| Liberty Precision Co., LLC | Title: Supplier Quality Manual | | |
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| Quality System Procedure | Q Procedure: 16 | Revision: 01 | |

1.0 Scope

This document is produced to identify the responsibility and activities required from Liberty Precision Company and its supplier as required by the Quality Management System Manual

2.0 Reference Documents

- 2.1 API Q1
- 2.2 AS9100D
- 2.3 LPC Quality Assurance Manual

2.1 Responsibility

- 2.2 The Quality Manager and if applicable the Subject matter expert has the responsibility of approval for this QP for inclusion into the Quality Management System, He / she also ensures that changes to documents are reviewed by the same function as the original document, revision and re-approval of these documents are carried out under the same authority.
- 2.3 Area Managers and Supervisors are responsible to ensure that required standards and specifications for their work are identified and included within the Integrated Management System.
- 2.4 Area Managers and Supervisors have responsibility to ensure that relevant documents are available at the point of use (Workstation) and that they remain legible and readily identifiable.
- 2.5 This procedure is also applied on external provided.

3 Procedure

4 Introduction

This Supplier Quality Manual (SQM) is provided to assist the external providers to understanding their responsibilities to Liberty Precision company.

LPC is expecting a commitment from our supplier to perform activities in a manner that maintain product safety and ethical behaviors.

Suppliers are responsible for the Quality and Delivery of their Products and Services and expected to provide Products or Services with:

- 1. Zero Quality defects
- 2. 100 % on time Delivery performance with zero disruptions
- 3. On time responsiveness to issues within 24 hours

This Supplier Quality Manual is based on ISO9001:2015, AS9100 and API Q1 requirements; LPC expects its suppliers to fully implement the processes and methods set forth in the Supplier Quality Manual. As well, full compliance with the requirements described within.

LPC expects its Suppliers to develop and maintain a registered Quality System that meets the requirements of ISO 9001.

Acceptance of an Liberty Precision Company Purchase Order or First shipment of product, constitutes acceptance of the requirements set forth in this manual as well as Terms and Conditions set forth in the Purchase Order.

5 Confidentiality

The Supplier shall ensure the confidentiality of Liberty Precision Company contracted products/ Services, projects under development, and all related product information. As well, the confidentiality of intellectual property shared as a result of the working relationship.

6 **Purpose**

This Supplier Quality Manual describes the basic Supplier Management guidelines between the Supplier and Liberty Precision Company regarding product and/or process related quality data, proper corrective measures, and change management.

7 Scope of application

This Manual applies to all current and new suppliers who provide raw materials, purchased parts / components and sub-contracted services incorporated into Liberty Precision Company and its entities final product. These Suppliers are listed on the Liberty Precision Company Approved Vendor List "AVL". The responsibility to deliver quality purchased parts and services on time lies with the Supplier. Equally, the supplier is obliged to assure adherence to the requirements stated in the SQM by its own subsuppliers.

8 Distributions

A copy of this manual and related supplier forms is available and readily accessible through the Liberty Precision Company Quality Group or the company website.

9 **Documents and Records**

Liberty Precision Company is obliged to provide the supplier with the latest version of specifications and/or must inform the supplier of any changes. Upon receiving any documents (e.g product/ Services specifications, drawings, inspection reports), required for product/ services planning, the supplier is to check them for completeness, possible contradictions in general, and in regards to their application. Concerns must be communicated to Liberty Precision Company immediately for clarification. The supplier is responsible for the active procurement of missing documents.

Unless additional requirements have been set forth by Liberty Precision Company and the supplier, specifications and supporting Quality records must be retained and stored for at least five years after service requirements terminate. Upon request, Liberty Precision Company has the right to review supplier documents and records at the supplier's site.

The supplier's records are to include at a minimum (As Applicable):

- 1. Lot traceability information specific to raw material and purchased parts heats or lots "material providers".
- 2. Test results for products /services.
- 3. Test equipment calibration records.
- 4. Training/ Certification records for personnel to show qualification.
- 5. Process and product change records.
- 6. Certificates of compliance.

