

KERN-LIEBERS

FIRMENGRUPPE



Quality Assurance Agreement



Version QSV-3.3 (revised 04/2018)

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1 Preamble

Supplier products and services have an important influence on the quality of our products.

The demands and expectations of our customers with respect to quality, flexibility, reliability of delivery and costs therefore necessitate intensive cooperation in partnership with our suppliers as an essential component of our QM system.

Consistent adherence to legal, normative and customer requirements is the basis of our business relationship with both our customers and suppliers.

To remain competitive in an international market, a high standard of product quality is an indispensable requirement.

Customer satisfaction is our priority objective

This agreement sets out our requirements of suppliers with regard to:

- Product and process planning as the basis for serial production release
- Process control and monitoring during serial production
- Supplier approval, assessment and qualification

The objectives of this agreement are to:

- Ensure the capability, reproducibility and traceability of processes
- Minimize product risks
- Prevent delivery of nonconforming products

The agreement does not affect the suppliers unlimited liability for their products and services.

The agreement is part of the contractual relationship between the supplier and the client.

Supplier liability for defects and claims for damages remain unaffected.

2 Scope

The quality assurance agreement

– **QAA** in the following –

applies to

Company name: _____

Street: _____

ZIP: _____

Place: _____

Country _____

and to

Hugo Kern und Liebers GmbH & Co. KG, Dr. Kurt-Steim-Straße 35, D-78713 Schramberg,
including all affiliated companies pursuant to §15 AktG (German Stock Corporation Act)

– **client** in the following –

and

Company name: _____

Street: _____

ZIP: _____

Place: _____

Country _____

including all affiliated companies pursuant to §15 AktG (German Stock Corporation Act)

– **supplier** in the following –

This QAA applies to the procurement of production materials, products and services that go directly into the client's products or directly influence the quality of the products:

- Raw material
- Purchased parts
- External processing for client products

3 General requirements

3.1 QM system and supplier objectives

Suppliers of the client must implement, use and maintain a customer and process oriented QM system that, at a minimum, meets the normative requirements of **ISO 9001** in the applicable edition.

Suppliers of the client for products or services used in the **medical products sector** may need to comply with more extensive industry and/or customer-specific requirements, including for example the normative requirements of **ISO 13485** and **ISO 14971** in the applicable editions.

If this is the case, these requirements are arranged individually in mutual agreement with the supplier.

Suppliers of the client for products or services used in the **automotive sector** must introduce, use and maintain a QM system that meets the normative requirements of **IATF 16949** in the applicable edition.

In particular, these suppliers must fulfill the following obligations:

- **Zero-defect objectives** and a commitment to **continuous improvement** of performance
- Implementation of a **preventive quality planning system** based on the principle of **prevention rather than detection of nonconformance**
- Goals and strategies for **100% reliability of delivery** and for continuous improvement of delivery performance
- A commitment to **adherence to legal and official requirements**, including requirements covering environmental impact

3.2 Supplier environmental management

Environmental protection is an integral component of our company philosophy and a precondition for working with suppliers.

We therefore expect an active environmental management system

from our suppliers that meets the legal and official requirements at the supplier's location and is run in accordance with ISO 14001 or equivalent environmental standards. Suppliers should be seeking ISO 14001 certification.

Amongst other requirements, the supplier undertakes to:

- Use materials, energy and natural resources economically
- Identify products and control safety data sheets in accordance with applicable law
- Declare hazardous substances in products as a component of the product and process approval procedure (for products in the automotive sector: IMDS application = International Material Data System)
- Fully comply with the requirements of REACH, ROHS and Conflict Minerals

3.3 Management system of subcontractors of the contractor

The supplier undertakes to oblige subcontractors to implement and maintain a QM system in accordance with ISO 9001, including a commitment to zero-defect objectives and continuous improvement of performance.

Contractors who supply the client with products or services for use in the automotive industry undertake to introduce IATF 16949.

