

## 1 Objective and Scope

- 1.1 Quality is a key success factor for Ulbrichts in the context of domestic and international competition. If Ulbrichts is to meet the demands and expectations of its customers and continue to deliver high-quality products, Ulbrichts shall constantly improve the quality of its products by way of this Quality Assurance Annex.
- 1.2 This Annex is an integral part of the General Terms and Conditions of Purchase and shall be binding on all contractual relationships with Ulbrichts, and shall be strictly observed by Supplier. Quality depends on the methods of quality assurance and process control applied. Appropriate measures shall therefore be taken to prevent as far as possible the occurrence of errors, with the goal of achieving "zero defects".
- 1.3 Quality specifications agreed with customers shall be reliably fulfilled when manufacturing products and providing consultation as well as other services. For such reasons, Ulbrichts seeks to procure only products of impeccable, supplier-tested quality. This requires the application by Supplier of a series of ongoing quality checks based on a recognized system of quality assurance.
- 1.4 This Annex describes the requirements and the process for safeguarding the quality of purchased materials, components, subassemblies and services delivered by Supplier.
- 1.5 Supplier shall be responsible for the quality of the products it delivers, regardless of whether they have been produced in-house or acquired from third parties.
- 1.6 Supplier undertakes to confer the content of this Quality Assurance Annex to its sub-suppliers.
- 1.7 This Annex describes the minimum requirements of the quality management system used by the contracting parties for the purposes of quality assurance.
- 1.8 The Annex shall apply to all parts, components and services that Supplier delivers to Ulbrichts.

## 2 Quality Management System

- 2.1 Supplier operates a certified system of quality management conforming, at a minimum, to the requirements of DIN EN ISO 9001. Moreover, if not already applicable, Supplier shall strive to obtain IATF 16949 certification.
- 2.2 Supplier shall consistently take into account and comply with the latest national and international developments in this respect, particularly the needs and requirements of the automotive industry in accordance with IATF 16949, as amended from time to time.
- 2.3 Supplier undertakes to implement, maintain and further develop an environmental management system conforming to ISO 14001.
- 2.4 Supplier shall ensure that its Affiliates which have business relationships with Ulbrichts comply with the duties Supplier has assumed on the basis of this Annex.
- 2.5 Supplier shall implement the fundamental principles applying to continuous improvement, namely: quality planning in respect of a systematic risk analysis of products and processes; quality assurance applied to ongoing monitoring and any intervention that might be needed; and improvements designed to increase both quality and productivity.
- 2.6 Supplier shall appoint a product safety officer for each location and communicate their name to Ulbrichts.

## 3 Management of Sub-suppliers

- 3.1 Unless otherwise agreed, Supplier shall bear sole responsibility for the selection of sub-suppliers. This includes being responsible for the reliable compliance of sub-suppliers with Ulbrichts' quality specifications up to the start of series production, followed by the application of continuous improvements for the duration of the relationship with Supplier.
- 3.2 Supplier shall be responsible for all tasks associated with the management of sub-suppliers. Supplier shall furthermore bind its sub-suppliers to fulfilling the duties arising from this Annex.
- 3.3 Ulbrichts shall be entitled to request documented evidence from Supplier verifying that Supplier has committed its sub-suppliers to comply with Ulbrichts' quality system.
- 3.4 Supplier undertakes to apply further measures to guarantee the quality of the products delivered by its sub-suppliers, and to provide Ulbrichts with appropriate evidence on request.
- 3.5 Details concerning sub-suppliers, their production sites, share of the supply volume and the results of sub-supplier audits shall be supplied to Ulbrichts on request.
- 3.6 Supplier shall ensure Ulbrichts rights of access to its sub-suppliers' premises.

## 4 Information

- 4.1 Supplier shall notify Ulbrichts, without undue delay, in case there is reason to assume that aspects of the reached agreements (e.g. quality specifications, deadlines, delivery volumes) may not be fulfilled.
- 4.2 Supplier shall likewise notify Ulbrichts, without undue delay, of any and all discrepancies subsequently found to affect items already delivered.
- 4.3 Supplier undertakes, prior to:
- changing its production processes, procedures and materials (including those of its sub-suppliers)
  - changing sub-suppliers
  - changing testing methods/equipment
  - relocating production sites
  - relocating production facilities within a site

- outsourcing operation sequences

to notify Ulbrichts as timely as possible so as to enable Ulbrichts the opportunity to verify whether the envisaged changes are likely to have any negative impact.

