplier subsequently named] whose goods are integrated into Banner products.

Accordingly, the **zero-defect quality** of all deliveries is an absolute prerequisite, which can only be achieved and secured through the combined efforts of both Banner and its suppliers.

This Quality Assurance Agreement [subsequently referred to as the QAA] shows our suppliers the preconditions, methodology and instructions for implementation, which are required to achieve the aforementioned common goals.

The QAA is binding upon all the products and services from suppliers from the date of the commencement of a business relationship.

Evidence of a structured and effective quality management forms the basis for cooperation.

We thus request you as our partner to continue to support us with the realisation of our quality objectives.

This Quality Assurance Agreement replaces the Version 4.0 issued on 20 February 2012, which was valid to date.

Linz, in December 2017

2 Area of validity

This QAA for suppliers applies to contractors for design parts, modules and components for the starter battery segment, e.g.

- Boxes / lids /handles / plastic screws
- Separators
- Additives /chemicals
- Lead
- Labels
- Purchased batteries (car, truck, motorcycle batteries)

Transport and storage contractors must fulfil the stated requirements in accordance with the respective, specific order.

3 Management system

The most important Banner demands that have to be fulfilled and evidenced by suppliers prior to the commencement of a business relationship and/or during ongoing business have been singled out and are further described below.

All certifications are to be documented by a current certificate from an accredited certification body.

3.1 Quality Managementsystem

Certification according to the latest version of ISO 9001 is a minimum requirement. The aim is to complete certification by an accredited institute from among the IAF-MLA members.

The requirements of IATF 16949 are to be fulfilled, or certification pursuant to IATF 16949 is to be sought.

Additional demands are established in:

- IATF 16949 (current version) and with valid documentation

or in

- VDA 6 Part 1 and with valid documentation, or
- VDA 6 Part 2 and with valid documentation (for service suppliers)

Apart from the listed standards, Banner’s order documents are binding, e.g.

- Agreed testing instructions and equipment
- Additional order information e.g. packaging regulations
- Special statutory and technical safety regulations
- Special environmental protection and recycling regulations

3.2 Environmental Managementsystem

The aim is that the requirements of ISO 14001 are fulfilled and certification according to ISO 14001 is sought.

3.3 Delivery quality and goods receipt

Products delivered by suppliers must correspond with the contractually agreed specifications and characteristics.

The legal, official and technical safety stipulations for all products in both the countries of origin and receipt, as well as the country of destination (where known) must be adhered to during the production of the goods to be delivered by the supplier.

Within the framework of the management system, the supplier is obliged to provide the zero-defect delivery of products and services. Should it breach this contractual obligation, the supplier will be subject to the measures agreed separately between it and Banner. Banner will be informed by the supplier immediately as soon as infringements of the zero-defect agreement are foreseeable.

Basically our orders presuppose complete fulfilment with regard to quantity and delivery date. Adherence to this stipulation is also part of the supplier assessment and Banner is to be informed without delay should recognisable deviations occur.

Upon request Banner is to be informed of the number of incidents involving additional freight costs.

Owing to the required high quality standards, defects are practically unidentifiable during random goods sampling checks. Therefore, in a deviation from the statutory regulations, Banner limits its incoming goods inspections to externally recognisable transport and packaging damage, as well as quantity and identity checks using the delivery documents.

3.4 Processing of the products delivered

The supplier shall examine the rejected goods carefully (defect cause analysis) and in line with the requirements of IATF 16949 (current version) must immediately integrate the findings and the planned corrective measures, including scheduling for their implementation, into an 8 step report that incorporates cause analysis methods (5 x Why? / Ishikawa) and send this to Banner. The Banner 8 step report will be enclosed with the complaint and must also be implemented. Banner shall receive proof of concept on implemented corrective actions within fourteen days. Delays will have a negative influence upon the supplier assessment.

3.5 Quality documentation

The findings of the quality checks carried out by the supplier, as well as those from audits, are to be documented along with the planned and effectively implemented corrective measures, and upon request be made available to Banner at any time.

Possible deviations from this procedure are already to be agreed between the partners upon the conclusion of the contract.

3.6 Quality agreement

In order to achieve zero-defect quality Banner and the supplier agree upon measurable targets for delivery quality.

The target value is established as **50 ppm**.

ppm = (max. number of rejects/ number of parts delivered) x 10^6

(ppm = **p**arts **p**er **m**illion / maximum number of rejects per million parts delivered)

Banner will register the ppm results, inform the supplier and include them in the supplier assessment. They shall also represent the basis for targeted measures aimed at continuous quality improvement.

The ppm value agreement shall not mean an acceptance by Banner of a particular quality level. Basically, all parts recognised as defective will not be accepted and the costs will be borne by the supplier.

3.7 Quality problems

As a rule, prior to product delivery, the supplier undertakes to inform Banner immediately in writing of any quality problems, or product and production stoppages, and coordinate with Banner regarding the necessary corrections. Costs and expenses that emanate directly or indirectly from defective products and/or services will be borne by the supplier.