7. Approved deviation requests "If Any"

10 Supplier Initiated Process Changes

- 10.1 Suppliers shall not make any type of change that might affect product/ services design criteria without prior written notification and approval from Liberty Precision Company.
- 10.2 Liberty Precision Company must be informed immediately when the supplier does not comply with the specifications agreed upon (e.g. test procedures, test equipment, process sequence, deadlines for delivery, quantities, packaging, drawings and agreements pertaining to product and process quality). In addition, a written approval by Liberty Precision Company Quality Management is required for any changes, further actions might be taken in case of the product/services supplier does not show a commitment to this requirement.
 - Actions might include but are not limited to, termination of relationship and/or re-evaluation.
- 10.3 The Supplier shall inform the Purchasing and Quality Departments of Liberty Precision Company immediately prior to making changes to the production/manufacturing process:
 - 10.3.1.1 Making changes to materials or vendor parts,
 - 10.3.1.2 Moving manufacturing locations,
 - 10.3.1.3 Any change of test equipment and test procedures affecting final product conformity,
 - 10.3.1.4 Changes to qualified personnel affecting final product/ Service Quality
 - 10.3.1.5 Changes to personnel affecting communication
 - 10.3.1.6 Changing sub-suppliers and suppliers of primary and interim products, packaging or labeling changes.
 - 10.3.1.7 This will allow Liberty Precision Company to examine the impacts to Liberty Precision Company and its customers prior to changes being implemented. Appropriate measures may be taken (e.g. renewed sampling, auditing of new/changed processes/manufacturing locations).
- 11 Submission and approval is required

If it requires reporting the changes, the Supplier Deviation Request form attached to this manual shall be used.

12 Quality System Requirements

The supplier must provide proof that the Quality Management System meets or exceeds the requirements set forth in ISO 9001. ISO 9001 qualified facility is a plus.

12.1.1.1 In the absence of third-party certification, depending on the product, its application, value, and criticality, Liberty Precision Company Quality representative may authorize the acceptance of other evidence of compliance. This may include second- audit (Vendor Audit) or first-party (self) assessment to the applicable criteria above, or to a set of alternative basic quality requirements (Supplier Survey).

13 Supplier Audits

- 13.1 Liberty Precision Company reserves the right to perform an onsite process / system audit at any time when selecting a supplier or to verify effectiveness regarding corrective and preventive actions. Advanced notice will be given prior to such a visit.
- 13.2 Liberty Precision Company may forgo audits in the following cases.

Proof of a current 3rd-party certificate (by an accredited certification authority).

Proof of an effective implementation of measures specified during a previous auditing process and/or proof of an actively pursued implementation plan.

- 13.3 Suppliers shall inform Liberty Precision Company about intended changes (re-certification, higher qualifications, expiration of certificates or loss of certification, and must do so in a timely fashion).
- 13.4 Liberty Precision Company may schedule process/product or QMS audits where:
 - 13.4.1.1 Supplier performance for quality or delivery does not meet Liberty Precision Company expectations.
 - 13.4.1.2 New or changed Products/ Services are being implemented.
 - 13.4.1.3 Significant change in the suppliers' management, or mergers or affiliations has taken place.

14 Supplier Evaluation: Performance Measurable "As Applicable"

- 14.1.1.1 Liberty Precision Company measures the suppliers' performance as follows:
- 14.1.1.2 Product Quality "NCR"
- 14.1.1.3 Delivery Schedule Performance,
- 14.1.1.4 Suppliers are required to maintain a 100% Quality and Delivery rating. Suppliers falling below 90% will be asked to provide a documented corrective action plan.
- 14.1.1.5 In case of supplier performance below 70%, Liberty Precision Company will consider further actions; actions might include terminating supplier from AVL.
- 14.2 Liberty Precision Company also tracks Supplier issues pertaining to:
 - 14.2.1.1 Escapes
 - 14.2.1.2 Deviation Waiver requests received from supplier.
 - 14.2.1.3 Failure to implement effective corrective action with supporting performance improvements may lead to the supplier being removed from the Liberty Precision Company Approved Supplier List "AVL".
- 14.3 If the supplier is recommended by customer, Liberty Precision Company customers shall be notified on the supplier performance status.
- 14.4 Liberty Precision Company requesting 24 hours for an initial response to the Supplier Corrective Action Request" SCAR", closing date will be stated inside the SCAR issued by Liberty Precision Company