## 5 Audits

- 5.1 Ulbrichts shall be entitled to carry out audits on Supplier's premises to verify whether its quality assurance measures fulfil the demands of Ulbrichts. The audit may take the form of a system, process or product audit. In the event of an escalated case, Supplier shall ensure that requested short-term appointments can be realized. At the same time, reasonable restrictions applied by Supplier in order to safeguard know-how and confidentiality shall be guaranteed. In case, quality-related issues arise, Supplier shall offer Ulbrichts the possibility of conducting an audit on the premises of Supplier's sub-suppliers.
- 5.2 Supplier shall be notified of the outcome of the audit. In the event of any issues being detected, Supplier undertakes to establish a plan of action (including deadlines) in consultation with Ulbrichts, to implement said plan in a timely manner, and to inform Ulbrichts accordingly.

## 6 Development - Quality Assurance prior to Series Production

### 6.1 Quality planning

Supplier shall implement and maintain at all times quality planning under its own responsibility when planning new products. The elements deemed to be requirements in this regard are listed below:

- Contract review (review of the technical documents)
- FMEA process
- Definition of key features
- Process flow diagram with review steps
- Planning of SPC characteristics
- Quality control plan
- Production materials planning
- Production Trial Run
- Staff qualification
- Packaging and conservation planning
- Supplier-side quality planning (vendor items)
- Detailed scheduling
- Planning/monitoring of testing equipment
- Tolerance study
- Inspection schedule for pre-production monitoring
- Methodical implementation of customers' wishes (e.g. using Quality Function Deployment (QFD))
- Production feasibility study
- Design FMEA (if Supplier is responsible for design)
- Measurement concept for pre-production monitoring
- Statistical test planning.

Ulbrichts shall be granted access to planning documents at any time. The following elements require coordination with Ulbrichts:

- process FMEA,
- inspection planning,
- planning of testing equipment,
- definition of key features and
- packaging planning.

For the purpose of supervision and progress monitoring, Ulbrichts shall be supplied with a schedule plan (containing all of the planning elements) no later than four weeks after the contract is awarded.

Supplier shall nominate a person with responsibility for the project, who shall be contactable at all times. The definitive scheduling shall be submitted four weeks prior to the initial sample deadline. In respect of standard series-produced parts that have been added to Ulbrichts' range, proof of suitability for processing or of processing capability shall be submitted.

### 6.2 Pre-production samples

If working models or prototype parts are required, they shall be supplied with a corresponding measurement report. Measuring criteria shall be subject to individual coordination with Ulbrichts' project coordinator. The parts concerned shall be clearly marked as prototypes, along with their corresponding article/project designation, drawing number, revision index, production date and Ulbrichts' article/project number.