Additional requirements are agreed by the client and supplier on a case-by-case basis.

2.4 Supplier and subcontractor audits

3.4.1 Product and process audits

The supplier will allow the client to conduct process and product audits to examine and determine established quality assurance measures in order to meet customer requirements. The supplier undertakes to grant access to all areas of the company and all documents relevant to quality that are required for the product or process to be audited. The supplier undertakes to provide the client with all relevant information without delay.

The supplier will receive an audit report. Where corrective or remedial action is required in the view of the client, the supplier undertakes to produce an action plan and to implement it on schedule.

Where required, the supplier will include subcontractors in the auditing process. The supplier undertakes to ensure that audits can be conducted by the subcontractor in accordance with these provisions as set out by the client.

3.4.2 Special processes

For automotive products, the supplier must ensure that critical processes such as heat treatment, electroplating, coating and welding are audited and documented in accordance with the requirements of AIAG CQI-9, CQI-11, CQI-12 and CQI15 for special processes.

3.4.3 Requalification inspection (for automotive products)

For all delivery volumes provided by the supplier, a full annual requalification inspection that meets the requirements of IATF 16949 is required.

The results of the requalification inspection must be provided at the request of the client within two working days.

3.5 Disclosure and release

3.5.1 Of process modifications

To identify and assess risks, the supplier undertakes, as part of the change management procedure, to inform and gain the consent of the client before implementing planned modifications with a potential impact on the product or process supplied. The basis for the assessment of the potential impact on automotive products is the clearing matrix set out in VDA Volume 2.

3.5.2 Of status reports

The supplier must inform the client (KL) immediately in writing of changes in status effected or implemented by OEM customers.

4 Quality assurance before serial delivery

4.1 Supplier quality planning

The supplier undertakes to apply the tools of preventive quality assurance, in accordance with the best currently available techniques, for the fulfillment of industry and customer-specific requirements and to document results.

Additional requirements apply to products and services for use in the automotive sector, as described in the AIAG manuals listed in section 6 and/or VDA volumes. The scope and documentation of quality planning will be agreed with the supplier for specific products.

Planning tools include for example:

- **APQP** (Advanced Product Quality Planning),
- **Feasibility study** of drawing specifications, delivery specifications or specifications and assessment of process reliability
- **FMEA** (Failure Modes and Effects Analysis) to systematically detect and assess process risks and apply appropriate measures to reduce them to an acceptable level
- **Production control plans** to control and monitor the production process
- **Process and inspection equipment capability studies** for relevant product characteristics to demonstrate reliable manufacturing and control

4.2 Supplier/subcontractor contract review

Before concluding contracts the supplier undertakes to ensure that the client's requirements have been fully understood and can be met. The supplier also undertakes to ensure that the same applies to subcontractors. Ambiguities must be clarified with the client.

4.3 Release process

4.3.1 Criteria for product and process release

Product and process release consists of the procedure for inspection and confirmation that:

- Order requirements as per product specifications have been adhered to
- The supplier's manufacturing process is suitable for meeting the client's quality requirements in a serial production environment

Unless otherwise agreed with the client, product and process release in accordance with the clearing matrix set out in VDA Volume 2 is required. This is the case for example in the event of:

- First samples (new product)
- Process modifications, e.g. change to production sequence, production and inspection procedures, new or modified equipment etc.
- Changes to subcontractors
- Relocation of the manufacturing location or relocation of production to another manufacturing location
- Product modifications (design, materials)
- Tool replacement and reconditioning
- Extended breaks in manufacturing (> 12 months)
- After correcting any nonconformance

The type and scope of the product and process release are agreed by the client and supplier on a case-by-case basis, depending on product and project, for:

Additional industry and customer-specific requirements apply to products used in the automotive sector, (e.g. AIAG PPAP manual, VDA Volume 2). Without product and process release, or a special release on the part of the client, serial deliveries not possible.

4.3.2 Samples

Samples are products not manufactured under serial production conditions, but can be part of the validation process. A decision to accept a sample does not imply release for serial production.

