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Role	Name	Position	Signature Date	Signature
Document Owner	Francesco Aiello	Team Lead Supply Chain Quality	2024-06-05 07:07	<i>Electronically signed</i>
Checked by	Sebastian Göbel	Vice President of Supply Chain Operations	2024-06-05 09:24	<i>Electronically signed</i>
Approved by	Werner Kloep	Head of Quality Manufacturing	2024-06-05 09:26	<i>Electronically signed</i>
Approved by	Jan Nowacki	Senior Vice President Manufacturing	2024-06-05 17:07	<i>Electronically signed</i>

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Change History

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8.0	Updated requirements of Distributors (F-Type Quality Management System Classifications)	Nicholas Cover	21-06-2021
9.0	Updated requirements for service provider and suppliers of COTS, standard parts, and raw materials (C-Type Quality Management System Classifications), added requirements for Supplier Manufacturing Digital Data Conversion, and general administrative changes through-out.	Nicholas Cover Eve Seigneur	30-09-2022
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11.0	PMS Update done – formal adjustments implemented	Melanie Schacher	02-06-2023
12.0	Formal updates and reference corrections; new company address implemented. Added Extended Workbench definition and requirement for delivery documentation, FAI. Added temporary labelling requirement at par. 12 for temporary suffix impacting next customer. Added details in par. 13 for CoC requirement related to kits.	Francesco Aiello	31-05-2024

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1. Introduction

1.1 Purpose

The purpose of this document is to provide Suppliers and their subtiers standard requirements for their Quality Management and Assurance System.

1.2 Scope

This document is applicable to all Suppliers and their subtiers supplying Lilium eAircraft GmbH Production Organisation with flying items and/or services used for aircraft manufacturing.

1.3 Definition of terms

Term	Definition
Advanced Product Quality Planning	A structured process that drives a quality focused approach to product development using a phased planning process within which specific deliverables are established, monitored, and tracked to closure, while highlighting and mitigating risks as they are identified.
Build-to-Print Supplier	A Supplier who produces an item according to Design Data released by Lilium eAircraft to the Supplier e.g., Lilium eAircraft provides drawings, and the Supplier is responsible for producing the item according to the drawing, using the specified materials and processes.
Certificate of Conformity	A document issued by the Supplier to confirm that the delivered items fulfill the relevant specification, applicable Design Data (e.g., drawing) and purchase order requirements.
Concession	A concession is a Design Organisation approval with a unique reference number giving acceptance for use or release of an item that shows a deviation to the specified Design Data.
Coupon	A representative or equivalent sample of an item under test that has been prepared in such a way that its failure will be representative of the larger production item.
Commercial off the Shelf	Commercially available applications, typically defined by industry recognized specifications or standards, sold through public catalog listings.
Deliverables	Items or documents (outputs) completed as part of the APQP process.
Deliverable Software	Embedded or loadable airborne or ground support software or firmware components which are part of an aircraft type design.
Destructive Methods	Tests carried out to the specimen's failure, to understand the specimen's performance or material behavior under different scenarios.
Extended Workbench	An extended workbench (EWB) is a Supplier acting and contracted as an extension of the Lilium manufacturing system, performing, and supplying specific manufacturing steps (e.g., Manufacturing processes) defined on a Lilium item.
Item	Generic term used for a product, part, appliance, or material.
First Article Inspection	Also referred to as production process verification (PPV) a planned, complete, independent, and documented inspection and verification process to ensure that prescribed production processes have produced an item conforming to the applicable Design Data.

Term	Definition
Major Finding	Would result in a failure of one or more modes of the quality system process that may influence the finished product quality, durability, structural and functional integrity, as well as maintainability of the product or may result in problems achieving management system certification.
Safety Data Sheet	A technical document that includes information such as the properties of each chemical; the physical, health, and environmental health hazards; protective measures; and safety precautions for handling, storing, and transporting the chemical.
Minor Finding	A single system failure or lapse in conformity that would not be framed as “major”.
New Product Introduction	Activities within an organisation to define, develop and/or launch a new or improved product.
Non-Destructive Testing	Inspection methods for the testing of the material properties on specimens without impairing their future usefulness.
Distributor	An organisation carrying out the purchase, storage, splitting, or sale of products without affecting product conformity. The term ‘organisation’ in the context of this directive means a distributor.
Quality Escape	Any item delivered by the Supplier to Lilium eAircraft that is subsequently determined to be nonconforming to contract and/or technical specification.
Recommendation Finding	Comment about areas complying with the standard/requirement but very close to becoming a non-conformity or that given additional evidence could transform into a non-conformity.
Service Provider	A Supplier providing a service either onsite or offsite e.g., outsourcing, offload, operational processing (conventional/special processes, laboratory test, etc.) on an item.
Special Process	A process that alters a part or assembly characteristic in a way that cannot be directly measured without destructive methods is treated as a Special Process. This includes processes or operations that create or change the electrical, chemical, physical and/or metallurgical properties of a component and processes that remove/deposit materials on a item in case the output cannot be evaluated by any non-destructive testing and measuring methods. In addition, non-destructive testing and materials testing methods are defined as special processes.
Subtier	A company contracted by the Supplier to furnish items or services to the Supplier or Lilium eAircraft.
Supplier	A company directly contracted by Lilium eAircraft to supply flying items, or aircraft manufacturing to Lilium eAircraft.
Technical Data	Data that is necessary to ensure that the item can be produced in a condition such that continuing airworthiness of the aircraft and related operational and emergency equipment is assured.

1.4 Acronyms

Acronym	Definition
APQP	Advanced Product Quality Planning
CB	Certifying Body
CofC	Certificate of Conformity
COTS	Commercial off the Shelf
Cpk	Continuous process capability index
DFMEA	Design Failure Mode and Effects Analysis
EASA	European Union Aviation Safety Agency
EDI	Electronic Data Interchange
EWB	Extended Workbench
FAA	Federal Aviation Administration
FAI	First Article Inspection
FAIR	First Article Inspection Report
FOD	Foreign Object Debris or Foreign Object Damage
IAQG	International Aerospace Quality Group
IT	Information Technology
LBA	Luftfahrt-Bundesamt (German national Competent Authority)
MSA	Measurement System Analysis
NC	Non-conformity
NDA	Non-Disclosure Agreement
NDT	Non-Destructive Testing
NPI	New Product Introduction
OP	Other Party
PMS	Production Management System
PFMEA	Process Failure Mode and Effects Analysis
PO	Production Organisation
PPAP	Production Part Approval Process
Ppk	Preliminary process capability index
QMS	Quality Management System
SCQM	Supply Chain Quality Manager
SDS	Safety Data Sheet

Acronym	Definition
SP	Special Process

1.5 Reference to other documents

Document ref	Document name
LP-PE-0000	Production Organisation Exposition
LP-SP-0001	Supplier Management
LP-CP-F012A	Concession Form
LP-MP-T020A	Special Process Certificate
LP-QS-T003A	Standard CofC template for Suppliers
LP-SP-F012A	Product Part Key Characteristics Definition Sheet
LP-SP-F017E	Supplier Acceptance Report
LP-SP-F019A	Supplier 9S Report
NAS410	Certification and Qualification Requirements for Non-destructive Test Personnel
EASA Part 21 Annex I POA	Production Organisation Approval according to EU regulation 748/2012
ARP/EN/SJAC 9136	Root Cause Analysis and Problem Solving (9S Methodology)
AS/EN/JISQ 9100	Certified Quality Management System Norm in Aviation and Space
AS/EN/JISQ 9103	Variation Management of Key Characteristics
AS/EN/SJAC 9102	Aerospace First Article Inspection Requirement
AS/EN/SJAC 9115	Quality Management Systems - Requirements for Aviation, Space and Defense Organisations - Deliverable Software
AS/EN/SJAC 9120	Quality Management Systems /Requirements for Aviation Space and Defense Distributors
AS/EN/SJAC 9131	Aerospace Series - Quality Management Systems - Nonconformance Data Definition and Documentation
AS/EN/SJAC 9145	Requirements for Advanced Product Quality Planning and Production Part Approval Process
AS/EN/SJAC 9146	Foreign Object Damage (FOD) Prevention Program - Requirements for Aviation, Space, and Defense Organisations
EN 4179	Qualification and approval of personnel for non-destructive testing
IATF 16949	Quality Management for the Automotive Industry
ISO/IEC 17025	Testing and Calibration Laboratories
ISO/TS 16949	Automotive standard is based on ISO 9001:2015
ISO 9001	Certified Quality Management System Norm

1.6 Roles and responsibilities

Role	Definition
Supply Chain Quality	Is the Liliam eAircraft department responsible for executing and managing the Liliam eAircraft and Supplier interfaces mentioned within the Supplier Quality Management System Handbook.
Supply Chain Quality Manager	It is the Supply Chain Quality Managers responsibility to verify and validate compliance to this directive and where mentioned the primary point of contact for the Supplier.
Supplier	It is the Supplier's responsibility to ensure that their PMS or Quality Management System and the PMS or Quality Management System of their subtier Suppliers operate in accordance with this directive.

2. General Policies

Customer safety and satisfaction within the business of Lilium eAircraft requires that flight and product safety be our highest value.

Product and flight safety are greatly influenced by our Suppliers. Therefore, the Supplier's ability to supply conforming, reliable, and safe items that meet our Lilium eAircraft quality requirements is mandatory for the sourcing of flying items.

To achieve Lilium eAircraft's high-quality standards and be competitive on the market, Suppliers and Lilium eAircraft must work cooperatively to apply a consistent PMS and execute continuous improvement.

The quality requirements represented in this document are mandatory and are to be applied by all Suppliers and their subtiers for business with Lilium eAircraft. To ensure Lilium eAircraft's continued compliance to EU regulation 748/2012 Subpart A&G, exceptions to the quality requirements stated herein must be agreed to in advance and documented in the contract.

