

QSA-APAG Group
Quality Security Agreement for suppliers

This Agreement defines the minimum quality requirements compliance for APAG Elektronik (hereinafter referred to as APAG) suppliers. This agreement is a component of the Purchasing Agreement between

APAG Elektronik AG and
Zentrum Staldenbach
CH-8808 Pfäffikon

+41 44 802 67 00 Telephone
purchasing-pcn@apagcosyst.com e-mail

APAG Elektronik s. r. o. and
U Panonicu 396
CZ-530 06 Pardubice

+420 467 004 259 Telephone
purchasing-pcn@apagcosyst.com e-mail

APAG Elektronik Corp. and
3505 Rhodes Drive
Windsor N8W 5B3 – Ontario
Canada

+1 226 722 7550 Telephone
purchasing-pcn@apagcosyst.com e-mail

..... Place and date

Signatures

Strategic Procurement..... Sales Director

Quality Director Quality Director.....

SCM..... SCM.....

Editor:	ZAV	Date:	27-Jul-2021	Location Validity:	Document-No.:	Index:
Reviewed:	LAC, KW	Date:	03.Sep 2021	APAG Global (AGL)	D-SP004-AGL	G
Released:	TKA	Date:	03.Sep 2021			

QSA-APAG Group Quality Security Agreement for suppliers

Foreword

This Quality Management Agreement applies to all products and services provided by APAG and APAG s.r.o suppliers. It describes the basic supplier quality compliance requirements.

This Agreement pursues a strategy of developing long-term partnerships with suppliers. Supplier partnerships that reliably meet set standards with regard to price, on-time delivery, quality, and innovation.

APAG product quality is largely dependent upon the quality of the products it receives from suppliers. Inspection systems cannot improve product quality. Quality must be produced. Inspections can only assess product quality. The quality assessment findings are then incorporated into improvement programmes with the objective of achieving long-term quality improvements.

To achieve these objectives, we expect our suppliers to fully comply with the IATF 16949 standards, as they regard quality management system implementation and improvement. If products are delivered for medical devices, APAG expects its suppliers to fully comply with the ISO13485 standards.

The supplier is fully responsible for the quality of any product it supplies. If any quality defects are identified, the supplier is obliged to remedy such defect in a sustained fashion.

If the supplier is, for any reason, unable to remedy the defects or unable to remedy the defects in due time, we will engage other suppliers.

We extend our thanks for your understanding and support.

APAG Elektronik

Editor:	ZAV	Date:	27-Jul-2021	Location Validity:		Document-No.:		Index:	
Reviewed:	LAC, KW	Date:	03.Sep 2021	APAG Global (AGL)		D-SP004-AGL	G		
Released:	TKA	Date:	03.Sep 2021						

QSA-APAG Group
Quality Security Agreement for suppliers

Table of Contents

1 Introduction 5

2 Quality Management System..... 5

3 Quality Assurance prior to Serial Production (Advanced Quality Planning)..... 6

3.1 General quality requirements..... 6

3.2 *Changes to quality requirements* 6

3.3 *Environment*..... 6

3.4 *Advanced Product Quality Planning APQP*..... 6

3.5 *Technical documents / Functional specifications and deliverables* 7

3.6 *Producibility assessment* 7

3.7 *Project schedules with quality objectives and deadlines* 7

3.8 *Construction-FMEA and Process-FMEA* 8

3.9 *Planning and determination of inspection characteristics and capability tests*..... 8

3.10 *Planning and definition of inspections and inspection methods, and test equipment* 9

3.11 *Plans for packaging*..... 10

3.12 *Part datasheet*..... 10

4 Initial sampling..... 10

5 Quality assurance during series production 11

5.1 *Procurement*..... 11

5.2 *Statistical process control*..... 11

5.3 *In-process inspections*..... 12

5.4 *Final inspection* 12

5.5 *Quality records* 12

5.6 *Documentation* 12

5.7 *Handling of defective units* 13

5.8 *Packaging and labelling*..... 13

5.9 *Traceability*..... 13

5.10 *Quantity assurance concept*..... 13

6 Collaborating with APAG 14

6.1 *Goods receipt inspection at APAG* 14

6.2 *Quality performance of production series deliveries* 14

6.3 *Defective deliveries* 14

6.4 *Product Safety Representative* 15

7 Quality audits..... 15

8 Acceptance inspection certificates..... 15

9 Supplier's reporting and information obligations 15

10 Rules and Regulations incorporated into this agreement by reference 16

Editor:	ZAV	Date:	27-Jul-2021	Location Validity:	Document-No.:	Index:
Reviewed:	LAC, KW	Date:	03.Sep 2021	APAG Global (AGL)	D-SP004-AGL	G
Released:	TKA	Date:	03.Sep 2021			

QSA-APAG Group
Quality Security Agreement for suppliers

11 *Addendums; Severability* 16

12 *Liability* 16

13 *Agreement Term* 17

14 *Intellectual and Commercial Property Rights* 17

15 *Duty to observe secrecy* 17

16 *Applicable Law and Jurisdiction* 17

Document History 17

Editor:	ZAV	Date:	27-jul-2021	Location Validity:	Document-No.:	Index:
Reviewed:	LAC, KW	Date:	03.Sep 2021	APAG Global (AGL)	D-SP004-AGL	G
Released:	TKA	Date:	03.Sep 2021			

QSA-APAG Group

Quality Security Agreement for suppliers

1 Introduction

To maintain our competitiveness, it is imperative that the entire value-added chain - from raw materials to the final product - is defined as efficiently as possible. This requires our suppliers' active participation in the planning and construction of new electronic modules, new components or raw materials, as well as in any associated changes, modifications and improvements.