3.8 Completion of the production process and product release procedure [PPR procedure according to VDA2] unless otherwise agreed

The supplier shall inform Banner of the completion of all planned product and process changes, and is obliged to carry out the PPR procedure, e.g. for

- New parts
- New samples
- Product modifications (design, specification or material changes)
- Use of alternative materials or designs
- Use of new, modified or replacement tools
- Production transfers
- Changes to the production process
- Extended production stops [longer than 1 year]
- Inclusion of new sub-suppliers
- The period following a quality-related, delivery freeze

The supplier is fully responsible for the examination of the initial sample and the documentation of the complete findings. It must prepare the initial sample check report for the production items to be delivered.

In line with submission level 2, documents and samples will be sent to Banner unless otherwise agreed between it and the supplier (see VDA Volume 2 “Production Process and Product Release Stipulations”).

The number of samples to be delivered will be stated.

4 Additional quality management requirements

4.1 Production feasibility assessment

With the provision of a tender, the supplier confirms production feasibility in line with the specifications and characteristics laid down in the enquiry from Banner.

4.2 Advance quality process planning

In order to secure zero-defect quality during every phase of the cooperation, the supplier undertakes to carry out binding, advance quality process planning for prototypes, pre-series samples and serial deliveries. Furthermore, to document this in testing procedure plans (control plans) and discuss these with Banner. Project management methods are to be employed, e.g. VDA RGA maturity validation, or QS9000 documentation APQP (advance process quality planning and production control plan).

4.3 FMEA product process

Taking into account the use of its products by Banner and its customers, the supplier shall undertake preventive risk analyses (FMEA) for all the items to be delivered to Banner, as well as the related processes, and also update the FMEA should any product and/or process quality deviation occur.

4.4 Test equipment, machinery and processability

By means of the utilisation of a suitable statistical procedure, the supplier shall ensure that the machinery, tools, measurement and testing equipment, and processes in which these are employed are suitable for and capable of manufacturing the products to be supplied to Banner.

Measurement system analyses (MSA) are to be carried out for all testing equipment and its suitability verified.

The procedure must correspond with all the stipulations of the MSA manual and VDA Volume 5.

Should the minimum requirements not be attained temporarily, 100 per cent tests are to be completed until this capability is restored by means of corrective measures.

4.5 Internal audits

4.5.1 Internal audit plan

Internal audits contain all processes of quality relevance and shifts, and are to be carried out at least once annually in line with the audit plan.

4.5.2 Auditor qualifications

Only persons who have completed external training at a company authorised for personnel certification shall be permitted to carry out internal system and process audits. Among other benchmarks, auditor competence is defined in ISO 19001 and IATF 16949 7.2.3 “Internal Auditor Competence”.

4.5.3 System audit
The supplier is obliged to audit its QM system in accordance with automotive industry requirements.

4.5.4 Process audit
The supplier is obliged to carry out a check of the entire manufacturing process at least once annually in accordance with VDA 6.3. (current version), or an equivalent standard. Upon request, the findings are to be communicated to Banner.

4.5.5 Product audit
The supplier shall complete product audits at least once a year for all the items delivered to Banner. Amongst other aspects such audits must cover measurements, functionality, packaging and labelling. In the case of possible deviations, the supplier shall immediately introduce corrective measures and ensure their long-term, effective implementation.

Following advance warning, Banner shall be entitled at any time to carry out and evaluate the quality assurance measures of the supplier by means of a system, process or product audit. Within the scope of its deliveries, in individual cases the supplier must also facilitate Banner's auditing of its subsuppliers. However, basically the supplier is responsible for subsupplier auditing.

In addition, Banner customers are entitled to carry out audits at Banner suppliers, where this is demanded.

Banner retains the right to invoice suppliers lacking IATF 16949 certificates for the costs emanating from the related need for an on-the-spot audit (travel time and expenses, overnight accommodation, employee costs and other expenditure). Should an audit be required owing to quality problems, Banner will also invoice the supplier for the related costs. If audit findings result in the need for a post-audit, or the supplier assessment is negative (failure to achieve a minimum requirement, basic classification as a B-supplier) and this necessitates an on-the-spot audit, Banner will invoice the supplier for all the resultant costs.

4.6 Continuous improvement

The supplier undertakes to create a systematic management system throughout its organisation, which will pursue the objective of achieving a high degree of customer satisfaction and its continuous improvement.

In order to attain this goal, the supplier must introduce a structured procedure within its company for the ongoing improvement of all its products, processes, operational procedures and services, and employ this in a proven manner for all of the products delivered to Banner, as well as every activity linked to the business relationship. The supplier shall demonstrate effectiveness in this regard through constant improvements in quality, prices, delivery performance, flexibility and cooperation. If so requested, the appropriate programmes and measures for continuous improvement will be presented to Banner.