- 6.3 Initial sampling
- 6.3.1 Where new or modified products are concerned or new or modified tools, materials, processes or production facilities are employed, Ulbrichts shall be provided with initial samples prior to the start of series production.
- 6.3.2 The initial sampling of parts for the automotive industry shall be carried out in accordance with VDA guidelines or IATF 16949. The complete initial sample inspection report (ISIR) – covering dimensions, materials, function, appearance and performance, and including the safety data sheet – shall be submitted to Ulbrichts' contact person in a sufficient quantity (approx. 5 - 50, samples, subject to agreement).
- 6.3.3 The test report shall include all the measurements, features, specifications and inspections and tests to be carried out in accordance with the technical documentation. Non-quantifiable measurements shall be specifically identified as such. The ISIR shall clearly show which measurement readings apply to which sample parts. Key (measurable) characteristics are to be included in the initial sample inspection report with details of their process capability indices. Initial sample parts shall be clearly labelled "INITIAL SAMPLE", separated from other deliveries and supplied with their own delivery note. Supplier shall store an approved sample, along with copies of the test results recorded by Supplier, until the item concerned is discontinued or modified.
- 6.3.4 A safety data sheet conforming to 91/155/EEC shall be submitted for substances or products containing hazardous substances. The contents of all other substances/products shall be indicated in accordance with VDA guidelines.
- 6.3.5 Supplier shall confirm that its products conform to EU Directive 2000/53/EC ("the ELV Directive") and that they contain no substances subject to declaration as per VDA list 232-101 or substances of very high concern within the meaning of EU Regulation 2006/1907/EC.
- 6.3.6 Deliveries from series production shall not take place until samples have positive approval and their approval has been confirmed in writing by Ulbrichts. All deliveries made up to this moment shall require a specific quantity-based or time-limited approval from Ulbrichts.
- 7 Complaints Procedures**
- 7.1 Complaints sent from Ulbrichts to Supplier shall typically be submitted by e-mail. Reasons for such complaints might include, without being limited to:
- Surface-finish and paint defects
  - Malfunctions
  - Dimensional deviations
  - Quantity anomalies
  - Failure to fulfil schedules
  - Incorrect labelling / attributes
  - Packaging not to specifications
  - Damage in transit
  - etc.
- 7.2 If defective products are supplied, Supplier undertakes to remedy the situation without undue delay (by replacement/special delivery, re-machining or re-sorting).
- 7.3 Supplier shall inform Ulbrichts in writing without undue delay, in any event within 1 Business Day, from the date on which Ulbrichts raised the complaint about immediate remedial actions undertaken by Supplier.
- 7.4 Supplier shall without undue delay take remedial action at its own site, at Ulbrichts and, if necessary, at the corresponding customer's site.
- 7.5 Depending on the extent of the problem, stricter shipping and inspection measures, or remedial action, shall be undertaken at Supplier's expense.
- 7.6 In order to maintain production operations and its ability to deliver, Ulbrichts reserves the right to re-machine or separate defective products at Supplier's expense; third parties may also be engaged to do so. Supplier shall bear the cost arising from such actions.
- 7.7 Problem Solving Documentation
- 7.7.1 The 8D Problem Analysis Report is Ulbrichts' preferred problem solving format for use by all Ulbrichts suppliers. The 8D Problem Analysis Report provides a means for the definition and resolution of issues through problem solving.
- 7.7.2 Supplier is responsible for appropriate and timely application of the 8D and for ensuring its organization possesses the knowledge and skill level to solve problems.
- 7.7.3 Supplier shall provide a preliminary 8D report to Ulbrichts within 5 Business Days from the date on which Ulbrichts raised the complaint.
- 7.7.4 Supplier shall provide the final and completed 8D report to Ulbrichts within 10 Business Days from the date on which Ulbrichts raised the complaint.
- 7.8 Procedures for approving products and production processes
- 7.8.1 Before commencing delivery for series production, Supplier shall, unless otherwise agreed, carry out, on request, product and production approval procedures in accordance with VDA Volume 2, in the form of an ISIR (initial sample inspection report), but also a PPAP. Supplier shall provide evidence, in an agreed format, in respect of suitability and capability.
- 7.8.2 Supplier shall provide - in a timely manner, to the agreed extent and before series production begins - initial samples produced under series-production conditions. Series production may only commence after Ulbrichts has issued its approval.
- 7.9 Suitability for processing
- 7.9.1 With regard to the characteristics, Supplier shall conduct process planning (work plans, test plans, production resources, tooling, machinery, etc.). With regard to the function-critical and process-critical characteristics, Supplier shall verify the suitability of production facilities and document the outcomes. Product quality shall be monitored through regular internal/external audits.
- 7.9.2 "Special characteristics" that have been identified and agreed on by Ulbrichts and Supplier shall, where applicable, be subjected to statistical process control.
- 7.9.3 Suitability for processing is to be determined and documented for special characteristics (see VDA vol. 4, part 1 and/or the SPC manual).
- 7.9.4 If the agreed values are not achieved, Supplier shall fully (100%) test the parts and document the same prior to dispatch until the cause has been determined and remedied.
- 7.9.5 In the event of processing errors or quality-related anomalies, Supplier shall analyse the causes, implement improvement measures and verify their effectiveness.
- 8 Agreements regarding Products and Processes**
- 8.1 The products shall be of the agreed or warranted characteristics (e.g. regarding specifications, data sheets, drawings, samples).
- 8.2 Supplier shall without undue delay verify whether a description provided by Ulbrichts (e.g. as a specification, list of requirements, data sheet, drawings) is manifestly incorrect, unclear or incomplete, or if it obviously deviates from the specifications. Should Supplier determine that this is the case, Supplier shall notify Ulbrichts in writing without undue delay prior to commencing the manufacturing process or carrying out the service in question.
- 9 Production Documents**
- 9.1 Ulbrichts shall provide Supplier with a set of verified, current documents. These can include:
- Drawings
  - Parts lists
  - Test instructions, and
  - Ulbrichts standards
- 9.2 References to the relevant documents shall be included in written enquiries and orders. If a document should be amended, the new version will be made available to Supplier.
- 9.3 Supplier undertakes to create and maintain the documents required for the processes for which it is responsible. These can include:
- Work schedules
  - Test plans
  - Test records for production batches
  - Processing parameters for production batches
  - Materials used for production batches, and
  - Production-batch materials certified in accordance with DIN EN 10204 2.2 or 3.1
  - Ulbrichts shall have the right to inspect these items at any and all times.
- 10 Series Production, Documentation, Labelling/Marking of Products**
- 10.1 Supplier shall maintain a record of the quality-assurance measures that have been undertaken, in particular those concerning measurement readings and test results, and shall store such records, along with product samples agreed to with Ulbrichts, in a manner that allows their easy retrieval. The duty to retain documents and records on file shall remain in force for at least 15 years.
- 10.2 Any modifications to the product and the process sequence shall be recorded by Supplier in a product life cycle log and presented to Ulbrichts on request. Supplier shall grant Ulbrichts access to these records and also hand over any samples on request.
- 10.3 Supplier shall manage the handling of data and documents (including external documents such as industrial standards and customer drawings) in procedural instructions and implement these effectively. The Annex shall reduce Supplier's need to send series-production documentation – which can be agreed upon individually – with each delivery.
- 11 Packing, identification, traceability**
- 11.1 Supplier shall deliver the products using suitable and – to the extent agreed – exclusively by means of transport approved by Ulbrichts in order to prevent damage and/or quality impairments (e.g. caused by contamination, corrosion or chemical reactions, etc.).
- 11.2 Supplier undertakes to mark and label products, parts and packaging in accordance with corresponding agreements entered into with Ulbrichts. Supplier shall ensure that the labels and markings used for the packaged products remain legible when in transit and during storage. Supplier undertakes to guarantee the traceability of the products that it