4.3.3 Prototype release and documentation

4.3.3.1 First prototype release

The supplier will provide the client with the first sample manufactured under serial production conditions for release inspection, together with documentation in the agreed scope and on schedule. First samples must be identified on the delivery note and packaging (e.g. with adhesive labels).

If not agreed otherwise in the order documentation, the following minimum requirements apply:

Product/service	Documentation	Comments
Raw materials and semi-finished products	<ul style="list-style-type: none"> • Part submission warrant (PSW cover) with reference to order specifications, client's delivery and inspection specifications and/or normative, legal customer specifications • Acceptance inspection certificate (Material inspection certificate) <input type="checkbox"/> e.g. in accordance with EN 10204, 3.1 including <ul style="list-style-type: none"> - Chemical and physical inspection results with reference to order specifications - ID number of smelt batch from semi-finished product supplier • First sample sections of supplier from the prototype release batch (depending on requirements) 	PSW cover can apply for material measurements with the same chemical/physical specification for a supplier
Products (purchased parts)	<ul style="list-style-type: none"> • Part submission warrant (PSW) <ul style="list-style-type: none"> - PSW cover - PSW inspection results (generally for 5 items per tool/cavity with reference to product drawing, variances and third-party measurements marked). - PSW material data sheet (Materials in products/product components) • Product drawing with numbered inspection characteristics • First sample items • Material certificate(s) of the material supplier <input type="checkbox"/> (e.g. in accordance with EN 10204) • Test plan and/or production control plan • Proof of capability of significant characteristics (Machine or preliminary process capability cmk / ppk) 	Forms from <ul style="list-style-type: none"> • AIAG manual PPAP • or VDA volume 2 • or customer-specific standards 5 items, identified <input type="checkbox"/> by tool and cavity
External processing	<ul style="list-style-type: none"> • Part submission warrant (PSW cover) • Product drawing with numbered inspection characteristics • Acceptance inspection certificate (e.g. in accordance with EN 10204, 3.1) • Proof of capability of significant characteristics (if agreed for machine or preliminary process capability) 	e.g. galvanized, chip-removing or forming processing, heat treatment as third-party service order

cmk / ppk >= 1.67*
* If not otherwise required for specific projects.

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	<i>cmk/ppk</i>	
Tools/ <input type="checkbox"/> equipment	<ul style="list-style-type: none"> • Acceptance inspection certificate (e.g. in accordance with EN 10204, 3.1) 	

Additional first sample documentation may be necessary, depending on industry and customer requirements. Specific requirements for significant characteristics will be agreed on a product-by-product basis between client and supplier.

4.3.3.2 First sample release

In the absence of a written release granted for scheduling reasons by the client after prior consultation, all first samples must fulfill the product specification and process capability requirements.

When requirements are met, the client will issue a written release, accompanied by any other documentation required (PSW cover, supplier notification etc.)

If the first sample is rejected, the supplier undertakes, in consultation with the client, to define without delay a date for the changed prototype and provision of the modified first sample.

4.3.3.3 Prototype release after modification and deviation

The first sample and release documentation will be re-submitted if the original first sample is rejected and after product or process modifications.

Type and scope of the release documentation depend on the decision of the client or on the reason for prototype release as defined in section 4.3.1.

5 Serial production and deliveries

The supplier must define, implement, maintain and document procedures to continuously assure product quality and reliability of delivery.

5.1 Process control and monitoring

To assess the process capability of serial deliveries, the client and supplier will agree special characteristics for verification – depending on product safety and customer requirements.

We expect our suppliers to establish appropriate procedures for monitoring processes. For statistical process control (SPC), the index

Capability index *cpk* > 1.67

is required in the absence of any other agreement.

If the supplier is unable to comply with the required capabilities, a 100% inspection of the parts is required, the client must be notified and appropriate corrective measures must be initiated.