ATTENTION: To secure its application, this directive will be referenced as applicable within contracts, purchase orders, or any other contractual documents between Lilium eAircraft and Suppliers.

The content of this directive needs to be proven by the Supplier during qualification by Lilium eAircraft and is to be maintained throughout the validity of the contract duration. The Lilium eAircraft Supply Chain Quality department by executing supplier control, surveillance and auditing will ensure this throughout the duration of the Supplier contract.

The Supplier shall also obligate its subtiers to comply with the duties and obligations upon it according to this Lilium eAircraft Supplier Quality Management System Handbook.

3. Supplier Quality Management Systems Classification

A - Type PMS

The Supplier has been granted and maintains an EASA Part 21 Annex I Production Organisation Approval in accordance with EU Regulation 748/2012 or similar regulations given by other Aviation Authorities e.g., FAA. This Supplier acts with quality mindset in accordance with this handbook and must apply his approved Production Organisation Approval PMS/QMS to supply items listed on his Capability List with an authorized release certificate e.g., EASA Form1, FAA Form 8130-3 and documentation according to sections 13 and 14, respectively. Delivered items not listed on his capability list in lieu of an authorized release certificate e.g. EASA Form1, FAA Form 8130-3, the Supplier is requested to deliver with a CofC; further documentation requirements given by sections 13 and 14 remain unchanged.

B - Type QMS

The Supplier has implemented and proven compliance with AS/EN/JISQ 9100, by having received a certification from an AS/EN/SJAC 9104-001 accredited organisation indicating his company is AS/EN/JISQ 9100 approved and maintains this certification. This Supplier acts with a quality mind set in accordance with this handbook and must supply items with a CofC and documentation according to sections 13 and 14, respectively.

C - Type QMS

The Supplier has implemented and proven compliance with an applicable ISO standard (e.g., ISO 9001, ISO/IEC 17025, IATF 16949) by having received a certification indicating his company is ISO approved and maintains this certification. This Supplier acts with a general quality mind set. In terms of aviation business Suppliers providing items other than services, laboratory test, COTS, standard parts, or raw material must adapt their ISO 9001 QMS in accordance with section 4 of this handbook and must supply items with a CofC and documentation according to sections 12 and 13, respectively. Suppliers providing services, laboratory test, COTS, standard parts, and/or raw material must supply items with documentation according to section 14.

D - Type QMS

The Supplier has none of the previously described Quality Management Systems. To conduct business with Lilium eAircraft the Supplier prior to signing the compliance agreement fully accepts to implement the PMS/QMS requirements given by this document. The Supplier must secure within an adequate time frame Quality Management System certification from an accredited organisation to become an approved Lilium eAircraft Supplier. Until such time, this Supplier in terms of aviation business with Lilium eAircraft must supply items with a CofC and documentation according to sections 13 and 14 respectively in addition to an onsite inspection of finished items conducted by a Lilium eAircraft Supply Chain Quality Manager (or approved delegate) prior to each delivery.

E - Type QMS (Deliverable Software ONLY)

The Supplier has implemented and proven compliance with AS/EN/JISQ 9100, by having received a certification from an AS/EN/SJAC 9104-001 accredited organisation indicating his company is AS/EN/JISQ 9100 approved and has supplemented their Quality Management System in accordance with AS/EN/JISQ 9115 for deliverable software activity. This Supplier acts with a quality mindset in accordance with this handbook and must supply software with a CofC and documentation according to sections 13 and 14 respectively.

F - Type QMS (Distributors ONLY)

The Distributor has implemented and proven compliance with ISO 9001, by having received certification from an accredited organisation indicating his company is at least ISO 9001 (or better e.g., AS/EN/JISQ 9120) approved for the distribution of items and maintains this certification. This Supplier acts with a quality mindset in accordance with this handbook and must supply items with documentation according to section 14.

4. Supplier Quality Management System Requirements

When requested the Supplier must be able to present to Lilium eAircraft a current and valid certificate according to Table 1 and where a supplementary PMS requirement is identified ensures that their Quality Management System has incorporated the supplementary standard or applicable requirements therein.

Table 1: Lilium eAircraft QMS requirements by Supplier classification

Classification	Certificate	Supplementary QMS Requirement
A-Type	EASA Part 21 Annex I POA or equivalent ⁽¹⁾	None
B-Type	AS/EN/JISQ 9100 ⁽¹⁾	None
C-Type	ISO 9001	Appendix A / C-Type ⁽¹⁾⁽²⁾
E-Type	AS/EN/JISQ 9100 ⁽¹⁾	AS/EN/JISQ 9115 ⁽¹⁾
F-Type	AS/EN/JISQ 9120	None
	ISO 9001	

⁽¹⁾ To get a record of evidence for the established PMS/QMS, **LP-SP-T014A** (see Appendix F) needs to be completed and signed by the Supplier and Lilium eAircraft. The signed “Supplier Compliance Agreement” shall be handled as part of the general Supplier contract and maintained on file by both the Supplier and Lilium eAircraft.

⁽²⁾ Suppliers, except for Service Providers, COTS, standard parts, or raw material Suppliers, falling within the classification of C-Type must review Appendix A and identify the highlighted AS/EN/JISQ 9100 requirements to be incorporated into their Quality Management System.

ATTENTION: To demonstrate compliance with the requirements of EASA Part21 Annex I, specific sub-sections of AS/EN/JISQ 9100 sections have been mapped to EASA Part 21 Annex I GM1 **21.A.139(d)(2)(ii)**. These sections are denoted by a “*” in Appendix A.

5. General Supplier Quality Management System Requirements

The following requirements must be applied by each Supplier according to the classification in section 3 of this directive.

5.1 Requirements for all Suppliers

The Supplier must grant Liliium eAircraft the right to conduct Audits of their PMS/QMS and issue non-conformities regardless of certification or Liliium eAircraft approval status.

The Supplier must grant Liliium eAircraft access to review their PMS/QMS, Audit plans, and Audit reports regardless of certification or Liliium eAircraft approval status.

The Supplier must immediately notify their Liliium eAircraft Supply Chain Quality Manager if there are major changes to their PMS/QMS or certification (e.g., major findings, decertification, change in management, change in location).

The Supplier must implement procedures that ensure Liliium eAircraft is aware of PMS/QMS non-conformities and has access to detailed information within these non-conformities.

In the event of findings derived from a Liliium eAircraft conducted Audit or assessment, or the Supplier itself identifies a PMS/QMS or technical non-conformity (NC) affecting items already delivered to Liliium eAircraft (Quality Escape), the Supplier shall conduct and submit to Liliium eAircraft, via the appropriate Liliium eAircraft Electronic Data Interchange solution (Supply on/Air Supply) corrective action in accordance with ARP/EN/SJAC 9136, Root Cause Analysis and Problem Solving (9S Methodology) and Table 2.

Table 2: Supplier Corrective action implementation time period

9S Step	Technical NC or Quality Escapes	Audit or Assessments	
Immediate Containment Action	2 business days	Agreed between Liliium eAircraft/Supplier	
Permanent Corrective Action	5 business days	Agreed between Liliium eAircraft/Supplier	
Final Corrective Action Closure	15 business days	Major (Level 1)	21 business days
		Minor (Level 2)	no longer than 3 months
		Recommendation (Level 3)	agreed between Liliium eAircraft/Supplier

When requested by the Authority (e.g. EASA, FAA, LBA) the Supplier must provide the Authority right of access to facilities. Reasonable restrictions made by Supplier to protect its business secrets shall be respected.

For the purposes of implementation of this directive, the Supplier must purchase and keep, according to its classification, on premise a copy of the latest release of the below standards:

Table 3: Supplier Classification

Classification	Doc.Ref.	Document full name
B-Type	AS/EN/JISQ 9100	Certified Quality Management System Norm in Aviation and Space
C-Type	AS/EN/JISQ 9100	Certified Quality Management System Norm in Aviation and Space
	ISO 9001	Quality Management System – Requirements
E-Type	AS/EN/JISQ 9100	Certified Quality Management System Norm in Aviation and Space
	AS/EN/JISQ 9115	Quality Management Systems - Requirements for Aviation, Space and Defense Organisations - Deliverable Software
F-Type	AS/EN/SJAC 9120	Quality Management Systems /Requirements for Aviation Space and Defense Distributors
	ISO 9001	Quality Management System – Requirements

5.2 Requirements for Suppliers with Other Party certifications

During an Other Party (OP) Audit the Supplier must provide the Certification Body (CB) access to Liliam eAircraft proprietary data exclusively to the level absolutely necessary and requested to support the Audit. The Supplier must ensure compliance with contractually imposed NDA and export control requirements.

The OP (CB) service agreement provides for “right of access” to all OP (CB) records by Liliam eAircraft as such the Supplier must grant Liliam eAircraft the right of access to review OP Audit results, findings and associated corrective actions. When requested the Supplier must grant Liliam eAircraft access to their IAQG OASIS Level 2 assessment results.

When requested by the competent Authority (e.g. EASA, FAA, LBA) the Supplier must provide the Authority access to review OP audit results, findings and associated corrective actions.

6. Supplier First Article Inspection Requirement

6.1 General First Article Inspection Requirements

The Supplier shall perform a First Article Inspection (FAI) for a part number if any of the following conditions occur:

- First time item is manufactured for serial production,
- A change in the design affecting fit, form, function and/or interchangeability of the item,
- A change in manufacturing source(s), process(es), Special Process(es), inspection method(s), acceptance criteria, location of manufacture, tooling, or materials,
- A change in numerical control program or translation to another media that is utilized to produce items,
- A natural or man-made event, which may adversely affect the manufacturing process,
- A lapse in production for two years, or as specified by Liliium eAircraft,
- Product related needs, e.g., occurrence report, or
- As requested by Liliium eAircraft and/or demand from the Competent Authority.