15 CONTROL OF SUB-TIER SUPPLIERS

- 15.1 The Supplier, as the recipient of the contract, is responsible for meeting all requirements, including work performed by the Supplier's sub-tier Suppliers (also known as Sub-Suppliers or subcontract Suppliers).
- 15.2 When the Supplier uses sub-tier sources to perform work on products and/or services scheduled for delivery to Liberty Precision Company, the Supplier shall include flow-down requirements on contracts/ Purchase Orders, to its sub-tier sources, all of the applicable technical and quality requirements contained in the Liberty Precision Company contract/ Purchase order, including quality system requirements, regulatory requirements, the use of Liberty Precision Company designated sources, and the requirement to document and control 'key characteristics' and/or 'key processes,' and to furnish certifications and test reports as required.
- 15.3 Liberty Precision Company, its customers, and regulatory authorities reserve the rights to access to the applicable areas of facilities and to applicable documented information, at any level of the supply chain that includes the right of- entry to sub-tier facilities, subject to proprietary considerations.
- 15.4 As applicable, Liberty Precision Company might ask the supplier for first article witness, the reason is to make sure that supplier capability, and process controls meet the minimum requirements communicated by Liberty Precision Company.

16 CONTROL AND RELEASE OF Liberty Precision Company FURNISHED DOCUMENTS

- 16.1 Documents furnished by Liberty Precision Company to the Supplier are furnished solely for the purpose of doing business with
- 16.2 Liberty Precision Company.
- 16.3 Proprietary documents may be furnished to the Supplier in hard copy, electronic or other media as agreed. The Supplier is responsible for controlling and maintaining such documents to preclude improper use, loss, damage, alteration and/or deterioration.
- 16.4 Unless authorized by the Liberty Precision Company Buyer in writing, the Supplier may not transmit or furnish any Liberty Precision Company furnished documents, or copies of such documents, to anyone outside the Supplier's business organization except to a sub-tier source used by the Supplier for performance of work on the Liberty Precision Company contract.
- 16.5 The Supplier shall return to Liberty Precision Company or purge electronic copies of, all proprietary documents with the last delivery of products or services on the contract. Liberty Precision Company may request the Supplier to furnish objective evidence or certification that proprietary documents have been purged. The Supplier shall flow down this requirement to all sub-tier sources, when such sources will be in receipt of Liberty Precision Company proprietary documents during performance of work for the Supplier.

17 Measurement and Test Equipment

- 17.1 The Supplier is required to prove reliability and accuracy of the measuring and test equipment used.
- 17.2 The Supplier is to show that the test process is suitable for the respective test purpose.
- 17.3 The test equipment has to be included in the Supplier's test equipment monitoring and calibration process.

18 Product Inspection and Process Control

- 18.1 Records of ongoing process and product control must be available to Liberty Precision Company on request.
- 18.2 The Supplier must immediately analyze possible causes, take corrective measures and prove effectiveness of such measures in case of failure.
- 18.3 Suppliers shall allow Liberty Precision Company and its customers or customer representatives the right to verify at the Supplier's premises that the purchased product or service meets specified requirement

19 Preservation of products" Handling/Storage/Packaging and Delivery"

- 19.1 The Supplier is obliged to use appropriate means and methods of handling, storage, packaging and delivery methods so as to avoid adverse effects on product quality.
- 19.2 Personnel responsible for the preservation of the product shall have enough skills, experience, knowledge and qualifications to deal with Liberty Precision Company requirements unless otherwise specified. Packaging is the responsibility of the Supplier.
- 19.3 All product shipped to Liberty Precision Company requires a label containing at a minimum "As applicable":

Supplier Name:

Liberty Precision Company Purchase Order No:

Part Serial Number:

Part Number:

Heat Number:

Quantity:

19.4 Where traceability is a requirement, in case of products sent for operations might affect product traceability, re-applying the traceability to the product is a requirement.