We expect our suppliers to independently submit construction ideas, process improvements, new materials, cost reductions, value analysis proposals, and other improvement concepts during the entire product life cycle. It is important to note that all materials used in the manufacturing process must comply with the applicable statutory rules and regulations regarding the restricted use of toxic and hazardous materials.

Consistent supplier driven quality improvements in supplier products and services are decisive for both APAG and our suppliers' long-term economic prosperity.

As such, APAG suppliers must have a contemporary, up-to-date and effective quality assurance system in place to ensure that product quality is free from defects.

This Quality Management Agreement contains the minimum standards for this system and describes the most important procedures required to achieve systematic quality assurance.

This Quality Management Agreement is an essential component of the Supply Agreement, even if this is not expressly noted in the order.

The standards stipulated in this Agreement supplement the technical requirements and may not be interpreted as an alternative.

Note

All recipients of this Quality Management Agreement are called upon to ensure that their Quality Managements Systems are IATF 16949 compliant and/or ISO 13485 compliant if the delivered products are to be used in medical devices.

If your company has received ISO 9001, IATF16949 and/or ISO 13485 certification, please provide us with a copy of the corresponding certification. See Section 8: Quality Capability Assessment of Suppliers.

2 Quality Management System

The supplier bears responsibility for the quality of products it supplies to APAG.

To ensure product quality, the supplier must, at a minimum, have a modern, effective and ISO 9001 compliant quality management system in place that is documented in writing and consistently adapted and updated.

The applicable ISO 9001, IATF 16949, ISO 13485 quality elements, quality assurance measures and assigned responsibilities must include all operational areas (departments/units) and must be monitored independent of the respective production processes.

The Quality Management System objective is to quickly identify any actual / target deviations regarding the organisation/operations and production. The Quality Management System must warrant that efficient steps are undertaken in a timely fashion to remedy any identified deviations (quality defects).

Editor:	ZAV	Date:	27-Jul-2021	Location Validity:		Document-No.:		Index:	
Reviewed:	LAC, KW	Date:	03.Sep 2021	APAG Global (AGL)		D-SP004-AGL	G		
Released:	TKA	Date:	03.Sep 2021						

QSA-APAG Group Quality Security Agreement for suppliers

3 Quality Assurance prior to Serial Production (Advanced Quality Planning)

3.1 General quality requirements

The individual quality requirements are derived from the respective technical specifications, technical documents, drawings, company and third-party standards, samples etc. that are provided to the contracting party within the scope of the contractual relationship.

3.2 Changes to quality requirements

APAG's approval regarding any quality related modification or amendment does not release the supplier of its sole responsibility for the contract products' properties, characteristics and reliability.

3.3 Environment

The statutory requirements and thresholds are minimum requirements for all processes integrated into the production chain, as well as all required services. Suppliers are to implement the necessary changes resulting from amendments to statutory requirements arising without requiring any notification by APAG. Inspection results must be made available to APAG.

A safety data sheet is to be included with hazardous material deliveries and the means of transportation must comply with the respective state regulations and laws.

The supplier undertakes to comply in full with the EU End of Life Vehicles Directive 2000/53/EG and international standards in regard to its products. The entry of all material data (complete data set) into the IMDS system, (<http://www.mdsystem.com>), becomes a mandatory component of any product release based on the initial sample inspection report, conducted in accordance with customer specific requirements and related standards, in order to comply with the aforementioned environmental requirements.

The supplier is required to obtain, maintain and/or implement the ISO 14001 standard (certificate) or a different equivalent environmental standard at its place of business/in its operations.

3.4 Advanced Product Quality Planning APQP

High quality, reliable products are the result of careful quality planning. Quality planning must begin in the development stage. For this reason, APAG expects its suppliers to conduct systematic advanced product quality planning. The quality of a product is largely determined in the development stage. As such, it is useful and necessary to include quality assurance measures in this early stage of planning.

Effective elements for advance product quality planning are:

- Technical documents / Functional specifications and deliverables
- Producibility assessment
- Project schedules with quality objectives, set dates and deadlines
- Capacity planning
- Construction FMEA and Process FMEA
- Planning and determination of inspection characteristics and capability tests
- Planning and determination of inspection, measuring and test equipment and methods
- Packaging planning

This concept is underpinned with the objectives of zero-defect (0 ppm) and 100% supply capability. The supplier is committed to attaining the zero-defect objective and is obliged to continuously optimise its services accordingly. Consistent Advanced Product Quality Planning (APQP) and

Editor:	ZAV	Date:	27-Jul-2021	Location Validity:	Document-No.:	Index:
Reviewed:	LAC, KW	Date:	03.Sep 2021	APAG Global (AGL)	D-SP004-AGL	G
Released:	TKA	Date:	03.Sep 2021			

QSA-APAG Group Quality Security Agreement for suppliers

effective series monitoring are indispensable. The main focus must be placed on defect avoidance rather than defect identification.

3.5 *Technical documents / Functional specifications and deliverables*

Required information, i.e. technical documentation, is provided for inquiries or orders, unless catalogue goods or standardised parts are involved.

The supplier bears the responsibility to ensure that APAG's technical specifications and requirements are applied. These are usually technical drawings, specifications and standards.

In addition, the supplier must also maintain a system that ensures that only the most recent technical documents are used.

The supplier is to check all specification documents required for development and planning for completeness and lack of ambiguity upon receipt. Matters requiring clarification and defects are to be reported immediately. If the supplier identifies that the product requirements specified in the technical documentation or the set inspection procedures contain erroneous, ambiguous, or incomplete descriptions or that characteristics and properties deviating from the sample are described, such information is to be reported to APAG in writing without prior request.

The same applies, if the product requirements and inspection procedures can be replaced by applicable, more economical and more efficient requirements or processes.

The supplier must keep reports / records (documentation) of the executed quality assurance measures, in particular regarding measurement data and inspection results; these reports/records must be kept according to a clear outline and must be available for review at any time.

Unless otherwise agreed, these documents and records are to be kept in accordance with the requirements/specifications defined (e.g. in VDA Vol. 1 – Documented information and Retention, IATF 16949:2016)

Suppliers and its subcontractors are obliged to keep such documents for a period which is classified in VDA 1, 4th edition.

3.6 *Producibility assessment*

The producibility assessment is a significant element assuring product quality in regard to new product planning, as well as product, process and quantity modifications or changes.

The producibility assessment determines, if the requested product can be produced in serial production according to the specifications described in the technical documents.

Particular attention is to be placed on if tolerance, scheduling, and capacity specifications can be complied with.

APAG will thoroughly review supplier change or supplement requests to the technical documents; the required technical document changes or supplements will be implemented in terms of product quality and process reliability. The supplier is obliged to review all technical documents regarding reliable production output, under consideration of its own production facilities. In the event the supplier perceives the technical specifications as ambiguous, the supplier is to notify the responsible APAG departments of this fact immediately.

3.7 *Project schedules with quality objectives and deadlines*

The supplier must have established a project organisation according to APQP. APQP defines the procedures and the coordination of the project's individual processes. The individual functional departments must be integrated into the project organisation.

Editor:	ZAV	Date:	27-Jul-2021	Location Validity:	Document-No.:	Index:
Reviewed:	LAC, KW	Date:	03.Sep 2021	APAG Global (AGL)	D-SP004-AGL	G
Released:	TKA	Date:	03.Sep 2021			

QSA-APAG Group Quality Security Agreement for suppliers

Clear and measurable objectives are to be defined and monitored with regard to deadlines, costs and key quality data.

The supplier's schedules are to be coordinated with APAG's overall schedules to avoid possible schedule conflicts which could endanger APAG's production start-up. Detailed schedules are to be kept. The schedules must reflect the development steps and quality measures defined in the development process. Notification of possible scheduling conflicts and potential missed deadlines is to be made without undue delay.

3.8 Construction-FMEA and Process-FMEA

FMEA (Failure Mode and Effects Analysis) plays a particularly significant role in the preventive quality assurance strategy.

FMEA is an early risk identification system designed to identify potential risks, see also AIAG_VDA_FMEA_Handbook_1. revision 2019.

FMEA is a methodical S-O-D approach (Severity, Occurrence, Detection), which analyses all concept components in relation to potential failures. Targeted remedies are to be initiated based on the Action Priority Table (High priority, medium, low).

In development FMEA, more specifically D-FMEA (Design FMEA), process risk components are analysed to identify potential fault or defect causes. In addition, Process-FMEA is utilized to analyse relevant production process steps regarding potential fault or defect causes. This analysis is to assess and consider all factors that influence the production process ranging from procurement to dispatch and shipping.

FMEA is to be performed and the results are to be reported to APAG upon request. The FMEA analysis remains the property of the preparing party.

3.9 Planning and determination of inspection characteristics and capability tests

Inspection characteristics that are scheduled to be reviewed are documented in drawings or other documents. Advanced product quality planning includes the preparation of a master inspection plan, which summarizes the essential and critical criteria in a master inspection plan. This is the foundation upon which APAG and the supplier will coordinate quality management planning prior to the commencement of production. The responsibility of reviewing the set criteria is borne by the supplier. Capability tests are to be considered for all criteria relevant to quality that could result in specifications not being complied with.

APAG retains the right to define additional inspection criteria.

The capability test compares the quality resulting from the process and the set specifications. An important point that must be considered when conducting the capability test, namely capability can only be determined if the process is stable, i.e. when the process is under statistical control.

The inspection and assessment of machine and process capability is conducted on the basis of VDA Vol. 4 PPAP and SPC Manual as amended, and under consideration of additional relevant requirements/specifications, if any.

The supplier must conduct and document a detailed analysis of the suitability of the production processes in relation to relevant function and safety characteristics. If the supplier does not achieve a machine capability value of cmk, the supplier must either furnish proof of the fact that its machinery/equipment has been optimized accordingly or furnish proof of the fact that faulty deliveries are excluded on the basis of an applicable test of the manufactured products. During series production runs the supplier must furnish proof of and document a process capability value of cpk for SC (significant characteristics) and CC (critical characteristics) using appropriate processes and methods (e.g. statistical process control or manual control charts) over the entire production period.

Editor:	ZAV	Date:	27-Jul-2021	Location Validity:	Document-No.:	Index:
Reviewed:	LAC, KW	Date:	03.Sep 2021	APAG Global (AGL)	D-SP004-AGL	G
Released:	TKA	Date:	03.Sep 2021			

QSA-APAG Group Quality Security Agreement for suppliers

If the supplier does not achieve the cpk value, the supplier must ensure the quality of its deliveries on the basis of applicable testing methods. In addition, the supplier must allocate all available resources to optimise its production processes to achieve the required process capability.

The following thresholds apply:

- Short-term process capability [short term machine capability index] $cmk > 1.67$
- Preliminary process capability [process performance index] $ppk > 1.67$
- Long-term process capability [long-term process capability index] $cpk > 1.33$

The following deviating thresholds apply to criteria relating safety and statutory provisions:

- Short-term process capability [short-term machine capability index] $cmk > 2.00$
- Long-term process capability [long-term process capability index] $cpk > 1.67$

Values deviating from the cpk and cmk values may be determined separately and are documented in the in the technical specifications.

3.10 Planning and definition of inspections and inspection methods, and test equipment

The supplier must be equipped with the inspection, measuring and test equipment, such that all agreed criteria, as defined in the technical documents, can be inspected and tested.

APAG and the supplier will come to an agreement regarding the inspection, measuring and test methods and equipment to be employed. The supplier must have an efficient inspection, measuring and test equipment monitoring system in place to guarantee precision, accuracy, inspection reliability, measuring and test equipment, as well as their working order.

Important inspection, measuring and test equipment monitoring elements are:

- Initial measurement and registration before use
- Suitability test
(e.g. gauge repeatability and reproducibility / Assessment of Measurement System Capability)
- Routine inspections of the measuring and test equipment in set intervals.
- Test equipment labelling for identification purposes
- Monitoring labelling (e.g. placards)
- Measures to be implemented in the event of deviations from the set target
- Documentation of measurement results and implemented measures

Inspection, measuring and test equipment monitoring procedures are detailed in the relevant documents (see Section 18 Reference List).

To the extent APAG provides production, inspection, measuring and test equipment, particularly materials and equipment for deliveries to the supplier, the production, inspection, measuring and test equipment must be incorporated into the supplier's in-house quality management system and incorporated into the supplier's in-house production and inspection, measuring and test equipment in accordance with the APAG QM Instruction.

The supplier is to ensure that the employed inspection equipment is suitable for the specific measurement task. For this purpose, VDA 2 and MSA "Measurement Systems Analysis" procedures are to be employed and proof is to be furnished that these procedures are implemented.

To achieve the set objectives and specifications the supplier will conduct inspections in accordance with inspection planning.

The APAG Quality Managers must agree to and accept the control plans submitted by the suppliers. At a minimum, the control plan contents must comply with the IATF 16949 Annex A specifications. The control plan must contain all relevant workflows for products manufactured by the supplier.

Editor:	ZAV	Date:	27-Jul-2021	Location Validity:		Document-No.:		Index:	
Reviewed:	LAC, KW	Date:	03.Sep 2021	APAG Global (AGL)		D-SP004-AGL	G		
Released:	TKA	Date:	03.Sep 2021						

QSA-APAG Group Quality Security Agreement for suppliers

The control plans must be fashioned in such a manner that all defects particular to a specific product can be identified to the extent possible with the available established technology. The suppliers are to maintain the control plans in an active and organized change management system to ensure that only current control plans and control instructions are utilized. In addition, the change management system must always be kept up-to-date. Product and process re-qualifications must be clearly identifiable in the inspection plan. A comprehensive report documenting the re-qualification inspections is to be prepared annually. Upon request this report is to be provided to APAG without undue delay. The scope of the re-qualification inspections is a function of the initial sample inspection. Deviating agreements require the written form.

3.11 Plans for packaging

All parts are to be packaged such that transportation, shipping and storage damages can be prevented. This applies irrespective of which party bears the associated packaging costs.

Suitable packaging is to be defined in conjunction with APAG and is to be agreed in due time with the responsible logistics departments. To ensure that delivery or quality issues do not arise from the lack of packaging materials, alternative packaging is to be defined in the project phase.

3.12 Part datasheet

All product and process relevant modifications that have been realized must be documented in the product and process datasheets (part datasheet). The documentation must ensure that modifications can be tracked.

Unless otherwise agreed, the parts datasheet must be included with every delivery through to the release of the initial sampling (Rating 1: Release without conditions).

The part datasheet is also to be updated by the supplier in series production and presented upon request.

4 Initial sampling

Initial sampling furnishes proof of the supplier's ability to comply with APAG quality standards.

Initial sampling is required as follows:

- New parts
- Amendments to the agreed specifications
- Production process modifications
- Production site relocation
- Production suspension for a period exceeding 1 year
- For production with more than one tool of the same type, one product from each tool, and if more than one mould of the same type is used, then one product from each mould
- Change of sub-contractors (sub-suppliers)

Initial sampling is to be conducted in accordance with VDA Vol. 2 "Quality Assurance of Supplies". This must include a target vs. actual analysis.

The Initial Sample Inspection Report is to be prepared according to the VDA guideline. The Initial Sample Inspection Report is to be presented to APAG Quality Assurance with a commensurate number of samples. Capability inspections on the critical characteristics are to be conducted and proven. The Initial Inspection Report is to be supplemented with the process capability indices (ppm, cmk, cpk factors). In the event PPAP sampling is required, sampling will be conducted in accordance with Level 3.

Editor:	ZAV	Date:	27-Jul-2021	Location Validity:	Document-No.:	Index:
Reviewed:	LAC, KW	Date:	03.Sep 2021	APAG Global (AGL)	D-SP004-AGL	G
Released:	TKA	Date:	03.Sep 2021			

QSA-APAG Group Quality Security Agreement for suppliers

Additional APAG requirements are to be considered.
 Customer-specific supplements or modifications may be required.
 In the event a construction release is required, the construction release is to be performed in advance. Substances and substance group entry into the IMDS is a component of the release process as stipulated in VDA2. In addition, all substances and substance groups as defined in VDA 232-101 "Global Automotive Declarable Substance List" are to be listed in the Initial Sample Inspection Report, to the extent that such substances and substance groups are contained in the parts or can be emitted or released. The supplier is to prepare all documents and produce all sample parts. The documents and sample parts are to be archived according to the highest submission level, even if APAG was provided with a lower level or simplified sampling. APAG may subsequently demand provision of the remaining documents. In addition, all sample cover sheets of all upstream suppliers of the supplier are to be appended as an addendum to the Inspection Report;
 Only product and process releases may be presented that fully comply with the corresponding specifications. If, in exceptional cases, deviations have been identified, the supplier must apply to APAG for a full product deviation permit.
 The supplier is obliged to conduct a root cause analysis in the event deviations are identified in the initial sample, and provide APAG with suitable remedies to ensure the production of defect-free products.
 Rejected or conditionally released samples are rated negatively in the supplier assessment. Additional costs incurred as a result of re-sampling or sorting out deliveries will be invoiced to the supplier.
 Process release is an initial sampling component; the supplier must furnish proof of process release compliance.

5 Quality assurance during series production

5.1 Procurement

The supplier must warrant that the products procured from its suppliers comply with the quality requirements; more specifically the supplier must warrant that the measures defined in this guideline also apply to its suppliers.
 Initial sample releases, upstream supplier goods receipt inspection agreements, supplier assessments and visits are required for this purpose, and must be documented in a suitable manner. The supplier warrants that its sub-suppliers implement suitable quality control measures to ensure that the products supplied to APAG comply with the specified requirements. The supplier specifically warrants that the sub-suppliers have suitable procedures and inspection plans available and that they work in accordance with such plans and procedures. The supplier conducts systematic on-site inspections or audits to accomplish this purpose.
 In addition, the supplier will make every effort to ensure that APAG is also permitted to audit the supplier's upstream suppliers. The supplier is to support APAG in this regard.
 The supplier is responsible for ensuring the quality of raw materials used by and components purchased for APAG.
 Material and component batches are to be stored separately and processed according to the "first in, first out" principle.

5.2 Statistical process control

The strategy of defect avoidance instead of defect identification results in targeted process control via process analysis.

Editor:	ZAV	Date:	27-Jul-2021	Location Validity:	Document-No.:	Index:
Reviewed:	LAC, KW	Date:	03.Sep 2021	APAG Global (AGL)	D-SP004-AGL	G
Released:	TKA	Date:	03.Sep 2021			

QSA-APAG Group Quality Security Agreement for suppliers

Each process is subject to fluctuations and variations. If processes show changes in variation or position, the causes must be identified and remedied to ensure that the process remains controllable. If a process becomes uncontrollable, the parts since the last successful inspection will undergo a full inspection (100%) until such time as the process capability has once again been restored.

The supplier must keep records and furnish proof of process control and process capability compliance covering the entire production period and will provide APAG access to such records upon request.

The statistical process control methods must be a fixed component of the supplier's quality management system.

In the event APAG or the supplier experience process interruptions or shutdowns and identify quality deviations, the causes must be analysed, improvement measures must be initiated and their efficacy must be monitored. If, in exceptional cases, non-compliant products will be delivered, an exception release is to be obtained from APAG in advance. APAG must also be notified promptly of any subsequently identified deviations.

5.3 In-process inspections

Inspection plans and inspection instructions are to be prepared for important characteristics that are determined by e.g. FMEA or functional specifications. Statistical methods are to be employed for in-process inspections to the extent possible and the individual characteristics/criteria are to be analysed and documented in control cards.

The supplier is to ensure 100% visual soldering points inspection and component presence/absence inspection.

5.4 Final inspection

To ensure that the products supplied to APAG are fault-free/defect-free it is mandatory that the final tests are conducted in full (100%).

Batches with defective units identified during random sample inspections may not be accepted, more specifically must be rejected. The inspection results are to be documented.

In the event it is required, that an APAG customer conducts an acceptance test at the supplier's site, the supplier is obliged to grant such APAG customer access to its premises and facilities.

5.5 Quality records

Quality records contain the results of completed inspections. The supplier is to keep inspection result records up-to-date and upon request the inspection result records are to be made available to APAG quality managers for inspection. If specific agreements or the order documents require the delivery of inspection results concerning relevant characteristics, such information is to be provided jointly with the delivery of such material.

5.6 Documentation

All quality records must be complete and must be stored for the required period. FMEAs, control plans, process control guidelines, laboratory inspection instructions, measuring and test equipment guidelines, as well as safety methods and quality records are to be stored based on classification in *VDA 1 Documented Information and Retention* after they have been replaced or have otherwise become invalid.

The same applies to initial sample inspection reports.

Editor:	ZAV	Date:	27-Jul-2021	Location Validity:		Document-No.:		Index:	
Reviewed:	LAC, KW	Date:	03.Sep 2021	APAG Global (AGL)		D-SP004-AGL	G		
Released:	TKA	Date:	03.Sep 2021						

QSA-APAG Group Quality Security Agreement for suppliers

5.7 Handling of defective units

If defective parts are identified during production or goods issue inspections such parts are to be labelled accordingly without undue delay and are to be stored separately.

The defect cause must be identified and the process must be corrected accordingly. All parts produced since the last successful inspection must undergo a 100% inspection. Inspections of re-worked batches are to be repeated and are to be labelled and released accordingly. If, in exceptional cases, non-compliant parts are to be delivered, a written construction deviation permit must be attained from APAG Quality Assurance in advance. The permit is granted for the affected unit quantity and for a limited period.

Irrespective of the special release result, the supplier is to conduct a detailed defect analysis to determine the cause of the defect and is to initiate the associated defect remedy measures.

Documentation of the problem solution in the 8D report is mandatory.

5.8 Packaging and labelling

All parts are to be packaged in such a manner as to prevent any damage during transport and storage.

Whenever possible, all components are to be clearly labelled (to guarantee that the components can be traced back to the raw materials).

Each packaged unit is to be labelled with the transport label and release notes for the purposes of identification.

The transport label must include the following information:

- Batch number / lot number / manufacturing order
- Manufacture date / filling date
- APAG reference number
- Article description
- Sender
- Delivery note number and shipping date

5.9 Traceability

The supplier undertakes to maintain a system that ensures the traceability of its subcontractors' products and process steps ranging from shipping to raw materials and its subcontractors' products and process steps ranging from shipping to raw materials.

Upon request, proof of this system is to be furnished to APAG within 2 working days.

5.10 Quantity assurance concept

In the event of damaged tools or machinery and equipment malfunction, the supplier warrants, employing suitable measures, the supply of products to APAG (e.g. contractually guaranteed rapid access to tool mechanics and machinery/equipment maintenance provided by the relevant manufacturers). The supplier maintains preventative maintenance/upkeep to prevent any process interruptions. The necessity and scope of the supplier maintaining a safety stock will be addressed separately.

The supplier maintains emergency management and emergency plans to maintain supply capability.

Editor:	ZAV	Date:	27-Jul-2021	Location Validity:	Document-No.:	Index:
Reviewed:	LAC, KW	Date:	03.Sep 2021	APAG Global (AGL)	D-SP004-AGL	G
Released:	TKA	Date:	03.Sep 2021			

QSA-APAG Group Quality Security Agreement for suppliers

6 Collaborating with APAG

6.1 Goods receipt inspection at APAG

If special agreements have not been entered into with the supplier, APAG will inspect the products procured from the supplier upon receipt; the goods receipt inspection only checks quantity and identity compliance and any obvious external damage.

Otherwise, APAG is released from the requirement to inspect or to make a complaint or provide notification in regard to a defect immediately upon receipt of the goods.

APAG is to notify the supplier of any defect identified during the normal course of business without undue delay. To this extent, the supplier waives its right to object to a delayed notification of defects. The scope of the inspections must be stipulated in a zero-defect random sample table.

6.2 Quality performance of production series deliveries

The quality of the entire delivery is determined on the basis of inspection results from the goods receipt random sampling. This determines if the quality of the delivered parts is acceptable or unacceptable.

APAG conducts supplier assessments every 6 months, the assessment is based on the goods receipt quality assessment.

The supplier assessment is conducted on the basis of VDA Vol. 2 "Quality Assurance of Supplies". Suppliers receiving a "B" or "C" rating will be notified in writing. "B" and "C" suppliers must show which improvement measures have been initiated to permanently prevent the occurrence of defects. An annual ppm objective will be agreed with the supplier. Objective: zero PPM strategy.

6.3 Defective deliveries

APAG undertakes to notify suppliers of any identified defects without undue delay. Notification will be provided in written form by means of an inspection report and an 8D-report. To the extent possible the supplier is provided with the defective parts for the purpose of analysis. In addition, any and all affected goods will be returned to the supplier, unless special agreements have been entered into.

The supplier must conduct a complaint analysis on the returned goods and report its findings in the 8D report. The investigation of returned parts must be performed based on VDA Field failure analysis & Audit standards.

The supplier undertakes to initiate remedy measures which warrant the lasting elimination of the defect. The supplier is to prepare and submit a written report on the cause of the defect and the immediate steps taken to remedy the defect, as soon as possible, however, no later than within 24 hours (working days only) (see steps 1 - 3 in the 8D report template). The remaining report is to be completed within 14 days and the defect cause and remedy measures are to be detailed in the report. Deviating due dates may be coordinated with APAG, if justified. Proof of the successful defect remedy must be furnished in the form of an efficacy test.

The completed 8D report furnishing proof of the initiated defect remedy measures is to be returned to APAG within the set period.

The supplier must remedy any delivery defects upon mutual discussion and conclusion (replacement deliveries, sorting or rework).

APAG charges the supplier EUR 150.00 for administrative costs for each defect, as well as any additional costs that may be incurred will be invoiced to the supplier.

Cost recovery will be communicated, after the analysis is done for the defect samples, with each claim through a cost breakdown. The cost recovery process will include, but is not limited to, contaminated stock at APAG affected plant, products in transit, OEM assembly plant, nonconforming received goods, assembly line downtime due to delivery or quality related issues, warranty returns,

Editor:	ZAV	Date:	27-Jul-2021	Location Validity:	Document-No.:	Index:
Reviewed:	LAC, KW	Date:	03.Sep 2021	APAG Global (AGL)	D-SP004-AGL	G
Released:	TKA	Date:	03.Sep 2021			

QSA-APAG Group Quality Security Agreement for suppliers

and costs required to analyze and rectify the effects of a quality, warranty, launch or delivery issue which result in a concern. Inspection costs, analysis costs, rectification costs, transit costs and costs to manage the implementation of a nonreversible corrective action may also be included. Level of cost recovery against concerns will be a significant factor in APAG sourcing decisions.

In the event of a dispute, APAG and the supplier must conduct a joint inspection.

6.4 Product Safety Representative

Supplier is requested to nominate Product Safety Representative who is intended, to determine by his specific expertise, to be recognized in the product development, to avoid or minimize and control liability risks in the process development and in the entire product development process. Supplier confirms establishing of Product Safety Representative in written form by signing Product Safety Representative document which will be sent by APAG. If no confirmation is made by supplier, APAG assumes that the supplier's Quality Manager/QM Representative is responsible for this task. This appointed person will be registered in APAG supplier contact list including emergency phone number. It is the responsibility of the supplier to ensure that APAG has the correct information.

7 Quality audits

APAG is entitled to perform an audit at the Supplier based on VDA 6.3 methodology, IATF 16949 or ISO 13485 audit to determine, if the quality assurance measures implemented by the supplier and its sub-suppliers (upstream suppliers) complies with the client's requirements/standards. The audit can be conducted as a system, process, or product audit and is to be agreed upon in sufficient time prior to its scheduled implementation. System audits performed by authorized certification companies' are to be considered in this regard. For this purpose, the supplier will allow APAG employees, who are obliged to confidentiality, to access its permanent establishments and provide a qualified employee to assist in performing the audit. The supplier will provide available inspection equipment and access to the quality records for the audit members, if required.

If quality issues arise that are caused by the sub-suppliers' deliveries of goods and provision of services, the supplier is obliged to conduct an audit at the affected sub-supplier's site.

8 Acceptance inspection certificates

The supplier must, at its own expense, present a certificate of inspection (also known as an acceptance inspection certificate) in accordance with International standard ISO10204 and a certificate of conformity in accordance with International standard ISO17050 with the delivery documents upon APAG's request for each delivery batch/lot.

The parties may agree to the submission of such documents to APAG in electronic form.

In justified cases, APAG may demand provision of the documents within a 24 hour period, due to the fact that the supplier must maintain evidence of its specification compliance, at any time.

9 Supplier's reporting and information obligations

The supplier will notify APAG in writing of all existing or suspected manufacturing issues and declines in quality (increased deviations between the actual product quality and the target product quality). In the event of such a decline in quality and in the event of complaints filed by APAG, the supplier will notify APAG without undue delay of its implemented corrective measures and scheduled remedies. Until such time as the remedy has gone into effect, APAG may demand the performance of special measures (e.g. increased inspection frequency). Additional costs incurred as a result of

Editor:	ZAV	Date:	27-Jul-2021	Location Validity:	Document-No.:	Index:
Reviewed:	LAC, KW	Date:	03.Sep 2021	APAG Global (AGL)	D-SP004-AGL	G
Released:	TKA	Date:	03.Sep 2021			

QSA-APAG Group Quality Security Agreement for suppliers

this situation will be borne by the supplier, unless APAG is demonstrably responsible for the decline in quality.

If the supplier identifies a quality deviation during quality inspection and the supplier suspects, that parts exhibiting the same deviation have been delivered to APAG, the supplier is to notify APAG Quality Management of this fact immediately.

If the supplier identifies that product specifications or requirements stipulated in the technical documentation or the required inspection processes contain faulty, ambiguous, or incomplete descriptions or that characteristics/criteria deviating from the sample are described, the supplier is to immediately notify APAG of such deviation in writing, without being asked. The same applies if the product requirements and inspection procedures can be replaced by more suitable, more economical and more efficient requirements or processes and procedures.

10 Rules and Regulations incorporated into this agreement by reference

The following regulations and standards, as amended, are a component of this Quality Assurance Agreement.

- ISO 9001:2015
- IATF 16949:2016
- ISO 13485 (if the delivered products are to be used in medical devices)
- IATF publications
- PAPP, MSA, SPC, FMEA
- Valid VDA volumes
- IPC standards
- Client-specific requirements
- Partner code of conduct (D-SP011-AGL)

11 Addendums; Severability

Supplements, deletions or amendments to the provisions of this Agreement only have binding effect on the parties to this agreement, if they are made in writing and signed by the duly authorised representatives of both parties. All supplements, additions, deletions or amendments must specifically refer to this Agreement.

If individual provisions of this Agreement are or become ineffective, this will not affect the effectiveness of the remaining provisions of this Agreement.

If a clause is ineffective or unenforceable, the contracting parties will draw up a joint provision that most closely reflects the meaning and purpose, as well as the original intended economic outcome. In the event a party declares the negotiation regarding the replacement provision to have failed, the statutory provisions apply (see Section 17).

12 Liability

The Agreement as to quality objectives and measures and control thresholds (incidents, ppm objectives in terms of a statistical value) does not release the supplier from its liability for APAG's warranty and damage claims due to defective deliveries.

These Quality Assurance Agreements do not constitute any claims based on liability for defects or any other legal grounds.

Editor:	ZAV	Date:	27-Jul-2021	Location Validity:	Document-No.:	Index:
Reviewed:	LAC, KW	Date:	03.Sep 2021	APAG Global (AGL)	D-SP004-AGL	G
Released:	TKA	Date:	03.Sep 2021			

QSA-APAG Group Quality Security Agreement for suppliers

13 Agreement Term

This Quality Agreement is concluded for an unlimited period. It may, however, be terminated by either of the contracting parties by giving three months written notice. The termination of this Agreement does not affect the effectiveness of current individual Supply Agreements until they are fully completed.

14 Intellectual and Commercial Property Rights

The supplier acknowledges that all intangible property rights to products delivered by APAG, as well as to inventions, processes, know-how, descriptions, reports, drawings, patents and other commercial property rights etc. remain the exclusive property of APAG. The supplier is obliged to refrain from any actions that could harm or damage APAG's intangible property rights.

15 Duty to observe secrecy

Each party is obliged to keep the contracting party's confidential information secret (particularly manufacturing and business secrets) and not to disclose such information to any third party both during and after the performance of the Agreement. In addition, the parties undertake to ensure that their employees also keep such information confidential. The duty to observe secrecy applies regardless of if the party became privy to the confidential information by chance or if it has been consciously entrusted to a party.

16 Applicable Law and Jurisdiction

All legal relationships between the parties are subject to the provisions of Swiss law under the exclusion of the United Nations Convention on Contracts for the International Sale of Goods (CISG) of April 11, 1980.

The place of jurisdiction for all disputes arising from and in connection with the contractual relationship CH-8808 Pfäffikon Switzerland.

However, APAG is also entitled to take legal action against the supplier at any other competent court. If the supplier is commissioned by APAG Elektronik s.r.o. Czech Republic, then the place of jurisdiction is Pardubice (CZ 53000). If the supplier is commissioned by APAG Elektronik Corp. Canada, then the place of jurisdiction is Windsor (N8W 5B3 – Ontario).

Document History

Change-Date:	Released by	Change Reason	Version
24-Feb-2020	STU	Updated chapter 6.4 PSR – added sentence, in case of no feedback from supplier, APAG assumes that Quality Manager or QM Representative is responsible as PSR. He will be registered in APAG supplier list.	E
10-Jun-2020	LAC, KW	Added references to medical norm ISO 13485	F
03.September 2021	LAC	Replaced signature of Managing director by Strategic procurement. Point 6.3 updated. Cost recovery and type of analysis detailed described. Partner code of conduct added to chapter 10.	G

Editor:	ZAV	Date:	27-Jul-2021	Location Validity:	APAG Global (AGL)	Document-No.:	D-SP004-AGL	Index:	G
Reviewed:	LAC, KW	Date:	03.Sep 2021						
Released:	TKA	Date:	03.Sep 2021						