Unless contractually required, a FAI does **NOT** apply to:

- Development and prototype items that are not considered as part of the first production run,
- Unique single run production orders not intended for serial production (e.g., out-of-production spares),
- Procured standard catalogue items, COTS, or deliverable software (section 6.3).

The FAI shall include, but not be limited to a complete documented verification of all dimensions, features, notes, and specifications identified in the approved data and on all provided key characteristics.

For any changes to the item, a partial FAI of only the applicable changes is required. Additionally, the Supplier shall ensure that all operations outsourced conform to AS/EN/SJAC 9102, "Aerospace First Article Inspection Requirement".

6.2 First Article Inspection Report requirements

The Supplier must utilize the most current version of AS/EN/SJAC 9102 for their First Article Inspection, utilizing AS/EN/SJAC 9102 Forms 1, 2, and 3 or equivalent forms containing all "Required" and "Conditionally Required" information as outlined in AS/EN/SJAC 9102.

The Supplier must submit to Liliium eAircraft the First Article Inspection Report (FAIR) and copies of the supporting documentation as evidence of conformance to this requirement with each affected shipment of the product via the appropriate Liliium eAircraft Electronic Data Interchange solution.

When requested, the Supplier must also provide evidence of inspections performed to verify conformance of subsequent build lots/shipments.

Before the start of series production and prior to shipment, the Supplier shall submit to Liliium eAircraft in accordance with the agreed time schedule electronic copies of the First Article Inspection Reports (FAIR) and all supporting documentation.

NOTE: Supporting documentation may include Certificates of Conformity for raw materials and Special Processes (as defined in the AS/EN/SJAC 9102 specification and identified on the engineering drawing), drawings, and test reports.

A Lilium eAircraft on-site inspection may be required prior to the release of finished items. The Supplier shall support the on-site inspection in accordance with the agreed time schedule.

The Supplier shall retain all records pertaining to the First Article Inspection Report (FAIR) as set forth section 15.3.

6.3 Deliverable software First Article Inspection requirements

Requirements for FAI of deliverable software are embedded in AS/EN/SJAC 9115 under the control of production and service provision.

For software product configuration verification, configuration Audits must be performed by the Supplier to determine whether an item conforms to its performance and functional requirements, and the as-built technical documentation.

A configuration Audit of software shall be performed by the Supplier to verify:

- All design and development activities, data, and documents are complete and documented information retained according to section 15.3,
- All problem reports and change requests are identified and dispositioned,
- The build instructions to ensure the deliverable object code can be regenerated from the source code,
- Software requirement deviations are recorded and approved,
- The software can be loaded into the target computer and initialized,
- The software was tested and accepted in accordance with the requirements,
- Traceability exists from the software product to the requirements,
- The software and its media are correctly identified and protected from overwrite,
- The software and its media are corruption free,
- The software and its media are free of malicious code (e.g., viruses, malware); and
- The source code is identified and under configuration control.

The above objectives can be verified by the accumulation of evidence throughout the software life cycle and Audits of the Configuration Management System can be addressed through internal Supplier Audits and/or the planned Lilium eAircraft Audit activities.

7. Supplier Special Process Requirements

Lilium eAircraft Suppliers providing a Special Process as a service shall pay close attention to the identification, control and documentation of Special Processes derived directly from Lilium eAircraft approved Design Data. The Supplier must refer to the design requirements for each item, specifically the Lilium eAircraft drawing and specifications, to identify their Special Process requirements.

In addition to the Special Processes identified in the Lilium eAircraft Design Data, the Supplier shall refer to the Special Process list provided in Appendix E.

7.1 Special Process Qualification Requirements

Lilium eAircraft requires the Special Process qualification of Supplier facilities as a means of ensuring item conformity against the applicable Lilium eAircraft process specifications and corresponding drawings.

Lilium eAircraft shall have the right to perform a Special Process qualification in two phases:

- **Capability Demonstration:** The Supplier must demonstrate, via a technical study, that the production or test environment can perform the Special Process. It can be done via coupon or item demonstration.
- **Validation Run:** The Supplier must apply the Special Process on the specific item or set of items to validate, via a technical study, that the process and component satisfies the requirements as stated in the Design Data. The results must be submitted to Lilium eAircraft as part of the Supplier's FAIR (section 6.2).

For each Special Process, a qualification plan shall be prepared by the Supplier and submitted to Lilium eAircraft for approval. After approval of the plan, Supplier shall perform any corresponding tests to demonstrate process capability.

A Special Process (SP) qualification file must be prepared by the Supplier for both the initial qualification and any subsequent renewals.

The following documents are required as a minimum as part of the SP qualification file:

- List of Lilium eAircraft design requirements
- Manufacturing documents, and other reference documents with revision numbers
- List of any existing of former approvals of the process
- Operator training and/or proficiency records
- List of consumables used in the process
- List of all facilities, equipment, and control documents used for the process
- Process control, monitor and Audit plans
- Test results (or demonstration of process capability)
- Nadcap or any other certifications related to the Special Process.

All documents are required; in the case any of the document cannot be provided, the Supplier shall submit to Lilium eAircraft a written reason for the deviation in the SP qualification file.

Lilium eAircraft will provide SP qualification decisions as noted below:

- Lilium eAircraft declares the Supplier as a Lilium eAircraft certified Special Process source.
- Lilium eAircraft declares a temporary approval on the application of Special Processes on a limited period or for only defined components, until the corrective action(s) is closed.
- Lilium eAircraft declares an approval with certain limitations in the basis of process application, method, consumable use, special monitoring methods, specifically trained personnel application, and others.

- Liliium eAircraft rejects the Supplier as a certified Special Process Source.
- Liliium eAircraft cancels the Special Process Certification of Supplier.

To get a record of evidence for the Special Process approval, **LP-MP-T020A** (see Appendix F) needs to be completed and signed by the Supplier and Liliium eAircraft. The signed “Special Process Certificate” shall be handled as part of the general Supplier contract and maintained on file by both the Supplier and Liliium eAircraft.

7.2 Control of personnel, equipment, and consumables requirements

7.2.1 Personnel requirements

The Supplier shall be responsible for setting the competency, training, and authorising its personnel based on internal documents or the specific technology domain and/or industrial specifications.

The Supplier must ensure its personnel and the personnel of its subtiers initiate and maintain a training program that covers each Special Process performed on Liliium eAircraft items.

Liliium eAircraft is entitled to request and the Supplier must provide details of Special Process training given to personnel involved in the execution of the Special Process. The training records must be in line with the level of competency and specified authorisations assigned as a part of the approved Special Process Qualification File.

The Supplier shall monitor and control any re-occurring personnel certifications within the required time interval e.g., NDT personnel qualification certificates, annual visual acuity test, process examinations.

Deviations from the above personnel competency requirements or initial training plan shall be reported and must be approved by Liliium eAircraft.

The training, qualification, and certification of NDT personnel shall be per:

Table 4: Qualification, and Certification of NDT personnel

Doc.Ref.	Document full name
EN 4179	Qualification and approval of personnel for non-destructive testing
NAS410	Certification and Qualification Requirements for Non-destructive Test Personnel

7.2.2 Equipment requirements

The Supplier shall identify and record in their manufacturing and quality procedures the method of generation, control, and measurement of equipment parameters during the Special Process operation. Any testing to implement equipment involved in the Special Processes shall be identified in the SP Qualification File and is subject to Liliium eAircraft approval.

The Supplier shall track the calibration of any tooling and equipment used in the execution of Special Processes.

7.2.3 Consumables and chemicals requirements

The Supplier must identify and list all consumables used during the implementation and execution of the Special Process. When requested by Liliium eAircraft, the Supplier must be capable of providing the SDS and CofC (if applicable) for the listed consumables.

The Supplier must be capable at all times of demonstrating the conformity of consumables specified in the Design Data. For any other consumable not covered in design requirements, their use and their function shall be presented to Lilium eAircraft. Lilium eAircraft may request coupon acceptance test for the consumables.

7.3 Special Process change management requirements

The Supplier must inform Lilium eAircraft of any changes to Special Processes according to section 15.3 regardless of whether the change is defined as administrative or technical by providing at a minimum the following information:

- Rationale for the change: It shall be correct, clear, and directly relevant.
- Scope of the change: It shall give the range of the components the change affects.
- Change description (from... to...): It shall demonstrate the change clearly, showing the prior condition and the post-change condition.
- Substantiation for the change: It shall be based on given substantiation methods, if applicable.

Special Process changes must be evaluated in a functional group that includes both Supplier and Lilium eAircraft representatives. The functional group shall review, substantiate, and approve the change.

The Supplier shall provide upon Lilium eAircraft's request additional technical studies such as literature review, coupon and/or item demonstrations, or test reports to reapprove the Special Process according to section 7.1.

7.3.1 Change records

A change record is a record that addresses the change rationale, change description, and change substantiation in complete, correct, and clear form. The record shall be captured on a traceable document such as meeting protocols, coordination memos, or technical reports issued by the Supplier and submitted to Lilium eAircraft.

Regarding substantiation of this type of changes, it must be proven and declared by the Supplier and approved by Lilium eAircraft that the change does not affect form, fit, or function and such proof shall be documented in the change record.

7.3.2 Administrative change

Correction of typo graphical errors, wording changes, clarifications, paraphrasing where there is no change in technical content, and other similar clerical changes (but NOT changes in document revisions references) are defined as an administrative change.