The process control system must identify and block nonconforming products and include a systematic cause analysis for the prevention of repeat defects.
If nonconforming parts have been shipped, or there is reason to believe they may have been shipped, the client will be informed without delay.

5.2 Identification and traceability of deliveries

The supplier undertakes to identify products and packaging in accordance with the client's requirements. The procedure must exclude the possibility of confusion and/or mixing of products in the production process.

Delivery note and labeling must include the following information:

Product	Information
Raw materials and semi-finished products	<ul style="list-style-type: none"> - Material description (e.g. in accordance with steel key) - Name of supplier - Dimensions and weight (of each delivery unit) - Client's order no. - Batch no. smelt batch (subcontractor) and production order (supplier) - Delivery note no.
Products (purchased parts)	<ul style="list-style-type: none"> - Product description - Name of supplier - Product/item no. and client's order no. - Drawing no. and change Index - Number of items in delivery - Delivery note no.
Products <input type="checkbox"/> (external processing)	<ul style="list-style-type: none"> - Product description - Name of supplier - Product/item no. and client's order no. - Drawing no. and change Index - Number of items in delivery - Delivery note no.

Additional requirements for some products may be defined with the supplier.

The supplier undertakes to guarantee the traceability of the products delivered. The supplier will define suitable traceability data and the type of documentation. Unless agreed otherwise for a specific project, the retention period for the above data is 15 years from the end of series production.

5.3 Inspection certificate for serial production

Inspection certificates and proof of capability in the series for the supplier and any subcontractors will be included in delivery if required in the client's order documentation.

5.4 Delivery and goods receipt inspection by the client

The supplier undertakes to ship goods by a suitable means of transport and in appropriate packaging to prevent damage to or a reduction in product quality through soiling, corrosion and chemical reactions.

The goods receipt inspection at the client is limited to checking for visible transport damage and determining that the quantity and identity of the products ordered is correct, at least based on the shipping documents. Any defects found will be notified without delay. Defects that are not detected will be notified to the supplier during the normal course of business. The supplier waives any objection to deferred notification of defects. The supplier must orient his quality management system and quality assurance measures to cater for this reduced incoming inspection.

5.5 Complaints, error management and measures

If defects or nonconforming products are identified by the client and notified to the supplier, the supplier undertakes to carry out a systematic error analysis without delay and to inform the client **within one working day** in an **8D report** of receipt of the complaint and any immediate measures taken.

The supplier undertakes to inform the client **within ten working days** about measures and their effectiveness in the form of a fully completed **8-D report**. Only corrective measures following the guidelines on prevention of repeat defects and zero-error objectives will be accepted.

In the event of repeat complaints, the client will conduct supplier audits to determine corrective measures, their implementation and effectiveness.

The client will also assess the effectiveness of the measures as part of subsequent deliveries and in some cases through supplier audits.

As a rule, nonconforming products will be returned to the supplier.

If the client cannot fulfill delivery obligations due to nonconforming products, immediate measures at the expense of the supplier will be agreed with the supplier (e. g. immediate replacement delivery, rework, sort, special transport, special shifts etc.). Nonconforming products differing from the order specifications may not be shipped without a **written special release** from the client. The application for a special release must include information on the nonconforming specification, the quantity and, where applicable, the delivery period for which the release is to be approved.

5.6 Documents, records, special characteristics

The supplier undertakes to maintain document and record control in accordance with ISO 9001 principles.

The retention period for **documents and records with information relevant to quality** is **15 years after the end of series production** if no other agreement with the supplier has been reached.

Special archiving applies to products and materials that significantly impact product safety and personal hazard and/or are subject to legal regulation.

5.7 Contingency planning

The supplier undertakes to implement a contingency plan to deal with failure to deliver due to force majeure, natural disasters, strikes or other production equipment and resource failures as set out in IATF 16949, and to submit it to the client on request.