delivers. If an anomaly is detected, the traceability and limitation of the defective parts/products/ batches, etc. shall be guaranteed.

- 11.3 If Ulbrichts provides Supplier with manufacturing and/or testing equipment, especially resources and equipment relating to the procurement of deliveries, these items are to be clearly marked as the property of Ulbrichts. Supplier shall be responsible for their integrity and correct operation, and shall arrange for maintenance and repair as well as insurance cover for said items.

## 12 Ulbrichts Quality Standards

- 12.1 In the same manner as Ulbrichts does for its own customers, Supplier undertakes to strive towards zero defects for Ulbrichts. If zero defects are not achievable in the short term, Supplier shall propose temporary upper limits for error rates as interim targets as well as a course of action and shall coordinate with Ulbrichts. The undercutting of agreed upper limits shall not release Supplier from its obligation to process all complaints or from continuing the policy of continuous improvement. Ulbrichts shall monitor Supplier's quality-related performance by way of regular supplier evaluations. Supplier will nevertheless also be expected to monitor its own quality-related performance.

- 12.2 Incoming goods inspections at Ulbrichts shall be limited to a visual inspection of the products for signs of external damage while in transit as well as to determining compliance with the quantity and identity of the products ordered, at a minimum on the basis of the shipping documents. Any and all resulting claims shall be reported without undue delay.

- 12.3 If a defect is not detected without undue delay upon delivery, Supplier shall waive any and all right to object to late notification of defects within the warranty period according to Point 23.2 of Ulbrichts' Terms and Conditions of Purchase. Supplier undertakes to align its quality management system and quality assurance measures to this reduced incoming goods inspection format. If Supplier should ever be unable, under exceptional circumstances, to deliver products conforming to specifications, it shall obtain special approval from Ulbrichts before carrying out the delivery. Supplier shall, to the full extent possible and on its own responsibility, heed any and all advice provided by Ulbrichts in respect of improving the quality of the products by amending its manufacturing process and quality assurance processes. If the delivery of products not conforming to specifications threatens to result in production stoppages on Ulbrichts' premises or those of its customers, Supplier shall, in consultation with Ulbrichts, be required to find remedies in the shape of appropriate immediate emergency measures (e.g. replacement deliveries, additional sorting, reworking, express deliveries, etc.) to be borne by Supplier. Supplier shall then without undue delay carry out an error analysis, during which Ulbrichts shall assist Supplier if required and within the bounds of its possibilities. Products subject to a complaint shall be returned to Supplier. Supplier undertakes to analyse all anomalies and notify Ulbrichts at short notice of the cause of the anomaly, the instituted remedial action and preventive measures applied and an indication of their effectiveness. Delivery deadlines based on delivery times agreed between Ulbrichts and Supplier shall be strictly observed. If exceptional circumstances make it impossible to meet a deadline, Supplier shall notify Ulbrichts without undue delay in writing or by telephone as soon as Supplier realizes that such a delay might be possible. Supplier shall, at the same time, propose a new delivery date. This shall not affect Supplier's liability for defects or damage claims arising from faulty deliveries.

## 13 Product Liability

- 13.1 Should a product delivered by Supplier cause any form of damage, Supplier shall be liable, under the statutory provisions, to the extent that the product so supplied is the cause of the damage.

- 13.2 Supplier shall, to this extent, expressly indemnify and hold Ulbrichts harmless for any and all liability arising from products supplied by Supplier. Supplier undertakes to maintain product liability insurance with cover amounting to at least €5 million per case of personal injury or material loss and damage. It shall cover not only the extended product risk (including loss or damage incurred outside Germany and vehicle recalls), but also the risks arising from any waiving of objection to the delayed notification of defects.

- 13.3 Supplier shall be able to provide Ulbrichts with evidence, on request, of the existence and maintenance of said insurance. Supplier shall notify Ulbrichts without undue delay if this insurance cover is amended or cancelled.

## 14 Health and Safety and Environmental Regulations (RoHS, REACH)

- 14.1 Supplier undertakes to observe the statutory provisions governing the environment as well as occupational health and safety and to minimize the impact of its occupational health and safety/environmental activities on human health and the environment by suitably organizing its health and safety and environmental protection measures. In this context, the implementation and ongoing development of a system of occupational H&S and environmental protection management will be of benefit (see Item 3, ISO 14001).

- 14.2 Supplier undertakes to comply with the requirements of RoHS EC Directives 2002/95/EC and REACH Regulation (EC) no. 1907/2006. If requirements should make an exception necessary, this shall be reported in writing to Ulbrichts specifically and for each individual case.

## 15 Product Safety Officer (PSO)

Supplier shall designate a product safety officer (PSO) and deputy PSO and confirm that Supplier's sub-suppliers do the same.

## 16 Underlying Standards, Guidelines, Directives and Agreements (as amended from time to time)

- DIN EN ISO 9001
- DIN ISO 2859 Sampling procedures for inspection by attributes
- DIN ISO 3951 Sampling procedures for inspection by variables
- DIN EN 10204 Certification of material testing
- DIN 55350 T.13 Quality testing certificates

- VDI/VDE/DGQ 2618 Instructions for the monitoring of testing equipment
- DGQ document no. 13-39 Monitoring of testing equipment
- VDA: Quality management in the automotive industry, volumes 1 to 7 Verband der Automobilindustrie e.V.
- (VDA, German Association of Automobile Manufacturers)
- Recommendation no. 4902 of the VDA
- IATF 16949
- Ulbrichts' Terms and Conditions of Purchase
- EU Directive 2000/53/EC (End-of-life Vehicles)
- VDA list 232-101
- EU Directive 2011/65/EU (RoHS Directive)
- EU Directive 2006/1907/EU (REACH Directive).