7.3.3 Technical change

Any change, that could affect form, fit, or function of the item is defined as technical change. Technical changes include but are not limited to:

- Change of wording, clarification, specification number/name revisions, specification cancellation and replacement where the technical content changes
- Change to processing equipment or tooling
- Repair of processing equipment core technology
- Movement of equipment
- Change of consumables (including chemical content, brand name, industrial specification)
- Change of design requirements and revisions of Design Data
- Change of manufacturing best practices
- Change of processing parameters
- Change of pre-processing practices that could impact the SP of interest.

All technical changes require substantiation to prove the effect of changes on the item will not change the design intent. There are four different substantiation methods that are permitted, which are used in combination with each other or individually:

- **Test Application:** Coupon or component-specific empirical tests to ensure the product still meets the design intent after the application of change.
- **Comparative Analysis:** Comparison of approved data or any equivalent component/ approach that is like current change.
- **Computational Analysis:** Analytical or computational approach where the possible effect on the processor material is calculated.
- **Experience:** Description of previous applications where the recommended changes were successful in other occasions based on statistical analysis, and results are well documented.

7.4 Cancellation and renewal of Special Process certifications

Lilium eAircraft is entitled to cancel the Special Process certification if the Supplier or its subtiers consistently demonstrates that it is not able to execute Special Processes in a manner consistent with its initial qualification.

The following circumstances are cases in which cancellation could occur, but this list is not exhaustive:

- Changes in facility and equipment
- Changes to the methods of equipment or tool calibration and maintenance
- Failure to demonstrate Special Process capability as specified in section 7.1
- Failure to meet design requirements.
- Increased occurrence rate of nonconformities totaling 25% or more of the production volume within 2 weeks of operation.
- Discovery of latent defects not captured in the approved validation
- Unmanaged changes to process equipment or tooling
- Lack of personnel competency
- Failure to maintain consistent production:
 - 6 months of process inactivity
 - 3 months of inactivity producing the affected Lilium eAircraft items.

Lilium eAircraft may renew the Supplier's Special Process certification only after sufficient demonstration of a Special Process capability equivalent to the initial qualification.

8. Supplier manufacturing digital data conversion requirements

The Supplier shall have a Configuration Management process that ensures that the current and latest revision levels of technical data received from Lilium eAircraft is controlled in a manner that maintains two-way traceability from the definition documentation to the final item and from the final item back to the definition documentation.

8.1 CAD compatibility requirements

Any technical data transferred to Lilium eAircraft shall be in accordance with Lilium eAircraft standards, or as otherwise mutually agreed between the Supplier and Lilium eAircraft.

Formal technical data releases, including drawings, specifications, documents, requirements, analysis, software code, etc. shall be provided to the Supplier in a digital format defined by Lilium eAircraft.

Any electronic file exchanged from the Supplier to Lilium eAircraft shall be capable of being opened by Lilium eAircraft without any restrictions.

The Supplier shall ensure that any drawings and 3D-models transferred to Lilium eAircraft are compatible with Siemens NX Design tool or a tool mutually agreed between the Supplier and Lilium eAircraft.

ATTENTION: Preferred formats are STEP and Parasolid.

All technical documentation and written technical correspondence provided to Lilium eAircraft shall be in English language.

8.2 CAD conversion requirements

If the Supplier's manufacturing and inspection software utilizes a different digital data format than provided by Lilium eAircraft, the Supplier must establish a documented process for the conversion of the digital data set received from Lilium eAircraft to their local format.

The Supplier must establish acceptance criteria for the accuracy of translated surface profile/geometry and tolerances and subsequently shall ensure the end item will be within engineering tolerance/specification.

For traceability, all technical data translated by the Supplier shall reference the same unit of measure as the original data set provided by Lilium eAircraft.

The Supplier shall ensure the verification process for all entities within datasets containing 3D annotation (i.e., feature control frames, dimensions, text, and/or surface geometry) are accounted for in their translated media.

Objective evidence validating the Suppliers' translation process and results of the verification must be retained by the Supplier according to section 15.3.

9. Supplier Production Part Approval Process Requirements

Unless otherwise stipulated in the contracts entered with Liliium eAircraft, the Supplier, as applicable in Table 5: Production Part Approval Process (PPAP) Applicability, shall perform PPAP according to AS/EN/SJAC 9145.

If the Supplier has a new part introduction, change in the process, material, or relocation in production site he should immediately inform Liliium eAircraft, review the changes and send an initial PPAP form submission to their responsible Supply Chain Quality Manager. The Supplier must use the form included in AS/EN/SJAC 9145 or equivalent to submit the specified contents of the PPAP.

The Supplier must identify the applicable PPAP elements, including specific requirements from Liliium eAircraft. All elements in Table 5 are required unless the element isn't applicable to the activities performed by the Supplier.

The Supplier must also develop a PPAP file for the products requiring PPAP. These PPAP documents must be maintained, and accessibility ensured as required. If changes to the product and/or the process proceed, the Supplier must inform their Liliium eAircraft Supplier Chain Quality Manager.

A formal PPAP approval is required for the shipments of items to Liliium eAircraft. The Supplier must wait until Liliium eAircraft has reviewed the PPAP package and gives positive feedback. The item is not to be shipped unless Liliium eAircraft approval is received in writing.

NOTE: Verbal approval is not acceptable.

Table 5: Production Part Approval Process (PPAP) Applicability

Supplier Type	PPAP	Conditions
Standard Part or Raw Material	Not Applicable	None
Distributor	Not Applicable	None
Service Provider	Not Applicable	None
COTS	Not Applicable	None
EWB	Not Applicable	FAI only
Build-to-Print	Applicable	(1)
Design & Build	Applicable	(1)

NOTE:

(1) PPAP required ONLY when APQP Phases 2, 3, and 4 are applied (Reference: AS/EN/SJAC 9145)

Table 6: List of Production Part Approval Process (PPAP) Elements

Production Part Approval Process (PPAP) Elements	
1	Design Records
2	Design Risk Analysis (e.g., DFMEA) - only applicable to design Organisation
3	Process Flow Diagram
4	Process Failure Mode and Effects Analysis (PFMEA)
5	Control Plan
6	Measurement System Analysis (MSA)
7	Initial Process Capability Studies
8	Packaging, Preservation and Labelling Approvals
9	First Article Inspection Report (FAIR)
10	Customer PPAP Requirements
11	PPAP Approval Form (or equivalent)

Reference Appendix B, Description of PPAP Elements.

10. Supplier Product / Process Key Characteristics Requirements

Suppliers shall establish within their Quality Management System a system for the variation management for Key Characteristic according to AS/EN/JISQ 9103, Variation Management of Key Characteristics.

The Liliium eAircraft form **LP-SP-F012A** (see Appendix F) or via the appropriate Liliium eAircraft Electronic Data Interchange solution all identified product and/or process Key Characteristics are to be documented, and quality measurements results reported back to Liliium eAircraft.

The Supplier shall ensure that the identified item Key Characteristics are incorporated into control plans, measured, and controlled at all levels of their supply chain i.e., Supplier, Supplier N-1, Supplier N-2, etc.

During series production, the Supplier shall demonstrate the capability of the process for all item Key Characteristic and manage and control each by using suitable techniques (e.g., statistical process control and digital control charts) throughout the entire production period.

When requested by Liliium eAircraft, the Supplier shall complete section two of the **LP-SP-F012A** with, their own and their responsible subtiers, the in-process or final measurements associated with each item Key Characteristic and share digitally to Liliium eAircraft via the appropriate Liliium eAircraft Electronic Data Interchange solution. This includes the results of any statistical process controls and capability targets specified by Liliium eAircraft.

11. Supplier Delegation Requirements

To comply with EASA Part 21 G, **21.A.139(d)**, Lilium eAircraft has established a supplier delegation process that will ensure Supplier personnel performing inspections/test on behalf of the Lilium eAircraft Quality Manufacturing meets or exceeds the competency requirements as set forth for Lilium eAircraft Quality Inspectors.

Suppliers who meet Lilium eAircraft entry requirements may be requested to have personnel from their Quality Organisation delegated to verify items, or services on behalf of Lilium eAircraft Quality Manufacturing. The Supplier may be requested to select personnel (it is recommended that the Supplier selects more than one candidate) meeting the required competency.

The Supplier must provide clear evidence that each candidate meets each specific requirement. This evidence can be training certificates, qualifications, on-the-job training, and period of experience in determined roles.

Authorisation is granted as a Lilium eAircraft Delegated Supplier Representative when the Supplier candidate has successfully proven their competencies in line with the competence matrix requirements. The authorisation for each Delegated Supplier Representative is valid for a maximum of 24 months. Supplier delegation authorisation extends only to items, or services listed on the Supplier's approved PPAP.

Lilium eAircraft may communicate to the Delegated Supplier Representative the required quality measurements by filling out and transmitting Append, **LP-SP-F017E** (see Appendix F) via the appropriate Lilium eAircraft Electronic Data Interchange solution. Where Supplier Delegation is invoked the delegation authorisation shall extend only to the Delegated Supplier Representatives.

The Delegated Supplier Representative shall perform the necessary inspections and as evidence of conformity return the results within a signed copy of, **LP-SP-F017E** (see Appendix F) along with the shipped items or via an equivalent electronic method.

ATTENTION: The Delegated Supplier Representative signing the Supplier Acceptance Reports cannot also sign the CofC and / or EASA Form1 for line items under the selected purchase order.

In the event a non-conformity is detected during a delegated inspection, the non-conformity details shall be reported to Lilium eAircraft, and the items are to be managed accordingly by the Supplier's PMS/QMS.

To assure the continuity of the delegation a renewal assessment must be carried out by Lilium eAircraft to review the Supplier's continued compliance to the entry requirements and the Delegated Supplier Representative's competencies against the requirements stated in the Lilium eAircraft Competency Matrix.

Prior to the Delegated Supplier Representative's expiration date, the Delegated Supplier Representative may be requested to provide clear evidence that he/she continues to meet each specific requirement. This evidence can be training certificates, qualifications, on the job training and period of experience in determined roles.