5.8 Warranty, product safety and liability

The supplier undertakes to:

- Apply a procedure for determining and assessing product risks and insure sufficiently against risks.
- The client requires the conclusion of operating and product liability insurance including extended cover for removal and installation costs of vehicle parts as well as vehicle recall cost insurance with coverage of at least EUR 5 million.
- Inform/provide training to employees about product liability risks and raise employee awareness of potential consequences of product failures.
- Define a contingency plan for damage limitation in the event of a product recall and inability to deliver.
- Adhere to the agreements made with us.
- Comply with the laws applicable to the supplier, in particular the statutory provisions relating to product safety, product and producer liability, plant and equipment safety, working conditions, and occupational safety and environmental protection.

5.9 Continuous improvement process

The supplier undertakes to implement and maintain a continuous improvement process. The client will support this process through close co-operation with the supplier.

5.10 Supplier assessment

The client will monitor adherence to product quality and reliability of delivery in the series, and may initiate qualification measures.

At least once per year, important series production suppliers will receive a supplier assessment with the following criteria:

- *Product quality (conformity of the products delivered with the specified requirements)*
- *Reliability of delivery (adherence to due dates and quantities) including special transports*
- *Notifications about any special customer status*
- *Number of field failures caused by the supplier*
- *Any disruptions caused to the client by the supplier*

Other criteria may also be used for evaluation depending on location.

The goal of the client is to achieve only suppliers with an A rating in these criteria.

Suppliers with a rating below A in one of the criteria will receive a request in the supplier assessment notification to indicate the improvement measures they have implemented without delay. The client will review these measures for effectiveness and where necessary include them in an annual supplier development plan.

The client reserves the right to conclude appropriate **target agreements** with suppliers for supplier development.

In the event that a supplier is responsible for a special status report from a company within the Kern-Liebers group due to a demonstrably poor delivery, or is responsible for a field failure involving customer recall, they will be immediately downgraded to C and required to respond to the client with an with action plan (cause, measures, planned proof of effectiveness) within 10 working days.

6 Related documents

ISO 9001 (current edition)	Quality management systems – Requirements
IATF 16949 (current edition)	Requirements for quality management systems for series and spare parts production in the automotive industry
ISO 13485 (current edition)	Medical devices – Quality management systems – Requirements for regulatory purposes
ISO 14001 (current edition)	Environmental management systems – Requirements
EN 10204 (current edition)	Metallic products – Types of test certificates

The following AIAG manual, each in the current edition:

- APQP Advanced Product Quality Planning
- PPAP Production Part Approval Process
- FMEA Failure Mode and Effects Analysis
- MSA Measurement System Analysis
- SPC Statistical Process Control
- CQI-9; CQI-11; CQI-12; CQI-15 "Special processes"

The applicability of other AIAG manuals depends on customer specific requirements

The following VDA publications, each in the current edition:

- Volume 1 Documentation and archiving
- Volume 2 Assurance of quality of delivery
- Volume 4
 - Assurance of quality in the process landscape
 - FTA fault tree analysis
 - FMEA
 - DFMA
- Volume 4.3 Assurance of quality
- Volume 6.3 Process audit

The applicability of other VDA volumes depends on customer specific requirements

7 Other

Exclusive place of jurisdiction for any disputes arising from the business relationship between the supplier and client is Rottweil am Neckar (Germany). Mandatory statutory provisions concerning exclusive jurisdiction remain unaffected by this provision.

The relationship between the seller and the client is subject exclusively to the law of the Federal Republic of Germany. The United Nations Convention on Contracts for the International Sale of Goods of 11 April 1980 (CISG) does not apply.

In the event that any provision of this agreement should be invalid in whole or in part or subsequently lose its legal validity, the validity of the remaining provisions will not be affected.

If this agreement contains loopholes, the legally effective provisions to fill these loopholes that are deemed to be agreed are those that the parties would have agreed had they been aware of the loopholes in order to fulfill the economic objectives of this agreement.

Place and date

Client:	Contractor / supplier:
Name and role:	Name and role:
Name and role:	Name and role: