

SAM Supplier Requirements

Quality and Environmental Requirements for Build-to-Print Suppliers



SAM GmbH

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0.2 Revision Record

Issue	Date	Reason for Revision
01	10.06.2026	Issue of first revision, This document replaces the previous Sitec Aerospace Supplier Quality Requirements. These have been divided into four documents: SQR-01 (Standard Products), SQR-02 (Catalogue Products), SQR-03 (Extended Workbench), and SQR-04 (Build to Print).

0.3 Abbreviations and Definitions

APQP	Advanced Product Quality Planning
ATR	Acceptance Test Report
Contractor	The recipient of the order from SAM. Carries out the processing/ treatment in accordance with the order.
Fraudulent activities	Deception, fraud, dishonest practices, or breach of trust committed intentionally for gain or to obtain an unfair or dishonest advantage. This includes, but is not limited to, falsification and intentional omission of information, misrepresentation of facts and intentional misuse of qualified resources or certifications/qualifications/authorizations.
B-t-P	Build to Print – Production and delivery of components, assemblies and implementation of processes based on SAM construction documents
CoC	Certificate of Conformity
DIN EN 9100 SAE AS 9100	Quality Management Systems – Requirements for Aviation, Space and Defense Organizations
DIN EN 9102 SAE AS 9102	Aerospace series – Quality systems – First Article Inspection Requirement
DIN EN 9120 SAE AS 9120	Quality Management Systems – Requirements for Distributors and Stock Keepers for Aviation, Space and Defense Organizations
DIN EN ISO 9001	Quality Management Systems - Requirements
FAI	First Article Inspection
FMEA	Failure Mode and Effects Analysis
FOD/ FOd	Foreign Object Damage/ Foreign Object debris
IAQG	Internation Aerospace Quality Group
IAQG SCMh	IAQG Supply Chain Management Handbook
ISO 14001	Environmental Management Systems – Requirements with guidance for use
NDT	Non-destructive Testing
NoE	Notice of Escape
OASIS	Online Aerospace Supplier Information System
PCN	Product Change Notification
PFMEA	Process Failure Mode and Effects Analysis

Product	Generic term for finished individual parts/ assemblies/ devices, parts sets, materials (rods, tubes, plates, sheets, etc.) cast parts, forged parts, services, etc.
QM- System	Quality Management System
QAA	Quality Assurance Agreement
SCM	Supply Chain Management
SMS	Safety Management System
SQRs	Supplier Quality Requirements
Supplier	Collective term for contractors and other companies in the supply chain
ToW	Transfer of Work
Subcontractor	Subcontractor commissioned by the contractor
WIP	Work in Progress

1 General Information

These Supplier Quality Requirements (SQRs) describe the mandatory quality requirements imposed by SAM GmbH, hereinafter referred to as SAM, on Build-to-Print suppliers in connection with the manufacture of components and/or assemblies based on SAM design documentation. These requirements supplement the requirements of EN 9100, which also apply (see 2.4).

These requirements apply to all SAM B-t-P suppliers and their subcontractors. The contractor is obligated to communicate all requirements of these SQRs to its subcontractors and ensure their flow-down throughout the supply chain. The contractor must be able to demonstrate to SAM, upon request, how these requirements are being flowed down.

The SQRs apply in addition to SAM's Terms and Conditions of Purchase. They are valid without a signature and until further notice and apply to all deliveries from B-t-P suppliers. The currently valid version is available on SAM's website (<http://www.sam-ger.com>). Changes and additions require SAM's approval and must be documented in a Quality Assurance Agreement (QAA) or similar document.

1.1 Order of Precedence

In case of contradictory requirements between this document and other documents, the following order shall apply:

1. individual product-related documents, e.g., order, delivery specification, product specification, drawing
2. general product-related specifications, e.g., standards
3. SAM General Purchasing Terms
4. Quality Assurance Agreements
5. these Supplier Quality Requirements

2 General Requirements

2.1 Measures to Ensure Compliance with Requirements

The supplier must ensure:

- that SAM's requirements, objectives, construction documents, and specifications are analyzed and communicated internally as well as to its subcontractors.
- that SAM's requirements are met through appropriate measures:
 - documented processes, methods, and tools,
 - an organization with sufficient and trained personnel,
 - monitoring processes (e.g., daily operational monitoring, audits, evaluations, spot checks, including subsequent action plans and closure of corrective actions), both internally and at subcontractors

The supplier must provide SAM, upon request, with all information necessary to demonstrate that SAM's requirements are being met.

2.2 Audits, Assessments, Special Investigations and Access Rights

The supplier grants SAM (or representatives or service providers acting on behalf of SAM), SAM's customers, and the relevant aviation authorities the right to access all facilities and associated records related to the order in connection with investigations pertaining to flight safety.

Furthermore, the supplier consents to the conduct of audits or assessments by SAM to monitor compliance with SAM requirements (e.g., order, purchasing terms, SQRs, etc.) and to evaluate the effectiveness of its management system (possibly in the presence of SAM's customers and/or aviation authorities).

Audits, assessments, and special investigations may cover individual products, processes, or the entire management system, with the aim of:

- monitoring compliance with requirements, the contract, specifications, or the purchase order
- identifying the need for improvements or corrective/ preventive actions
- conducting a root cause analysis
- to conduct expert reviews following an event, operational disruption, incident, or accident
- to determine the supplier's performance, industrial process maturity, FOD risk, etc.

If necessary, audits, assessments, or special investigations may be extended to any level of the supply chain.

Audits, assessments, and investigations can be conducted on-site or as desktop audits.

The supplier is required to:

- Provide appropriate support for audits and investigations and participate in them as needed
- Provide all product- and process-related information, documents, and procedures (or excerpts thereof)
- Submit evidence demonstrating that the processes and associated procedures are being/ have been effectively implemented
- Provide examples of deliverables, reports, investigation results, etc.
- Define, plan, and implement corrective and preventive actions in the event of identified nonconformities.

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The actions, along with their due dates, must be coordinated with the auditor and completed as scheduled.

Upon completion of the actions, the supplier must provide evidence of their effective implementation.

Depending on the criticality or complexity of the nonconformity or action, a full repeat audit or an on-site review of the implemented corrective actions may be required.

Upon request by SAM, the supplier must ensure that relevant information, documents, results, and evidence (including excerpts, if applicable) can be viewed online or transmitted within a reasonable time (e.g., for desktop audits, evaluations, root cause analyses, special investigations, or similar).

SAM will provide timely notice of audits. The supplier is required to provide SAM with appropriate support in planning and conducting these audits.

2.3 Fraudulent Activities

The supplier must implement measures to detect discrepancies or fraudulent activities, e.g., during internal audits, document approval, supplier audits, incoming goods inspections, or other monitoring activities, with a focus on:

- Errors, e.g., omitted, incorrect, false, implausible, or illegible information on production and inspection records, applications, reports, certificates, etc.
- Timing discrepancies, e.g., documentation or confirmation of the activity not occurring at the scheduled time or not in a timely manner relative to the activity
- Incorrect or unclear representation of facts, e.g., work not performed as planned, etc.
- Misuse of resources (e.g., approval stamps)

Training must, where applicable, take into account differences in language usage, ethics, and cultural understanding.

If discrepancies or fraudulent activities are detected, the SAM purchaser must be informed immediately. If an impact on products already delivered cannot be ruled out, a NOE must be created.

2.4 Quality Management System

The supplier must implement and maintain a quality management system (QMS) that complies with the IAQG (EN/AS/JISQ) 9100 series and is certified by a certification body (CB) accredited under the IAQG Industry Controlled Other Party (ICOP) scheme.

Only certifications registered in the OASIS database are valid.

For certain product types and/or low-risk products, another QMS standard certification (e.g., ISO 9001) may be sufficient, provided SAM agrees in writing.

Upon request, the supplier must provide SAM with copies of the certificates/ approvals it has obtained, including the corresponding scope of services/ capability statement and the name of the organization that issued them.

For certification according to IAQG (EN/AS/JISQ) Series 9100, the supplier must:

- Grant SAM access to the section of the OASIS database containing detailed certification-related information
- Provide SAM, upon request, with all information regarding the content of the OASIS audit report

The supplier agrees to immediately notify SAM in the event that its QM certificate is suspended or has expired. Upon renewal of its certificate, the supplier must promptly and without being asked, send a copy to SAM.

The supplier must inform SAM of any major changes to the QMS (e.g., change in scope).

2.5 Information Obligation

The supplier must provide SAM with information regarding any changes that may affect manufacturing processes, product quality, or delivery performance. This includes, for example:

- Relocation of the site
- Change in the supplier's name
- Change in the QM system
- Change in the top-level organization (e.g., key personnel), quality organization, and corporate/ ownership structure (including company headquarters)
- Change in the ERP system (production planning and control system)
- Transfer of work (ToW) at the manufacturing site, to subcontractors, or from subcontractors to the supplier
- Changes to manufacturing processes
- Changes within the supply chain

The supplier must ensure that these changes do not result in quality issues or delivery delays.

Upon request by SAM, the supplier must submit a plan outlining all activities necessary for a smooth implementation or transfer, including measures to minimize risk (buffer stock or inventory build-up, temporary dual sourcing, verification of implementation through appropriate control points, training, process qualification, calibration, commissioning, FAI, etc.)

2.6 Supplier Approval

Supplier approval is based on compliance with the requirements set forth in these SQRs. Compliance with these requirements is verified through a supplier self-assessment questionnaire (desktop audit) and/ or an on-site audit. Upon request, the supplier must complete the questionnaire prior to approval and as part of the renewal process, and send it to SAM along with copies of its QM certificates.

As part of the approval process, SAM reserves the right to verify the effectiveness of the implemented system on-site, if necessary, with the participation of SAM's customers and/or the relevant aviation authorities. If the approval process is successful, the supplier will be added to SAM's supplier database.

Individual exceptions may be approved subject to conditions. The accepted deviations from the requirements are documented in a QAA or a compliance matrix.

3 Planning

3.1 Contract Review

The supplier is required to review SAM's contracts and/ or purchase orders upon receipt. This review ensures that risks (e.g., new technology, short lead times) have been assessed and that the resources necessary to perform the work (including required construction documents) are available.

After the contract review, a final agreement in the form of an order confirmation is sent to SAM. This is the supplier's formal response, in which they accept all requirements of the contract and/or purchase order and confirm compliance with the SQRs referenced in the order.

3.2 APQP

Upon request (purchase order) from SAM, the supplier must prepare and submit individual APQP elements, such as measurement system analysis, PFMEA, process capability analysis, etc.

3.3 Configuration Management

The supplier must implement a system that ensures that:

- only the current version of the documents/ approved design data provided by SAM is used
- the revision held by the supplier matches the information in the order data
- all production-, inspection-, and order- related documents are revision- controlled, and only the current version is used
- all necessary personnel have access to the current documents/ approved design data, and unauthorized persons do not have access
- all necessary and current approved design data and applicable documents are provided to subcontractors

This applies to all documents required for manufacturing, testing, qualification, and certification.

Only standard terms and abbreviations that are also used in the approved design data may be used.

The notation for batch numbers or serial numbers must be consistent and unambiguous in all documents (certificates, delivery documents, ATR, CoC). "From-to" specifications are permitted.

3.4 Data and Documentation Management - Records

The supplier must:

- comply with the legal and specific requirements of SAM regarding data and documentation records, in particular:
 - records that provide evidence that a product was manufactured in a conforming state (including manufacturing drawings, production/ assembly orders, test results, calibration certificates for measuring equipment, etc.)

- Archive documents required to determine the airworthiness status of a product.

Note: This applies at a minimum to the records required to demonstrate that all requirements for issuing the release certificate have been met, including release documents from subcontractors.

- Ensure electronic archiving in a separate physical location where the information is protected from damage, loss, alteration, and unauthorized access, to ensure the availability, traceability, and integrity of the archived information throughout the entire archiving period.

3.5 Quality Records

The supplier must ensure that quality records are identified, collected, and archived in accordance with the requirements of DIN EN 9130.

Undeletable writing or marking media must be used. The use of correction fluid and adhesive tape is prohibited.

In exceptional cases, handwritten changes may be made. The changes must be confirmed with the date and signature/ stamp. The author of the handwritten change must be clearly identifiable.

It must be ensured that the records cannot be altered retrospectively.

Readability must be ensured after scanning or during storage.

The supplier shall ensure that, at SAM's request, order-related quality records are forwarded to SAM within 24 hours.

The quality records must be retained indefinitely, unless otherwise agreed in the contract.

In the event of (premature) termination of the contract or the business relationship, or in the event of the supplier's insolvency, all relevant quality records must be handed over to SAM on request.

Before destroying the quality records, the supplier must obtain the consent of the responsible SAM purchaser. Upon request by SAM, all relevant quality records must be handed over to SAM.

3.6 Transfer of Work (ToW)

It's a ToW in case of:

- Changes to the manufacturing process
- Transfer of machinery, production, or testing equipment
- Outsourcing work to a subcontractor or bringing work from a subcontractor back in-house

The supplier must:

- Manage ToWs, assess and mitigate risks, and identify opportunities (on-time/quality-compliant execution)
- Ensure that its ToW process meets SAM's specific requirements and, in particular, includes an appropriate project plan
- Inform the responsible buyer (SAM) well in advance of the intention to outsource work
- clearly identify the affected products from SAM (P/N)
- submit the project plan to the ToW team (SAM), coordinate it with the ToW team (SAM), and report on progress at appropriate intervals

- provide the ToW team (SAM) with insight into risks and evidence of the activities carried out (in accordance with the project plan)

A ToW may only be carried out after approval by SAM. SAM reserves the right to reject a ToW, e.g., in the event of excessive risk regarding quality, reliability, on-time delivery, or configuration control.

3.7 Foreign Object Prevention

The supplier must maintain a foreign object debris (FOD) prevention program, specifically to ensure that:

- all manufactured products are free of foreign object debris (FOD) to prevent foreign object damage (FOD)
- cases of FOD are recorded, analyzed, and appropriate corrective and preventive actions are initiated

The program should be based on the requirements of DIN EN 9146.

3.8 Root Cause Analysis and Problem Solving

The supplier must have a procedure in place in accordance with DIN EN 9136/SAE ARP9136 or an equivalent procedure to record and analyze significant and/or recurring issues (such as quality deviations in products or services, delayed production or deliveries, process deviations, documentation issues, or delayed or faulty design) and to analyze them, identify their causes, and prevent their recurrence, with due consideration given to similar products/processes (prevention).

3.9 Delay Management

The supplier must have a process in place that:

- supports the early identification of potential supply issues, taking into account internal and external resources and risks within the supply chain
- enables the early initiation of internal measures
- governs the implementation of necessary measures and escalation procedures at the supplier
- ensures that SAM is informed at an early stage

3.10 Lessons Learnt and Continuous Improvement

The supplier must implement a continuous improvement process for the purpose of regularly recording lessons learned and improving the product realization process, including:

- Definition of the scope and objectives (goals)
- Definition of metrics
- Tracking of improvement measures (including updating control plans and corresponding FMEA)
- Identification and recording of lessons learned.

The supplier continuously works toward the goal of zero-defect quality.

3.11 Project Management

The supplier must (e.g., for APQP or ToW):

- implement, operate, and continuously improve a project management system appropriate to the scope of the assignment and the organization
- identify project risks and opportunities and minimize risks,
- take into account lessons learned from previous projects
- determine the project requirements (e.g., requirements for APQP or ToW, including those of its subcontractors) and define the associated project objectives
- ensure that the requirements are available, understandable, and verifiable to all internal and external stakeholders
- at SAM's request, document the implementation of all requirements from SAM or the end customer, international standards, and aviation authorities in a Quality Assurance Plan in accordance with AS ISO 10005 and forward it to SAM
- regularly review ongoing projects to ensure the project's effectiveness,
- report the project status to SAM at regular intervals to be mutually agreed upon

Note: When applying APQP, project progress monitoring must include the status of the required deliverables and be reported to SAM.

- analyze all insights gained during the project duration and document them upon project completion so that they can be taken into account in every new project (lessons learned)

3.12 Risk & Opportunity Management (R&O Management)

The supplier must:

- Demonstrate a robust, company-wide risk and opportunity management system for all products and services supplied to SAM.

Notes:

- The risks covered may include contractual, financial, technical, and industrial risks, as well as subcontracting (regardless of whether it originates from SAM, the supplier, or subcontractors), supply chain and quality, subcontractors, projects, catastrophic events, industrial systems and tools, IT systems, geopolitical risks, environmental risks, corporate social responsibility, human factors, resources, technological capabilities, industrial capacities, lead time, location, batch size, transportation, delivery, etc.
- Compliance with the DIN ISO 31000 standard is a valid response to this requirement for the R&O management system.
- For risks in the supply chain, the application of SAE ARP 9134 "Guidance for Supply Chain Risk Management" is recommended.

- actively contribute to a common approach to addressing shared R&O, in alignment with business priorities and continuous R&O improvements,
- conduct regular risk reviews at the appropriate management level to ensure the effectiveness of the risk mitigation plan,
- ensure that SAM is notified promptly of any new risks
- report to SAM (at intervals to be mutually agreed upon, at least once a year) on the status of all R&O and the associated plan.

3.13 Production Planning and Forecasts

The supplier must have a functional system for short- and long-term production planning that takes into account personnel and material resources as well as key performance indicators.

The forecasts sent by SAM to the supplier must be incorporated into the supplier's planning and forwarded to its subcontractors.

If the forecasted delivery quantities or dates are (expected to be) unmet, the supplier must take appropriate measures and proactively communicate this to SAM.

3.14 Traceability

The supplier must have a traceability system in place that ensures that:

- all components can be traced back to the production lot (the production order), the processes performed, and the material batch. Therefore, different material batches should not be used for a single production lot.
- all assemblies and devices can be traced back to the assembly lot (the assembly order), the individual parts used, and the tests performed.

3.15 Obsolescence Management

The supplier shall:

- implement a process for preventing, predicting, and resolving obsolescence during the life of the program,
- regularly report the status of potential obsolescence to SAM
- notify, when requested by SAM, any product obsolescence to SAM by communicating a Last Buy Order (LBO) and a Last Time Shipment (LTS).

For substances that are regulated or proposed for inclusion in applicable laws and regulations, including (but not limited to) those recorded in the list of substances, the supplier shall:

- identify and anticipate potential obsolescence or any regulatory constraint (also coming from its own supply chain),
- ensure continuity of supply throughout the life of the program and provide an action plan satisfactory to SAM,

- regularly report to SAM on the status of any potential obsolescence concerning substances contained or used in the manufacturing process of each product to be delivered.

4 Make

4.1 Qualification of Personnel

The supplier must ensure that all employees who have an impact on product quality are thoroughly trained and qualified, including in the requirements of these SQRs and the applicable regulations and standards.

Personnel performing certification activities (e.g., issuing a release certificate must be suitably qualified. The supplier must specify the qualification requirements for certifying personnel in detail (e.g., process instructions and qualification matrix). Personnel authorized to issue releases must be authorized by the quality management representative.

4.2 Human Factors

Aviation safety studies show that a high percentage of aircraft accidents are attributable to human factors.

Human factors are related, among other things, to:

- Ergonomics
- Equipment
- Culture
- Competence
- Environment
- (Human) Feelings

The supplier must train and/or raise awareness among employees, including management, with the goal of:

- recognizing risks or problems caused by human error
- minimizing risks associated with human factors
- implementing a human factors-based error management system, including a positive error culture.

Note: The IAQG SCMh provides a guide on this topic, with links to aviation authority requirements and additional information.

4.3 Production Documentation (e.g., Work Plan)

All necessary work and inspection steps, including material procurement and subcontracting, with reference to specific work, assembly, and inspection instructions, as well as the machines, fixtures, specific tools, and/ or test equipment to be used, must be specified in a work plan.

The standards, regulations, and implementation notes referenced in the component or assembly drawings provided by SAM must be strictly observed.

The work plan must ensure that inspections are performed and that the execution of the individual work and/or inspection steps is confirmed. Work plans must be revision controlled.

The following must be ensured by means of an order- specific production record or an electronic record:

- Each work or test step must be confirmed by the worker or inspector, with the date and an identifiable name or (inspector's) stamp. Initials are not sufficient for identification.
- Changes in the quantity (e.g., due to scrap) must be traceable and documented with the affected lot or serial numbers at the respective work or inspection step.
- Rework must be documented in a traceable manner, specifying the affected batch or serial numbers for each work or inspection step and the result. A separate rework plan or rework procedure must be created for the rework, with a corresponding note on the original production documentation.

If the batch is split, it must be ensured that the complete documentation of all work or inspection steps performed is clearly traceable for all sub-batches.

4.4 Inspections

4.4.1 Key Characteristics

Characteristics marked as "Key Characteristics" require a 100% sample size. In addition, a measurement system analysis (MSA) is required to demonstrate the capability of the measurement system used.

4.4.2 Sampling Inspections

If sampling inspections are conducted, the sampling plans used must comply with recognized statistical principles and be suitable for the intended purpose. To this end, the supplier is required to use sampling plans that meet the requirements of DIN ISO 2859-1. Any sampling plans that deviate from these requirements must be approved by SAM.

If a nonconforming characteristic is identified during a sampling inspection, a 100% inspection of the affected characteristic is required.

The sampling plans represent the minimum requirements for samples and sample sizes. Larger sample sizes may be used.

4.5 Calibration

The supplier must establish a measurement control system for the measuring and/or testing equipment used and have the equipment calibrated periodically. The measurement standards used for calibration must be traceable to international or national measurement standards. If such measurement standards do not exist, the basis for calibration or verification must be documented.

At a minimum, the expiration of the calibration interval must be clearly marked on the test equipment.

If SAM provides the supplier with measuring and/ or testing equipment, the supplier is responsible for the proper calibration of such equipment. If the calibration period for a measuring and/ or testing instrument provided by SAM has expired, it is the supplier's responsibility to mark it immediately and return it to SAM without being asked.

4.6 Preventive Maintenance

The supplier must maintain preventive maintenance plans to avoid unplanned production downtime.

4.7 First Article Inspection (FAI)

DIN EN 9102/SAE AS 9102 applies.

The supplier must demonstrate the qualification of the manufacturing process as part of a First Article Inspection. This must be conducted in accordance with DIN EN 9102. The supplier is obligated to conduct an FAI in accordance with the requirements of DIN EN 9102, regardless of whether this is explicitly stated in SAM's purchase order.

SAM reserves the right to have authorized representatives accompany an FAI at the supplier's premises.

The results of the First Article Inspection must be recorded for all characteristics and properties, including target and actual values; any deviations must be clearly marked.

For key characteristics defined by SAM, evidence of process capability and an MSA must be attached to the First Article Inspection.

The First Article Inspection report must be made available to SAM no later than the first delivery of the goods.

The First Article Inspection must be repeated in whole or in part in the following cases:

- Production interruption of more than 2 years
- Change in equipment and test equipment in the manufacturing process (e.g., machine change or change in the NC program)
- Design change (fit/form/function)
- Process change
- Material change
- Relocation of the production site

4.8 Prevention of Counterfeit Parts

The supplier must plan, implement, and manage processes appropriate to the supplier and the product to prevent the use of counterfeit or suspected counterfeit parts that are delivered to SAM. The following aspects must be considered:

- Training of relevant personnel regarding the identification and prevention of counterfeit parts
- Control measures regarding the procurement of externally sourced products from original or authorized manufacturers, authorized distributors, or other approved sources
- Requirements to ensure the traceability of parts and components back to their original or authorized manufacturers
- Verification and inspection methods for identifying counterfeit parts
- Tracking of reports from external sources regarding counterfeit parts
- Quarantine and reporting of suspected or confirmed counterfeit parts

4.9 Capacity Planning

The supplier shall establish processes to plan its capacity utilization. Short-, medium-, and long-term planning by SAM, e.g., via forecasts, must be taken into account. The planning shall reflect the following:

- available capacities
- required resources
- existing bottlenecks

Capacity planning shall be reviewed at regular intervals and revised, as necessary.

5 Management of Nonconforming Products and Services

5.1 General

The supplier must:

- ensure that nonconforming results are controlled. This includes the timely reporting of nonconformities to SAM and other interested parties when delivered products and services are affected (see Section 5.3)
- define corrective actions for nonconforming products and services, regardless of whether they were identified before or after delivery, in accordance with their impact
- communicate and cooperate with SAM's SCM and Quality Management to initiate investigations and actions deemed appropriate
- Identify the nonconforming products and physically segregate them until they are scrapped, reworked, or released by the responsible organization after the nonconformity has been eliminated

When defining the required process, the supplier must take into account the requirements of DIN EN 9131/SAE AS 9131.

5.2 Complaints

If parts are claimed by SAM due to identified nonconformities, either in writing via a nonconformity report or by email, the supplier must:

- Take action within one business day to isolate and contain the problem, including:
 - Assessing the rejection: "How did the nonconformity occur, and why was it not detected?"
 - In the event of a possible systematic error or if other parts may be affected, the supplier must ensure continued error-free production and delivery, including by:
 - Inspecting all potentially affected parts (parts in shipping, WIP, and inventory—of the same and, if applicable, similar design)
 - Immediately switching to 100% inspection (in the case of sampling)
 - Required additional inspections

These measures must remain in place until a detailed root cause analysis has been conducted, corrective actions implemented, effectiveness confirmed, and the incident has been accepted by SAM.

- Conduct an initial assessment/incoming inspection within 5 business days of receiving the rejected part and communicate the results to SAM via a preliminary investigation report.
- If requested by SAM, prepare a final investigation report (at least a 4D report) within 2 weeks (after receiving the rejected part), including the root cause of the defect and the corrective/ preventive actions with confirmation of their effectiveness.

Notes:

An 8D report must be prepared in the event of recurring problems, critical deviations related to airworthiness, or upon request. It must be determined whether a PFMEA needs to be created or an existing one updated, and whether the control plan needs to be adjusted.

SAM reserves the right to return all shipments potentially affected by the defect to the supplier for investigation. The supplier shall provide SAM with a competent contact person and sufficient resources for the employee responsible for implementing the corrective actions.

5.3 Notice of Escape (NoE)

If a product defect is discovered after delivery to SAM, or if there is a suspicion that defective parts may have been delivered to SAM, SAM must be notified immediately upon discovery, but no later than 72 hours thereafter. The general requirements of DIN EN 9131/SAE AS 9131 apply.

5.4 Process performed in a non-compliant manner

If an incorrect or faulty (special) process (e.g., a surface treatment or heat treatment) has been performed on a component, rework is permitted only within the parameters of the specification or standard, or with written approval (concession) from SAM.

5.5 Marking and Storage of Nonconforming Product

Nonconforming products must be clearly marked by the supplier immediately after the nonconformity has been identified. Until a decision has been made regarding the further use of the nonconforming products, they must be stored in such a way as to prevent any unintended use (quarantine storage).

5.6 Concession

Nonconforming products at the process, component, or assembly level, regardless of their classification (major or minor deviations), must not be used or dispatched without SAM's approval.

If rework within the specified tolerances is not possible and there are reasons for using the components that are acceptable to SAM, the contractor may submit a "Request for Concession" to SAM. To this end, the contractor must submit all data and information required for SAM's assessment (e.g., relevant drawings or, where applicable, relevant extracts thereof, target/ actual values, drawing coordinates, measuring equipment, measurement results, photographs, etc.) via the SAM form provided by the SCM department.

SAM will inform the supplier of the approval or rejection of the application. Delivery is only permitted with a written approval of the concession. A copy of the concession application approved by SAM must be enclosed with the delivery.

SAM reserves the right to charge for concession on a time-and-materials basis or at a flat rate of €500.

Note: An approved concession is strictly limited to the components specified in the application and does not imply approval for any further or other parts with similar deviations.

5.7 Handling of Scrap Parts

If a decision has been made to scrap a component due to non-conformity, the part must be marked immediately and clearly as scrap (e.g., with a tag). In case SAM has provided the material the part is to be returned to SAM with the delivery.

The delivery note and release certificate must clearly indicate the scrap parts, stating the serial number where applicable.

5.8 Redelivery of Rejected Parts

When returning rejected parts, the following must be ensured:

- All relevant delivery documents must be included with the return shipment (see Section 7.1)
- The delivery note and certificate of Conformity must refer to the original SAM rejection report

5.9 Costs for Nonconformities

In the event of nonconformities caused by the supplier, SAM reserves the right to charge the supplier for the costs incurred. These costs may include, amongst other things:

- Nonconformity management
- Sorting costs
- Rework at SAM

6 Stocking, Packaging and Labelling

6.1 Stocking

The supplier must ensure that:

- all materials, products, production equipment, and test and/ or measuring equipment are stored in such a way that they are not affected or damaged by external factors (e.g., dust, moisture, temperature, daylight, etc.). This also applies to products, measuring equipment and fixtures provided by SAM.
- access to these storage areas is regulated
- the FIFO principle is applied
- Storage locations for materials provided by SAM are explicitly marked.

6.2 Packaging

Any specific requirements regarding preservation or packaging set out in the purchase order, drawings or relevant process specifications must be adhered to.

Machined parts must be packaged in such a way as to prevent potential transport damage (impacts, scratches, moisture, corrosion, etc.).

The packaging of electronic components must comply with DIN IEC/TR 61340-5-2:2019-04; VDE 0300-5-2:2019-04 or a comparable standard. The outer packaging must be marked with warning labels indicating the risk of damage from electrostatic discharge.

Even components that are not themselves at risk from electrostatic discharge must be supplied in suitable packaging. Where possible, dust-free materials should be used for both direct contact and protective packaging (avoid cardboard and paperboard).

6.3 Labelling

The following information must always be included in the delivery documents and packaging:

- Item number
- Date of manufacture
- Serial numbers or batch number
- Quantity

6.4 Shelf Life

Where products or materials with a limited shelf life are delivered, the remaining shelf life must be at least 80% of the total shelf life, unless otherwise specified for the material in question. The expiry date must be explicitly stated on the delivery documents.

7 Delivery

Each delivery item must consist of a single production batch. If multiple production batches are delivered, they must be delivered in separate packaging.

Where materials with a limited shelf life are delivered, the remaining shelf life must be at least 80% of the total shelf life, unless otherwise specified for the material in question. The expiry date must be explicitly stated on the delivery documents (see 6.4).

7.1 Release Certificate

A release certificate (e.g., CoC) must be included with each delivery item. The certificate must include at least the following information:

- Name and address of the supplier
- SAM purchase order number
- Item description as specified on the purchase order
- SAM Part Number as specified on the purchase order
- Revision of the item as specified on the purchase order
- Delivery quantity
- Process carried out as specified on the order (if applicable)
- Batch number
- Serial numbers (for items requiring serial numbers)
- Expiry date (for products with a limited shelf life)
- Concession number (if applicable)
- Declaration certifying product conformity
- Name of the authorized person responsible for approval
- Authorized signature or electronic signature* or inspector's stamp
- Date of issue of the certificate

*Unsigned certificates will be accepted provided they include a note such as 'Document created electronically. Valid without signature.' In this case, the supplier is obliged to implement a procedure to ensure the traceability of the approval.

A certificate of conformity for the raw material used by the supplier must also be provided. The certificate of conformity must explicitly state material data (e.g., EN 10204 3.1, hardness values, chemical analysis values, etc.).

If the material was sourced from a supplier, the supplier's certificate of conformity must enable full traceability back to the manufacturer's certificate.

Note: A delivery note containing confirmation of conformity and the details listed above is regarded as a release certificate in accordance with these SQRs.

7.2 Test Reports

If tests are required by the purchase order or design data, the supplier must prepare and archive a report listing all relevant results for each product, with a corresponding reference to the purchase order or design data, and make it available to SAM within 72 hours of being requested to do so.

7.3 Country of Origin

The supplier is required to state the country of origin for each line item on the delivery note.

8 Subcontracting and Purchasing

8.1 General

The contractor must have processes in place for:

- the selection and approval of suppliers
- maintaining a risk register for its suppliers
- cascading the applicable SAM quality assurance requirements
- providing all necessary and currently valid design data (Configuration management)
- Regular monitoring and evaluation of delivery performance (PPM, OTD, etc.)
- Systematic handling of complaints (in the event of quality and delivery issues) with consistent demands for sustainable corrective and preventive measures
- Resolution of discrepancies or problem-solving with the subcontractor, on-site if necessary and by means of an audit.
- Collecting and evaluation of changes in the supply chain (e.g., ToW) with notification to SAM

The supplier is responsible for monitoring the performance of the subcontractor and the conformity of the services provided by subcontractors, regardless of whether the use of a supplier has been approved by SAM.

8.2 Procurement of Raw Metal Materials (Including Castings and Forgings)

The contractor must request an inspection certificate 3.1 in accordance with EN10204 from the manufacturer with every order. A copy of this inspection certificate 3.1 for the raw material used must be enclosed with every delivery to SAM.

8.3 Procurement of Plastic and Glass Materials

If SAM has not specified a manufacturer for the plastic or glass material required in the drawing, the contractor is responsible for selecting the supplier of the raw material or semi-finished product.

Note: Drawings may specify certain branded materials. In such cases, the choice of supplier is restricted to specific brand manufacturers.

Unless otherwise specified, plastic and glass materials must be procured with an inspection certificate 2.1 in accordance with EN 10204.

For each batch of material procured, checks on characteristic parameters must be carried out to ensure that the material procured complies with the drawing specifications and that confusion with similar materials can be ruled out.

The supplier shall define the selection and proper application of appropriate tests. Tests may include, for example:

- Verification of the melting point and density
- Verification of hardness and tensile strength
- Verification of chemical composition
- Verification of chemical resistance

Records of tests must be retained and submitted to SAM upon request.

8.4 Outsourcing Individual Process Steps as an Extended Workbench

Where individual process steps or (specialized) processes are subcontracted, the contractor must apply the requirements of SQR-03.

The contractor may only engage subcontractors who have been notified to SAM in advance and approved by SAM via QAA. The supplier shall maintain a list of extended workshop subcontractors, including the work and/or processes commissioned. If the supplier intends to use a new subcontractor, the list must first be updated and sent to SAM for review. The new subcontractor may only be used after approval by SAM.

SAM reserves the right to reject subcontractors in justified cases.

8.5 Procurement of Standard Products (Distributors and Manufacturers)

The contractor must apply the requirements of SQR-01.

8.6 Procurement of Catalogue Products (Distributors and Manufacturers)

The contractor must apply the requirements of SQR-02.

8.7 Flow- Down of Production Demand

The contractor must ensure, based on SAM's forecasts and in accordance with its overall production plan and material resource planning, that production demands are correctly communicated to its subcontractors and that these are understood, accepted, and incorporated by them.

8.8 Incoming Goods Inspection

The supplier shall ensure that incoming products comply with the applicable design data and other specific requirements of SAM, including:

- Inspection of the delivery and the conformity documentation
- visual incoming inspection,
- technical incoming inspection, as specified in the technical requirements and standards,
- Inspections (including documented sampling procedures), where appropriate and as specified in the applicable requirements,
- management of non-conformities that may be identified during the incoming inspection, in accordance with SAM's requirements.

Notes:

- This includes the incoming inspection of products supplied by SAM or a subcontractor to the contractor for integration into its product.
- If the supplier has access only to some interface design data (e.g., for parts supplied by SAM), these shall serve as the reference for verifying product conformity.
- If the non-conformity was caused by a design issue, or if this is suspected, the supplier must inform SAM for an appropriate root cause analysis

During the visual or technical inspection, it must be ensured that:

- the goods comply with the order and the delivery documents
- the delivery documents are complete
- only suppliers approved by SAM have been used
- the required material or process specifications have been confirmed
- the certificates refer to currently valid design documents
- for deliveries of semi-finished products, castings and forgings, the tests required by the manufacturer on the raw part drawing or test report (e.g., X-ray) have been carried out and correctly confirmed

8.9 Counterfeit Parts Prevention

The supplier must plan, implement, and manage appropriate processes for the supplier and the product to prevent the use of counterfeit or suspected counterfeit parts supplied to SAM. The following aspects must be taken into account:

- Training of relevant personnel in the identification and avoidance of counterfeit parts
- Control measures regarding the procurement of externally sourced products from original or authorized manufacturers, authorized distributors, or other approved sources
- Requirements to ensure the traceability of parts and components back to their original or authorized manufacturers
- Verification and inspection methods for identifying counterfeit parts
- Tracking of reports from external sources regarding counterfeit parts
- Quarantine and reporting of suspected or confirmed counterfeit parts

8.10 Performance Key Figures of the Subcontractors

The contractor must:

- upon request from SAM, provide details of the definition and content of the key performance indicators (KPIs) of its downstream suppliers, together with the associated targets
- upon request, provide the results of the KPIs of its downstream suppliers compared with the targets

9 Supplier Evaluation

SAM carries out regular supplier evaluation with regard to non- conformities and delivery performance. If this evaluation does not meet the agreed targets, or if the supplier itself identifies deviations from the agreed targets during its monitoring of customer satisfaction, the supplier shall take appropriate measures to achieve the required quality and delivery performance as soon as possible.

10 Safety Management Requirements

SAM operates an Aviation Safety Management System (SMS) in accordance with the requirements of EASA Part 21G and involves its suppliers in this management system. Suppliers are required to participate actively in the safety partnership and to meet the following requirements.

The main objective of Aviation Safety Management is to prevent the occurrence of serious incidents and accidents in aviation by proactively identifying, assessing, and eliminating safety-related hazards, or reducing them to an acceptable level.

10.1 Safety Culture

Suppliers must ensure that their employees are sufficiently aware of safety issues in the aviation context. This includes, in particular:

- An understanding of the importance of their work for aviation safety
- Training in safety-related topics and a just culture
- Awareness of human factors and risks throughout the product lifecycle

10.2 Integration into the SAM- SMS

Suppliers are integrated into the SAM safety management system as external partners. This includes:

- An obligation to report (potentially) safety-related incidents or observations (safety occurrences), even if they occur outside their direct sphere of influence.
- Participation in safety-related analyses and measures, provided that the supplier's products, services, or processes are affected.
- Assistance with the investigation of incidents involving supplied products.

If the supplier identifies safety occurrences or these are reported to them, the supplier is obliged to submit a report to SAM within 72 hours. The report should be sent to the email address safety@sam-ger.com.

10.3 Safety-related communication

Suppliers are required to:

- Receive and assess safety communications from SAM (e.g., Safety Alerts) and take appropriate internal action.
- Immediately report any safety-related information, such as changes to product design, composition, or production processes, on their own initiative.

10.4 Safety Risk Management

Suppliers are required to implement an appropriate Safety Risk Management (SRM) system as part of their operations, which is compatible with SAM's Safety Management System (SMS). The aim is to identify potential hazards at an early stage, systematically assess risks and implement appropriate measures to minimize them.

The following requirements apply:

10.4.1 Hazard Identification

Suppliers must establish processes for the continuous identification of potential hazards. This applies in particular to:

- Manufacturing processes, testing procedures, and logistics
- Changes to product design, materials, or processes
- Feedback from the field (e.g., customer complaints, field reports)

10.4.2 Risk Assessment

Identified hazards shall be systematically assessed in terms of their likelihood of occurrence and their potential impact on aviation safety. The associated risk level shall be documented and subject to regular review.

10.4.3 Risk Mitigation

Appropriate mitigation measures shall be implemented for identified risks. The following shall apply:

- Risks assessed as unacceptable or intolerable shall be reduced to an acceptable level prior to further deliveries.
- The effectiveness of the implemented measures shall be demonstrated.
- Critical mitigation measures shall be coordinated with SAM.

10.4.4 Communication of Risks

Suppliers shall promptly report safety-related risks that may potentially affect the airworthiness or operational safety of the delivered products (see Section 10.2). This also includes newly identified risks related to products that have already been delivered.

10.4.5 Participation in SAM's Risk Management

Upon request, suppliers shall participate in risk assessments conducted by SAM, in particular where their products or processes have been identified as sources of risk.

11 Environmental Requirements

11.1 Compliance with legal and regulatory requirements

The supplier agrees to comply with all applicable environmental laws, regulations, and official requirements at both the national and EU levels - in particular:

- REACH Regulation (EC) No. 1907/2006
- RoHS Directive 2011/65/EU (if applicable)
- Chemicals Act (ChemG), Hazardous Substances Ordinance (GefStoffV)
- Packaging Act and waste legislation

The supplier shall ensure that all applicable restrictions on substances of very high concern (SVHC) are taken into account and complied with.

11.2 Handling Hazardous Substances

Deliveries containing hazardous substances as defined by the CLP Regulation or other materials that pose a risk to the environment or human health must be clearly labelled.

Current, complete Safety Data Sheets (SDS) in German must be provided upon initial delivery and whenever changes occur. These documents must be made available in digital form. The use of particularly hazardous substances should be avoided whenever possible and, if necessary, must be approved in advance by SAM.

11.3 Packaging, Transportation, and Disposal

The supplier uses environmentally friendly, recyclable packaging materials. The use of oversized or non-separable plastic packaging shall be avoided.

Transportation of hazardous materials must be properly declared and documented in accordance with ADR/IATA regulations. The return and proper disposal of packaging, hazardous waste, or returned goods must be carried out in accordance with legal requirements.

11.4 Conflict Minerals

Unless otherwise specified in the purchase order, the supplier agrees to disclose the use of so-called conflict minerals (e.g., tin, tantalum, tungsten, gold) in accordance with EU Regulation 2017/821. The origin of these materials must be documented, and Conflict Minerals Reporting Templates (CMRT) must be provided upon request.

11.5 Environmental Management System

A certified environmental management system in accordance with ISO 14001 or an equivalent system is recommended. Suppliers with a significant environmental footprint (e.g., due to chemicals, surface treatments, or energy use) should provide evidence of this.

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Even without certification, a structured approach to environmental risks, legal compliance, and waste management must be ensured.

11.6 Requirements to Provide Information in the Event of Changes

The supplier agrees to immediately notify us of any changes that could affect the environment (e.g., in formulation, processes, mode of transport, or packaging) if such changes could impact on waste disposal, safety, or REACH/RoHS compliance.

This also applies to new substance classifications or SVHC listings.

11.7 Environmental Emergency Management

A company-wide emergency management plan must be in place for relevant processes (e.g., handling hazardous substances, surface treatment, solvents). It includes measures to prevent and control leaks, fires, water pollution, and emissions.

Employees must receive regular training on these procedures.

11.8 Evidence and Audits

Upon request, the supplier must provide appropriate evidence of compliance with environmental requirements, e.g., material declarations, supplier declarations, audit reports, or certificates. SAM has the right to conduct on-site audits at the supplier's premises to verify compliance with environmental obligations—particularly in the case of high-risk processes or supply chains involving SVHCs or conflict minerals.

12 Information Security

The Supplier agrees to implement appropriate organizational and technical measures to protect the confidentiality, integrity, and availability of information. This includes, in particular, protecting all data provided by SAM, as well as all information generated in the course of the collaboration, against unauthorized access, loss, manipulation, or disclosure.

The Supplier shall ensure that an information security management system (e.g., in accordance with ISO/IEC 27001 or a comparable standard) is in place or that corresponding measures are demonstrably implemented. Access to sensitive information shall be granted exclusively to authorized persons in accordance with the need-to-know principle.

The Supplier undertakes to report security incidents that could affect SAM's data or systems immediately, but no later than 24 hours after becoming aware of them, via email) to cert@sam-ger.com (initial report). A further assessment and detailed information regarding the incident must be submitted within 72 hours at the latest, if available. At the same time, appropriate countermeasures must be initiated, and their progress must be reported regularly.

Subcontractors must be bound by these obligations and must meet the same requirements. At the client's request, the supplier must provide appropriate evidence of compliance with the information security requirements and allow audits to be conducted.