In case a Delegated Supplier Representative(s) is no longer working in the assigned role referenced on the last documented competency assessment, the Supplier must immediately inform Lilium eAircraft and delegation authorisation will be revoked for that individual.

12. Supplier concession management

A concession request only applies to unintentional deviations on items that can be identified by a part number where a 100% recovery to the specified Design Data from a technical and/or economic point of view cannot be achieved but could be conceded and approved under requirements provided by the Lilium eAircraft Design Organisation.

The Supplier is responsible for raising a concession request because of an identified non-conforming item by using the appropriate Lilium eAircraft Electronic Data Interchange solution. In exceptional cases (e.g., IT-connection off) the form **LP-CP-F012A** can be used (reference Appendix F).

To secure adequate processing time in terms of Lilium eAircraft Design Organisation acceptance/rejection of the concession request and to describe the deviation between the non-conforming item and the specified Design Data, the information listed below must be provided within the header and in the 'Deviation description to specified Design Data' field of the concession form:

- Detailed deviation description on the non-conformity
- Part number and part serial number (if applicable)
- Design drawing number
- Part description
- Assy serial number / manufacturer serial number (if applicable)
- Design drawing section / pictures with detailed measurements.

When it is necessary to provide additional details on the non-conforming item the Supplier shall use the concession continuation sheet. The affected page number of the additional continuation sheets need to be referred to within in the 'Deviation description to specified Design Data' field.

The Supplier must forward the concession request for further assessment and disposition to Lilium eAircraft Supply Chain Quality. Lilium eAircraft Supply Chain Quality will return the concession back to the Supplier and delivery of the affected items is released **ONLY** if the concession is approved and accepted.

Upon receipt of an approved concession, the Supplier must act according to the concession disposition and temporary suffix.

Table 7: Concession suffix

Temporary Suffix	Action Description
QI	Issue a non-conformity record to execute the required inspection.
RTC	Issue and execute a production order according to the concession rework disposition.
I	Identify the manufacturing data issued to the affected items in the concession and implement a quality inspection at the interface.

The Supplier must mark, using marking requirements as specified on the Technical Data, the concession number on the affected items and record the concession number on the certification documentation (e.g., Certificate of Conformity, EASA Form1) for the affected items. Where a "RTC" suffix is noted on the concession, the Supplier must provide a statement on the Certificate of Conformity confirming that the concession disposition has been executed on the affected items within their production system.

In case of temporary suffix related to actions impacting next customer (Lilium), Supplier cannot close the concession by removing the temporary suffix and shall visibly label the part in the location of the non-conforming condition exist, recalling the concession reference for attention to the next assembly.

13. Supplier Certificate of Conformity requirements

The Supplier must supply with each order shipped to Lilium eAircraft a Certificate of Conformity (CofC) that confirms that the delivered item(s) fulfill the relevant specification, applicable Design Data (e.g., drawing) and purchase order requirements.

To standardize the CofC and ensure Suppliers are consequently meeting CofC content, this section also provides guidance material and a template that may be used by Lilium eAircraft Suppliers to submit CofCs to Lilium eAircraft.

Suppliers may use and submit their CofC by using the form in Appendix C, **LP-QS-T003A** according to the below instructions and Appendix D guidelines:

- The CofC form is not a fixed template, the width and length of the boxes may change based on data input.
- There can be multiple items listed on a CofC. In case multiple items are from different Purchase Orders, the link must be made between each of the different items and the corresponding PO or PO line.
- In case of kitted parts represented by a single item ordered by Lilium eAircraft. The Supplier is requested to confirm in the CoC the full list of the parts, providing relevant quantity and traceability (S/N or Batch Nr).
- Check block #1 for the appropriate page numbering, i.e., 1/1, 1/2, 2/2 etc.
- If a block is not applicable the space must be completed by entering "N/A".
- When submitting a non-conformity (e.g., concession), the Supplier must also provide reference to the Lilium eAircraft acknowledgement in the Block 13.
- The Supplier's PMS/QMS shall ensure that only authorised personnel can initiate, sign and issue CofC's and provide traceability to that person and to the relevant skills and competences (training performed, experience in the conformity attestation process and Lilium eAircraft requirements, etc.). The Supplier personnel authorised to initiate, sign and issue CofC's should, in particular, be aware of their level of responsibilities and impact of possible mistakes and/or fraudulent actions.
- Electronically generated CofCs are acceptable, provided they are compliant with all other appropriate elements of this document, in particular, verification that only authorized personnel can validate a CofC in the corresponding IT tool. An electronic representation of that person's signature may also be shown but is not mandatory.
- Copies of the CofC must be retained according to section 15.3 in their original paper format or in a secure database, provided that the database contains all of the information required on the CofC and they are filled and secured in line with Lilium eAircraft and regulatory requirements (e.g., double archiving, storage duration, protection against fire, water, etc.).

ATTENTION: Suppliers that opt to use their own CofC format must ensure the minimum content as specified in Appendix D is present on the CofCs submitted to Lilium eAircraft.

14. Supplier accompanying documentation requirements

Each order shipped to Lilium eAircraft must be accompanied (or transmitted to Lilium eAircraft electronically) by documents containing a declaration that the individual item was produced under the terms of the contract and according to Table 8.

ATTENTION: For Production Organisation Approval Holders or equivalent, the prevailing agreements such as, for instance, procurement contracts shall determine whether an EASA Form1 (F1) or CofC (CC) shall accompany each shipment.

Table 8: Accompanying documentation requirements

Supplier	Build-to-Print / Design & Build Item	Shelf-life, Time Sensitive Item or Material ^(1, 2)	Standard Part or Material	COTS	Service Provider
Production Organisation Approval Holder or equivalent	F1, DN	(F1 or CC), DN	(F1 or CC), DN	(F1 or CC), DN	CC, DN
Non-Production Organisation Approval Holder	CC, DN, SR	CC, DN	DC	DC	CC, DN
International Suppliers located outside of the European Union	CC, CI, DN, SR	CC, CI, DC	CI, DC	CI, DC	CC, DN
Distributors	n/a	DT	DT	DT	n/a
International Distributors located outside of the European Union	n/a	CI, DT	CI, DT	CI, DT	n/a

Legend:

CC = Certificate of Conformity (CofC) and/or any agreed upon inspection and/or test reports

CI = Commercial Invoice

F1 = EASA Form 1 or equivalent

DC = Delivery Note with conformity statement

DN = Delivery Note

DT = Delivery Note with information showing traceability to the original source and/or attachments confirming original manufacturers and lot numbers along with applicable certifications issued by the original manufacturer, such as material certs, mill test reports, mill test certificates, manufacturer's CofC

SR = Supplier Acceptance Report (Note 3)

n/a = not applicable

NOTES:

1 - For shelf-life parts the supplier must supply documentation indicating the status of the item, including items listed in Notes 2.

2 - For time-controlled parts the Supplier must list hours, cycles, and/or days since last service.

3 - In case Supplier is delegated according to section 11

15. Supplier Quality Assurance requirements

These Quality Assurance requirements set forth the determination of the technical and administrative conditions and of the interactive processes that are necessary between Lilium eAircraft and Supplier to achieve the desired level of Quality.

These Quality Assurance requirements describe the minimum requirements applying to the PMS/QMS of the Supplier in respect of Quality Assurance. These Quality Assurance requirements define special requirements applying to the manufacturing process.

15.1 General Supplier Quality Assurance requirements

15.1.1 Scope and subject of the Quality Assurance requirements

These Quality Assurance requirements are set forth by Lilium eAircraft, for the purposes of protecting its own interests and the interests of its group companies within the meaning of sections 13 et seq. of the German Stock Corporation Act (Aktiengesetz, AktG).

These Quality Assurance requirements and referenced Aerospace Standards regulate the requirements applying to the quality of all development services and/or items manufactured and/or delivered for the use of Lilium eAircraft unless the scope of these requirements is restricted expressly to certain services and/or items. Certain provisions of these Quality Assurance requirements shall not apply if found to be conflicting with the provisions of prevailing agreements such as, for instance, procurement contracts.

15.1.2 Subtier Quality Assurance

Supplier shall obligate its subtiers to comply with the duties and obligations upon it according to these quality requirements. In the event of Supplier being unable to enforce compliance with these obligations by a subtier, Lilium eAircraft shall be informed by Supplier, to find an amicable solution.

Lilium eAircraft may demand from the Supplier documentary proof of the effectiveness of the Quality System of any subtier providing items destined for Lilium eAircraft that has been contracted by Supplier, and/or that other suitable measures have been implemented to assure the quality of items bought by Supplier.

15.1.3 Audit (on Supplier's premises and/or remote)

Lilium eAircraft shall be entitled to perform Audits to establish whether Supplier's Quality Assurance measures appear capable of ensuring conformity with Lilium eAircraft requirements. Lilium eAircraft may exercise its right to audit twice a year and in the event of a justified suspicion of a violation of the agreed quality or these Quality Assurance requirements. Such Audit, which shall be agreed prior to the scheduled performance, may take the form of a quality system, manufacturing process, product assessment, or Special Process Audit as per Lilium eAircraft directives. Audits performed by registered certification companies and/or Authorities shall be considered in respect thereof. Reasonable restrictions made by Supplier to protect its business secrets shall be respected.

In the event of quality concerns arising because of items and/or services supplied by subtiers, Supplier shall ensure that, after due notice, Lilium eAircraft is granted access (through the Supplier) for auditing purposes to subtiers involved in the manufacture of the product in question; however, the above shall apply only in conjunction with items destined for Lilium eAircraft.

15.2 Product Lifecycle

15.2.1 New Product Introduction, Planning

Whenever there is a New Product Introduction (NPI) in Lilium eAircraft's order directed to the Supplier, the Supplier is obliged to apply Advanced Product Quality Planning (APQP) project management techniques from the planning stage and to inform Lilium eAircraft upon request about the progress of the project and deliverables at agreed upon intervals. The requirements specification, activities (elements), deliverables, and APQP project plan shall be agreed between both, Supplier and Lilium eAircraft in written form (according to AS/EN/SJAC 9145).

Any Technical Data required to support the development of the series production, such as specifications, drawings, parts lists, CAD data, shall be reviewed by Supplier upon receipt regarding completeness and lack of contradictions in general and in respect of the special purpose of its intended use. Supplier shall inform Lilium eAircraft about any defects detected in such process. Lilium eAircraft, in turn, shall ensure that any specifications, drawings, parts lists, and CAD data are made available to Supplier promptly, completely, and free from contradictions.

During the product and process design and development phases, both, Supplier and Lilium eAircraft shall employ suitable preventive quality planning methods such as, for instance:

- Design Risk Analysis,
- Process Flow Diagram,
- Process Failure Mode and Effects Analysis,
- Control Plan,
- Measurement System Analysis, and
- Initial Process Capability Studies, etc.

Past experiences (process cycles, process data, capability studies, etc.) from similar projects shall also be given consideration (according to AS/EN/SJAC 9145).

Manufacturing and testing conditions applying to prototypes or initial production items during product and process validation phase shall be agreed between Lilium eAircraft and Supplier and be documented. It is the objective to manufacture the items under conditions which are as close to those of series production as possible.

In respect of known – regulated or agreed – functionally relevant characteristics, Supplier shall perform analyses of the manufacturing lines as well as the inspection equipment and document those. Whenever any defined capability variables are not accomplished, Supplier shall either optimize its systems or perform suitable item inspections to preclude defective deliveries (according to AS/EN/SJAC 9103).

Before the start of series production, Lilium eAircraft may inspect the item to the requisite extent before the start of series production and grant Supplier a release for its manufacture under certain conditions, if necessary (according to AS/EN/SJAC 9145, AS/EN/SJAC 9102, AS/EN/SJAC 9115).

Upon production product and process validation the initial preliminary process capability index (Ppk) as well as the continuous process capability index (Cpk) shall be specified for all agreed characteristics (according to AS/EN/SJAC 9103).

15.2.2 Initial Production Run - Release

Before the start of series production, Supplier shall submit to Lilium eAircraft in accordance with the agreed time schedule, the respective initial production run of the item and associated First Article Inspection Reports (FAIR) for the purpose of inspection and release (according to AS/EN/SJAC 9145, AS/EN/SJAC 9102, AS/EN/SJAC 9115).

Release of initial production run by Lilium eAircraft shall not release Supplier of its responsibility for product quality during series production.

Release of initial production run by Lilium eAircraft is a purely technical process and is not to be equated with a supply order.

15.2.3 Series Production, traceability, notification of non-conformities, labeling

Supplier shall only deliver series items to Lilium eAircraft that have been released for delivery by a production part approval process pursuant to PPAP (according to AS/EN/SJAC 9145) or by a concession.

In the absence of specific requirements of Lilium eAircraft, the Supplier is obliged to ensure the traceability of the items supplied.

In the event of a defect being detected, the traceability system shall be good enough to permit tracing the number of potentially non-conforming items to the smallest possible volume. Lilium eAircraft will provide Supplier with any data required for traceability purposes (according to AS/EN/SJAC 9131).

In the event any process disruptions or quality deviances occur, the causes shall be analyzed, corrective actions shall be initiated, and their effectiveness shall be reviewed. If it becomes necessary under exceptional circumstances to deliver non-conforming items to Lilium eAircraft, a request for concession shall be obtained prior thereto (see section 12). Similarly, Lilium eAircraft shall be informed within 24 hours about any later detected Quality Escapes (according to ARP/EN/SJAC 9136, AS/EN/SJAC 9131).

Labeling of items and packages shall conform to the requirements agreed with Lilium eAircraft. Supplier shall ensure that the labels of packaged items remain legible during transport and storage. Deviations from the existing labeling requirements are only valid if agreed in writing between the Supplier and Lilium eAircraft.

Supplier shall ensure that items are delivered only in suitable containers to avoid damages or quality losses (e.g., contamination, chemical reactions). Lilium eAircraft shall be informed about special storage conditions (according to AS/EN/SJAC 9145).

ATTENTION: All Quality Escapes are to be communicated to Lilium eAircraft via the appropriate Lilium eAircraft Electronic Data Interchange solution.

Suppliers must develop, implement, and maintain effective methods and processes appropriate to their products to exclude the risk of counterfeit items being delivered. Effective processes should be in place to detect, report and quarantine counterfeit items and to prevent such items re-entering the supply chain. If counterfeit items are detected or suspected, Suppliers must provide immediate notification to Lilium eAircraft of such counterfeit items.

15.2.4 Inspections, capability, corrective action

Supplier shall be responsible for implementing inspections to comply with agreed specifications and targets.

In the absence of agreements to the contrary, Supplier shall include in its own PMS/QMS any production and inspection equipment, including but not limited to tools and rigs, provided by Lilium eAircraft as part of the normal purchasing process, to be handled like Supplier's own production and inspection equipment.

If Supplier cannot fulfil the targets (e.g., regarding quality characteristics, deadlines, supply volumes), Supplier shall inform Lilium eAircraft about such fact and the details in respect thereof. To find a quick solution, Supplier shall be obligated to disclose all relevant data and facts.

During series production, Supplier shall demonstrate the capability of the process for all characteristics that are functionally relevant and have to be documented by using suitable techniques (e.g., statistical process control or digital control charts) throughout the entire production period. In the event of process capability shortfalls, the quality shall be assured through suitable inspection methods; the production process shall be optimized to bring the required capability up to the desired level (according to AS/EN/SJAC 9103, AS/EN/SJAC 9138).

In the event Supplier observes an increase of discrepancies between quality targets and actual quality performance, Supplier shall inform Lilium eAircraft without delay and describe any corrective action contemplated (according to ARP/EN/SJAC 9136).

Upon receipt, Lilium eAircraft shall inspect Supplier's products in respect of compliance with quantity, identity, visible damages, as well agreed technical requirements.

Unless otherwise stipulated in the contracts entered with Lilium eAircraft, any deviations detected in the ordinary course of business will be reported by Lilium eAircraft to Supplier without delay. If feasible in the ordinary course of business, Lilium eAircraft will either inspect assemblies manufactured with items provided by Supplier prior to the next manufacturing segment or, alternatively, inspect the final product that incorporates the assemblies.

In the absence of agreements to the contrary, non-conforming items will be shipped to Supplier for analysis. Should a dispute arise, Lilium eAircraft and Supplier will conduct a joint analysis. In the event of deliveries of non-conforming items, Supplier shall take corrective action immediately (according to ARP/EN/SJAC 9136).

Lilium eAircraft may delegate inspection authority to the Supplier, at which point an approved delegated supplier representative shall be notified and shall conduct the required inspections on behalf of the Lilium eAircraft.

15.2.5 Foreign Object and Debris control

The Supplier shall establish and maintain an effective FOD prevention program that involves using a process approach and risk-based thinking to proactively address the events (conditions and actions) leading to FOD (according to AS/EN/SJAC 9146).

15.3 Document retention, changes

Documentation associated with manufacturing, quality, tooling, and equipment shall be kept on file in a special archive for a period of aircraft operational life plus 3 years. Upon request the Supplier shall allow Lilium eAircraft to periodically audit such documents. This includes but is not limited to documents such as:

- Production samples and associated laboratory results
- Manufacturing Records (e.g., Work Orders, Work Instructions)
- Tooling and Equipment Calibration Records
- Equipment Validation Reports
- Tooling Refurbishment and Maintenance Records
- First Article Inspection Records
- Inspection Test Results (e.g., Measurement Reports)
- Non-Destructive Inspection Test Reports
- Acceptance Test Reports
- Concessions
- EASA Form 1s
- Certificate of Conformities.

Before launching any changes in respect of production processes or items of Subtiers, relocation of manufacturing sites, further changes to procedures or equipment for item testing, or of any other quality assurance measures, Supplier shall inform Lilium eAircraft in time to enable Lilium eAircraft to review the changes contemplated regarding any possible detrimental effects and to assess whether the consent to the change can be given (see section 9). This obligation to notify Lilium eAircraft is set forth in the aforementioned PPAP guidelines (according to AS/EN/SJAC 9145).

Without the prior written consent of Lilium eAircraft, which may be given under certain circumstances only following production part approval process (section 9), Supplier shall not implement any changes relating to production processes, production locations, materials, and Subtiers of items. Lilium eAircraft may only refuse its consent if such change has possibly a detrimental effect on Lilium eAircraft. All modifications of the item and/or the processes shall be documented. Such relevant documents shall be retained by Supplier in a manner acceptable to Lilium eAircraft.

Any and all product changes as well as any process changes that are of relevance to the item shall be documented in the product history.

ATTENTION: All product and/or process changes are to be communicated to Lilium eAircraft via the appropriate Lilium eAircraft Electronic Data Interchange solution.

15.4 Liability

Supplier will not be relieved of its liability for any warranty or damage claims of Lilium eAircraft due to non-conforming deliveries by the fact that quality targets and measures as well as intervention limits (disruptions, statistical ppm targets in the meaning of a statistical factor) are set forth in these Quality Management requirements. Rather, these Quality Management requirements define the obligations arising from the supply contract and the resulting warranty right.

Appendix A: Supplier Quality Management System Requirements Matrix

9100:2016 Clause	A-Type	B-Type	C-Type	E-Type
4 Context of the organisation				
4.1 Understanding the Organisation and its context	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
4.2 Understanding the needs and expectations of interested parties	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
4.3 Determining the scope of the quality management system	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
4.4 Quality management system and its processes	EASA Part21 Annex I	EN/AS9100	<i>EN/AS9100</i>	EN/AS9100
5 Leadership				
5.1 Leadership and commitment				
5.1.1 General				
5.1.1 General	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
5.1.2 Customer focus	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
5.2 Policy				
5.2.1 Establishing the Quality Policy				
5.2.1 Establishing the Quality Policy	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
5.2.2 Communicating the Quality Policy				
5.2.2 Communicating the Quality Policy	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
5.3 Organisational roles, responsibilities, and authorities				
5.3 Organisational roles, responsibilities, and authorities	EASA Part21 Annex I	EN/AS9100	<i>EN/AS9100</i>	EN/AS9100
6 Planning				
6.1 Actions to address risks and opportunities				
6.2 Quality objectives and planning to achieve them				
6.2 Quality objectives and planning to achieve them	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
6.3 Planning of changes				
6.3 Planning of changes	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
7 Support				
7.1 Resources				
7.1.1 General				
7.1.1 General	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
7.1.2 People				
7.1.2 People	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100

9100:2016 Clause	A-Type	B-Type	C-Type	E-Type
7.1.3 Infrastructure	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
7.1.4 Environment for the operation of processes	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
7.1.5 Monitoring and measuring resources				
7.1.5.1 General	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
7.1.5.2 Measurement traceability	EASA Part21 Annex I	EN/AS9100	<i>EN/AS9100*</i>	EN/AS9100
7.1.6 Organisational knowledge	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
7.2 Competence	EASA Part21 Annex I	EN/AS9100*	<i>EN/AS9100*</i>	EN/AS9100*
7.3 Awareness	EASA Part21 Annex I	EN/AS9100	<i>EN/AS9100</i>	EN/AS9100
7.4 Communication	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
7.5 Documented information				
7.5.1 General	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
7.5.2 Creating and updating	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
7.5.3 Control of documented Information	EASA Part21 Annex I	EN/AS9100	<i>EN/AS9100</i>	EN/AS9100
8 Operation				
8.1 Operational planning and control	EASA Part21 Annex I	EN/AS9100*	<i>EN/AS9100*</i>	EN/AS9100*
8.1.1 Operation risk management	EASA Part21 Annex I	EN/AS9100	<i>EN/AS9100</i>	EN/AS9100
8.1.2 Configuration management	EASA Part21 Annex I	EN/AS9100*	<i>EN/AS9100*</i>	EN/AS9100*
8.1.3 Product safety	EASA Part21 Annex I	EN/AS9100*	<i>EN/AS9100*</i>	EN/AS9100*
8.1.4 Prevention of counterfeit products	EASA Part21 Annex I	EN/AS9100*	<i>EN/AS9100*</i>	EN/AS9100*
8.2 Requirements for products and services				
8.2.1 Customer communication	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
8.2.2 Determining the requirements for products and services	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
8.2.3 Review the requirements for products and services	EASA Part21 Annex I	EN/AS9100*	<i>EN/AS9100*</i>	EN/AS9100*

9100:2016 Clause	A-Type	B-Type	C-Type	E-Type
8.2.4 Changes to requirements for products and services	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
8.3 Design and development of products and services				
8.3.1 General	n/a	n/a	n/a	n/a
8.3.2 Design and development planning				
8.3.3 Design and development inputs				
8.3.4 Design and development controls				
8.3.5 Design and development outputs				
8.3.6 Design and development changes				
8.4 Control of externally provided processes, products, and services				
8.4.1 General	EASA Part21 Annex I	EN/AS9100	EN/AS9100*	EN/AS9100
8.4.2 Type and extent of control	EASA Part21 Annex I	EN/AS9100	EN/AS9100*	EN/AS9100
8.4.3 Information for external providers	EASA Part21 Annex I	EN/AS9100	EN/AS9100*	EN/AS9100
8.5 Production and service provision				
8.5.1 Control of production and service provision	EASA Part21 Annex I	EN/AS9100	EN/AS9100	EN/AS9100
8.5.1.1 Control of equipment, tools, and software programs	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
8.5.1.2 Validation and control of special processes	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
8.5.1.3 Production process verification	EASA Part21 Annex I	EN/AS9100	EN/AS9100	EN/AS9100
8.5.2 Identification and traceability	EASA Part21 Annex I	EN/AS9100*	EN/AS9100*	EN/AS9100*
8.5.3 Property belonging to customers or external providers	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
8.5.4 Preservation	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
8.5.5 Post-delivery activities	EASA Part21 Annex I	EN/AS9100*	EN/AS9100*	EN/AS9100*
8.5.6 Control of changes	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
8.6 Release of products and services	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100

9100:2016 Clause	A-Type	B-Type	C-Type	E-Type
8.7 Control of non-conforming outputs	EASA Part21 Annex I	EN/AS9100*	EN/AS9100*	EN/AS9100*
9 Performance evaluation				
9.1 Monitoring, measurement, analysis, and evaluation				
9.1.1 General	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
9.1.2 Customer satisfaction	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
9.1.3 Analysis and evaluation	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
9.2 Internal audit	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
9.3 Management review				
9.3.1 General	EASA Part21 Annex I	EN/AS9100	EN/AS9100	EN/AS9100
9.3.2 Management review inputs	EASA Part21 Annex I	EN/AS9100	EN/AS9100	EN/AS9100
9.3.3 Management review outputs	EASA Part21 Annex I	EN/AS9100	EN/AS9100	EN/AS9100
10 Improvement				
10.1 General	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100
10.2 Nonconformity and corrective action	EASA Part21 Annex I	EN/AS9100	EN/AS9100	EN/AS9100
10.3 Continual Improvement	EASA Part21 Annex I	EN/AS9100	ISO 9001	EN/AS9100

* Reference Regulation (EU) No 748/2012 GM **21.A.139(d)(1), (2), (3)**

ATTENTION: For indicated regulations and norms linked to QMS Types, the current valid and published versions, or versions referenced on the supplier’s certification form apply.

Appendix B: Description of PPAP Elements

PPAP Elements				
Element	What is it?	Objective or Purpose	When to use it	
1	Design Records	<p>A collection of the design documents typically including:</p> <ul style="list-style-type: none"> • CAD/CAM Math Data • Part Drawings • Specifications • List of all characteristics and requirements • If Lilium eAircraft is responsible for designing, this is a copy of Lilium eAircraft drawing that is sent together with the Purchase Order (PO). • If Supplier is responsible for designing this is a released drawing in Supplier's release system. 	<p>Verification that the Supplier has designed the item and process according to Lilium eAircraft & Regulatory Requirements.</p>	<p>Anytime an item or service is being designed or redesigned Design Records must be confirmed early in APQP Phase 2/3 and be updated with any changes prior to submitting PPAP.</p>
2	Design Risk Analysis	<p>A structured approach used to identify and prioritize potential risks in a new or changed design.</p>	<ul style="list-style-type: none"> • Per AS/EN/SJAC 9145 the DFMEA methodology can be used as a record of the DRA • Identifies potential failure modes, the resulting effects, and prioritizes actions based on the expected severity, likelihood of occurrence, and ability to detect the failure mode during design. • Enables collaborative identification of risk and associated risk mitigation actions. 	<ul style="list-style-type: none"> • Started during initial design, updated as the design matures and throughout the product lifecycle as the product is updated. • As an input to the next product development cycle

PPAP Elements				
Element	What is it?	Objective or Purpose	When to use it	
3	Process Flow Diagram	<p>Representation of sequential steps of a process</p> <ul style="list-style-type: none"> • To help “see” the real process. • To understand the following characteristics of a process: <ul style="list-style-type: none"> • Step-by-step process linkage • Inputs and outputs of each process step • Offline activities (measurement, inspection, handling) • Planned vs. non-planned rework. • Assist in identification of needed resources (equipment, tooling, facilities people) 	<ul style="list-style-type: none"> • Once the preliminary design is released • Prior to initiating the PFMEA • To evaluate changes to the process 	
4	PFMEA	<ul style="list-style-type: none"> • A structured method for identifying all possible failures & impacts of the process under review. • “Failure modes” is the description of the non-conformity to the requirements. • “Effects analysis” refers to studying the consequences of those failures. • Failure modes are prioritized according to how serious their consequences, how frequently they occur, and how easily they can be detected. • Reaction plan to eliminate or reduce failure modes with high severity, reduce occurrence, and improve detection 	<ul style="list-style-type: none"> • Identify potential product related process failure modes. • Assess potential effect of the failures. • Identify potential cause(s) • Plan for the prevention, mitigation, and control of failures • Repository for Lessons Learned 	<ul style="list-style-type: none"> • When launching a new product or service • Design and development of new manufacturing process • To improve an existing process

PPAP Elements				
Element	What is it?	Objective or Purpose	When to use it	
5	Control Plan	<ul style="list-style-type: none"> AS/EN/SJAC 9145: A documented description linking manufacturing process steps to key inspection and control activities. The intent of a control plan is to control the design characteristics and the process variables to ensure product quality. It is a document that describes the measurement methods, tools and procedures required at each significant phase of a process to control critical inputs and assure product that will conform to pre-determined requirements. 	<ul style="list-style-type: none"> Implementation of new process After risks identified in PFMEA have been mitigated Following a process change Evaluating processes with non-conformities after corrective action 	<ul style="list-style-type: none"> Monitors all product and process Key Characteristics (KCs) and Critical Items (CIs) defined by the customer and Organisation. Manages process variation (input) to reduce product characteristic variation (output). Defines reaction to out-of-control situations, and ensures process improvements are sustained throughout the product lifecycle
6	MSA	<p>A MSA is a statistical tool used to determine if a measurement system is capable of accurate/precise measurements</p>	<ul style="list-style-type: none"> Quantifies the variability/error added by the measurement system To discover areas where: <ul style="list-style-type: none"> Training is needed. Procedures are lacking. Standards are not defined 	<ul style="list-style-type: none"> When trying to understand the effectiveness of your measurement system on its ability to measure both inputs and outputs of a process Any new or modified process to ensure the quality of the data
7	Initial Process Capability Studies	<p>A collection of dimensional results on product and process Key Characteristics identified in the control plan.</p>	<p>Initial process capability studies demonstrate that the combination of people, machine, methods, material, and measurements have the potential to produce product that will consistently meet the design requirements.</p>	<p>Products produced from the production run(s) are used to provide data for determining initial process capability.</p>
8	Packing, Preservation & Labeling Approvals	<p>Packaging and Labelling approvals are used to validate the process of delivering product and material to Lilium eAircraft</p>	<ul style="list-style-type: none"> To ensure that product or material is not physically damaged, nor will the packaging degrade in performance through the normal course of transportation, delivery, and storage. Labelling approval is used to ensure that the correct item is received by Lilium eAircraft 	<ul style="list-style-type: none"> Packaging should be considered early in the process design and completed in Phase 3. When required by Lilium eAircraft, a packaging evaluation is completed in phase 4 when product becomes available. The manufacturer should confirm that labeling requirements are understood and can be executed as planned in Phase 3. Lilium eAircraft approval is obtained when required.

PPAP Elements			
Element	What is it?	Objective or Purpose	When to use it
9	FAIR	<p>First Article Inspection is a complete, independent, and documented physical and functional inspection process to verify that prescribed production processes have produced an acceptable item as specified by engineering drawings, purchase order, engineering specifications, and/or other applicable design documents.</p> <p>This element must comply with the requirements of AS/EN/SJAC 9102 when contractually required by Liliium eAircraft.</p>	<p>The purpose of the FAI is to provide objective evidence, based on an assessment of the first production article produced during the initial production run, that all engineering, design, and specification requirements are correctly understood, accounted for, recorded, verified, and fulfilled.</p> <ul style="list-style-type: none"> FAI planning should begin in the early APQP phases to ensure that all Liliium eAircraft requirements are clearly understood and accounted. The FAI submission shall be completed using the initial production item produced during the first production run.
10	Customer Specific Requirements	<p>Liliium eAircraft may specify activities and/or artifacts that exceed those required in the AS/EN/SJAC 9145. These items are referred to as Liliium eAircraft Specific (PPAP) Requirements in the PPAP submission.</p>	<p>To ensure compliance to any addition Liliium eAircraft requirements</p> <ul style="list-style-type: none"> Specific Requirements by Liliium eAircraft should be identified during the project-planning phase, with timing established and assigned to the appropriate functional organisation. Evidence is submitted with the PPAP as defined by Liliium eAircraft in Phase 4.
11	PPAP Approval Form	<ul style="list-style-type: none"> The official record of part approval is AS/EN/SJAC 9145 Appendix D if not specified by Liliium eAircraft. May contain records of Subtier PPAP approval status 	<ul style="list-style-type: none"> Phase 4 when submitting PPAP to Liliium eAircraft. When any design change in item or process is completed <ul style="list-style-type: none"> To record the status of all PPAP requirements Official record of the status of item approval, including subcomponents as required

Appendix C: LP-QS-T003A, Standard CofC template for Suppliers

Latest version available upon request

Corporate Logo <small>(optional)</small>	CERTIFICATE OF CONFORMITY				
2 Certificate Number	3 Date	4 Supplier Name and Address	5 Customer Name and Address	6 Purchase Order number	
7 Item Number	8 Quantity	9 Description	10 Revision	11 Traceability	12 Remarks
13 Conformity Details					
Certifies that the items detailed have been manufactured / inspected / tested and are conform in all respects to the relevant specifications, drawings, and purchase order requirements.					
14 Name and Signature of person authorised to release items					
LP-QS-T003A Rev.01		Standard CofC template for Suppliers		18 JAN 2024	

Appendix D: Guidelines for the completion of the Certificate of Conformity

No.	Data Field Title	Description	Data	Data Type
1	Pages of Pages	Sheet number and total number of sheets	Numerals	Numeric
2	Certificate Number (optional)	Unique reference number assigned to Certificate of Conformity by Supplier	Numerals/letters	Alphanumeric
3	Date	Issue Date	Numerals/letters	Date
4	Supplier Name and Address	Supplier Name and Address	Numerals/letters	Alphanumeric
5	Customer Name and Address	Customer Name and Address	Numerals/letters	Alphanumeric
6	Purchase Order Number	Purchase Order Number	Numerals/letters	Alphanumeric
7	Item Number	Purchase Order Item Number	Numerals	Numeric
8	Quantity	Quantity of delivered items	Numerals/letters	Alphanumeric
9	Description	Description of items supplier, identified by same part number / material buying standard as referenced on the Purchase Order	Numerals/letters	Alphanumeric
10	Revision	Part or material revision as stated on the Purchase Order	Numerals/letters	Alphanumeric
11	Traceability	Serial / batch / lot / heat / cast numbers - as applicable to provide traceability	Numerals/letters	Alphanumeric
12	Remarks	Any additional remarks as related to the product	Numerals/letters	Alphanumeric
13	Conformity details	Optional statements as applicable: <ul style="list-style-type: none"> • Shelf-life expiry data • Non-conformity numbers • First Article Inspection • Material Certifications • Process Certifications • Customer Approval Numbers • Product category • etc. 	Numerals/letters	Alphanumeric
14	Name and signature of person authorized to release product to Customer	Statement confirming compliance to Customer Purchase Order requirements.	Digital signature	Alphanumeric

Appendix E: Lilium eAircraft Production Special Process List

Technology Domain		Special Process
1	Additive Manufacturing	<ul style="list-style-type: none"> • Powder Bed Fusion (SLM, EBM) • Direct Energy Deposition • Selective Laser Sintering • Stereolithography
2	Casting	<ul style="list-style-type: none"> • High Pressure Die Casting • Investment Casting • Sand Casting
3	Chemical Processing and Coating	<ul style="list-style-type: none"> • Cleaning • Anodizing • Chemical Conversion Coating • Etching • Mechanical Stripping • Chemical Stripping • Painting • Electro Polishing • Plating • Bonding with organic and inorganic adhesives • Thermal Spraying
4	Conventional Machining as Special Process	<ul style="list-style-type: none"> • Abrasive Blasting • Broaching • Grinding • Hole Making • Milling • Turning • Tumbling
5	Composite	<ul style="list-style-type: none"> • Forming- Composite Lay Up • Forming- Impregnation • Forming- Liquid Resin Infusion • Forming- Press Forming • Forming- Multiaxial Laying • Forming- Fiber Layout • Forming- RTM Injection • Forming-Laminate Making • Forming-Filament Winding • Heat Treatment-Composite Autoclave or oven • Machining- Hole making, drilling on composite materials. • Storage

Technology Domain		Special Process
6	Electronics Assembly	<ul style="list-style-type: none"> • Tempering (Drying) • Soldering • Electronic Components Bonding • Material Lamination • Harness Assembly • PCB. Finishing • PCB. Plating • PCB. Drilling • Varnishing and coating of electronic boards • Parylene Coating
7	Forging	<ul style="list-style-type: none"> • Die Forging • Ring Rolling • Forging of Bars • Rolling of Bars
8	Heat Treatment	<ul style="list-style-type: none"> • Furnace Brazing • Vacuum Brazing • Carburizing • Nitriding • Hot Isostatic Pressing • Induction Processes • Sub-zero Heat Treatments • Quenching • Local heat treatment • Stress Relieving • Solution heat treating • Normalizing • Homogenizing • Ageing • Annealing
9	Joining	<ul style="list-style-type: none"> • Brazing • Welding (All) • Adhesive joining
10	Materials Testing Labs	<ul style="list-style-type: none"> • All
11	Measurement and Inspection	<ul style="list-style-type: none"> • CMM • Laser tracker • Articulating Arms • 3D Scanners • Structured Light Scanning • Capacitive Measurement
12	Non-Conventional Machining	<ul style="list-style-type: none"> • EDM • Chemical Milling • ECM • Laser Cutting and drilling processes. • ECF (Electrochemical Drilling) • High Pressure Water Jet • Post Peen Material Removal

Technology Domain		Special Process
13	Non-Destructive Testing	<ul style="list-style-type: none"> • Airflow Measurement • Visual Inspection • MPI • Radiography (Manual, Computed, Computed Tomography) • FPI • Eddy Current • Ultrasonic Testing • Residual Stress Measurements
14	Non-Metallic Materials Manufacturing	<ul style="list-style-type: none"> • Plastic Injection molding • Urethane forming
15	Surface Enhancement	<ul style="list-style-type: none"> • Plasma treatment • Marking • Peening • Laser Conditioning

Appendix F: Lilium eAircraft template references

Section	Template Reference / Number	Template Name	Notes
4	LP-SP-T014A	Supplier Compliance Agreement	Latest version available upon request
6	AS/EN/SJAC 9102	First Article Inspection Report (Form 1, 2, 3)	IAQG Forms Library
7	LP-MP-T020A	Special Process Certificate	Latest version available upon request
8	AS/EN/SJAC 9145	PPAP Approval Form	IAQG Forms Library
9	LP-SP-F012A	Product Part Key Characteristics Definition Sheet	Latest version available upon request
11	LP-SP-F017E	Supplier Acceptance Report	Latest version available upon request
12	LP-CP-F012A	Concession Form	Latest version available upon request
13	LP-QS-T003A	Standard CofC Template for Suppliers	Latest version available upon request or IAQG CofC Template
15	LP-SP-F019A (ARP/EN/SJAC 9136)	Supplier 9S Report	Latest version available upon request