Note: The Bill of Lading will contain the above information including Quantities per Lot number for traceability purposes.

20 Control of Non-Conforming products

- 20.1 Non-conforming or discrepant product is defined as a deviation from drawing or purchase order requirements such as quality, appearance, packaging, material, labeling, quantity, handling, shipping, delivery, cleanliness, dimensional or performance issues
- 20.2 Products, which have been deemed defective at the supplier's facility (incl. those caused by a sub-supplier), shall be appropriately dispositioned by Liberty Precision Company Quality Representative to prevent to protect Liberty Precision Company from receiving discrepant material.
- 20.3 Unless it can be ruled out that defective parts have been delivered to Liberty Precision Company, the Liberty Precision Company quality department must be informed immediately to determine suitable measures and containment actions.
- 20.4 Since delivering non-confirming products to Liberty Precision Company have a potential business impact regarding future business, Liberty Precision Company will take an appropriate action considering the business potential and existing business risk, actions might

- include but are not limited to, Issue SCAR, Complaints, NCR, and/ or termination from Liberty Precision Company AVL.
- 20.5 The Liberty Precision Company Engineering and Quality Departments may approve deviations from specifications, where adverse effects for function, durability, or safety are not to be expected. These special releases are only valid for a limited delivery period or quantity and must be documented properly between the supplier and Liberty Precision Company.
- 20.6 Approval provided only by Liberty Precision Company controlled document attached to this Manual.
- 20.7 For supplier that provide products and/or services that will be incorporated into any aviation, defense and/or space applications, Liberty Precision Company expects the supplier to be incorporated into the counterfeit parts program that is set by Liberty Precision Company, please reference to the counterfeit parts prevention policy attached to this manual

21 Supplier Complaints

- 21.1 Upon detection of defective purchased parts (or service) at Liberty Precision Company a Supplier Complaint initiated and e-mailed to the Supplier, it is required from the supplier to initially respond back to Liberty Precision Company Representative.
- 21.2 Phone contact is made with the Supplier and decision is made in cooperation with the Supplier (and if necessary with the sub-supplier) regarding the handling and containment of such parts.
- 21.3 In case of late delivery and/ or non-conforming products, SCAR and Supplier complaint will be provided to the supplier, further actions will be discussed with Liberty Precision Company management team, actions might include supplier termination, considering that Liberty Precision Company are looking forward to continuing with product/ Services suppliers that are fulfilled Liberty Precision Company requirements.
- 21.4 In case the suppliers are listed and recommended by Liberty Precision Company suppliers, and no reply to the Supplier complaints and taking an immediate action to eliminate root caused for the detected non-conformity and/or late delivery, Supplier complaints will be provided to LPC Customers and notice for supplier replacement will be issued to the customer.
- 21.5 Actions that might be applicable for the concern,
- 21.6 The immediate return of the entire shipment to the Supplier (if necessary, in cooperation with a Liberty Precision Company Management team). Replacement certified stock is expected in a timely manner so as not to cause disruption to Production.
- 21.7 Sorting by a third party provider. (Rework requires Liberty Precision Company Quality/approval) Use of 3rd Party to sort/rework defective product does not relieve the Supplier of their responsibility for the Quality or Delivery of product.
- 21.8 Sorting measures at Liberty Precision Company and possible rework by the Supplier at Liberty Precision Company Costs incurred by Liberty Precision Company will be recovered from the supplier.
- 21.9 In case of non-compliance with the goals set forth, the Supplier must establish a plan for improvement and submit the plan to Liberty Precision Company Quality Group for

evaluation. Failure to implement effective corrective actions for Quality or Delivery performance will lead to removal from the Liberty Precision Company Approved Vendor List 'AVL" as an approved Supplier.