5 Management responsibility

5.1 Process monitoring

Using defined key figures, the top management monitors the efficiency and effectiveness of both the product realisation and support processes at regular intervals.

5.2 Persons with responsibility for quality

The persons responsible for quality must be informed of product and process problems immediately, in order to be able to initiate timely measures.

The persons bearing responsibility for a halt to production are to be defined and provided with the appropriate authorisation.

5.3 Customer representative

The supplier shall appoint one or more customer representatives, who act as customer contacts. Among other assignments, customer representatives are responsible for the definition of critical characteristics, the handling of complaints and corrective and preventive measures.

5.3.1 Special Characteristics

Special Characteristics consist of selected features (e.g. dimensions, impermeability ...) from internal Banner regulations, which in the design drawings and specifications are marked by the following symbol:

This symbol designates especially important characteristics, which can influence battery function and are determined (regulated) during the process, and therefore demand the application of statistical process control (SPC) in order to establish process stability, capability and control throughout the service life of a part.

This symbol defines critical characteristics (document with special archiving period - DmbA). These constitute safety features, which are marked in technical specifications or the product requirements for single parts, materials or assembly operations, and require special production regulation in order to correspond with the statutory regulations governing vehicle safety. The uniform period for the retention of such documentation is fifteen years.

If special characteristics have been agreed with the supplier, it is obliged to subject the parameters to a risk check (FMEA, change in the production control plan). In addition, processability examinations for the agreed characteristics are to be completed. Upon request, the statistical evaluations for the agreed characteristics are to be supplied to Banner.

5.4 Product Safety Officer (PSO)

Both VW and BMW require the naming of at least one product safety officer within a company.

5.4.1 PSO know-how

5.4.1.1 regarding the product produced:

Functionality, detailed production at own location and usage in Volkswagen Group vehicles as stipulated (Tier 2), or the respective, downstream customer in the delivery chain (Tier 3ff).

Within the scope of the aforementioned requirements, if necessary recommendations with respect to material use (e.g. raw materials, working materials) are to be coordinated.

5.4.1.2 regarding the Product Safety and Product Liability Acts

5.4.1.3 regarding risk evaluation methods resulting from qualified PSO training measures and their application

On this basis an individual and suitable training concept can be installed by the supplier for the coaching of several product safety officers within the framework of an in-company PSO network. This is subject to the proviso that comparable content is appropriately communicated, understood and documented.

5.4.2 PSO assignments

- Participation, preparation and determination of priorities for the removal or prevention of deficiencies relevant to product safety during the product production phase (defect prevention).
- Independent involvement in, and initiation and verification of, decisions of relevance to products, processes and design (e.g. FMEA or risk evaluation methods), in cases where an influence of safety relevance exists.
- The preparation, cultivation and further development of lessons learned via checklists for the qualified assessment of design, production, process and material characteristics relevant to product safety.
- The completion, arrangement and evaluation of component or material analyses with the objective of uncovering indications of product deviations of safety relevance at an early stage.
- The independent completion or arrangement of regular process, production, material and product checks with respect to current series, for the confirmation of product safety for the intended and foreseen (mis-) use, and the initiation and tracing of (immediate) measures in the case of deviations of relevance.
- Evaluations of the probability and frequency of failure of the affected product should a defect occur.
- In the case of a complaint, verification of the planned corrective measures, their implementation and long-term efficacy. The supplier's PSO must examine, confirm and document in writing the effectiveness of the measures.
- Should a complaint arise, or in the case of a voluntary admission, communications take place via the person responsible at the customer company for component QA (QA purchased part organisation or QA product engineering).

  The PSO provides advice regarding the quality and confidentiality of the information (clear instructions regarding the defect pattern, its limitation and failure probability, etc.).

5.4.3 PSO competences

- The PSO shall report directly to the executive management, the plant manager and the head of quality assurance
- Introduction of component or material freezes for the current series for reasons such as complaints of safety and image relevance (as well as when for safety reasons, these endanger serial use) including resource planning regarding test stand checks, validation, analyses, etc.
- One PSO per production facility must be named for every stage in the production chain.

5.5 Emergency planning

The supplier shall ensure that all risks within the delivery and process chain that could have a negative impact upon its ability to deliver are to be identified and evaluated upon its own initiative. The supplier shall determine measures in order to guarantee its ability to delivery. Essential emergency plans are to be prepared and kept up to date in order to secure the supply capability. Emergency plans are to be drawn up, constantly updated and upon request, shown to Banner.

5.6 Sustainable and Responsible Procurement Guide

This document FOe_0136 is part of this QAA and must be additionally signed by the supplier.

Reply

To:

Banner GmbH

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Hr. DI (FH) Thomas Schmidt

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or
thomas.schmidt@bannerbatterien.com

From:

Company:

Address:
Postal code/Place:

_____
Responsible person

Recognition of the Supplier Quality Agreement

We herewith confirm the recognition of your Quality Agreement from December 2017

Yours sincerely,

Date:_____ Name:_____

Company stamp
Signature