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## Introduction LaunchPoint Supplier Quality Requirements

LaunchPoint EPS has established the following Quality Clauses to ensure effective communication to external providers. All requirements for products and services provided by external suppliers will be communicated by means of Supplier Purchase Order (PO). LP EPS POs shall callout applicable Quality Clauses for the product or service being provided.

In addition to these supplier PO Quality Clauses that are applied to each PO All LP EPS external providers are to ensure they can comply with the following requirements:

- Notify LaunchPoint of the identification of current or planned obsolescence of parts or processes
- Approved suppliers must retain documented information for products supplied to LP EPS, including retention periods and disposition requirements for the product's intended lifetime.
   Records must be retained for a minimum of at least 10 years.
- Vendors must ensure that their employees/staff are aware of:
  - o How to prevent the introduction of counterfeit parts or material
  - o Their contribution to product or service conformity
  - Their contribution to product safety
  - FOD Prevention and Detection methodologies
  - The importance of ethical behavior

When deemed necessary LaunchPoint reserves the right to audit vendors for the application / implementation of the above practices. Adequate notification will be provided prior to audit scheduling.

For any questions or inquiries regarding the requirements communicated in this document, you may contact the Quality Assurance Manager for LaunchPoint EPS.

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## Q-1 First Article Inspection Report

Supplier shall supply a First Article Inspection Report (FAIR) with the delivered product.

Inspection and acceptance of the First Article by the Buyer's representative shall be required prior to the delivery of the first lot of a new part. Additionally, if it has been 24 months or more since the last time the product was produced, a design or process change affecting the form, fit or functionality of the product, a new First Article is required prior to the next delivery.

The manufacturer/seller shall notify the Buyer of the opportunity to witness the performance of the First Article inspection Testing. Manufacturer / seller shall notify LP EPS buyer 7 days prior to planned First Article Inspection date to permit scheduling. LP EPS Witness will take place within 2 days from agreed schedule, or the First Article inspection may proceed without LP EPS participation. A formal First Article Inspection / Test Report shall be generated that documents the following: (Refer to AS9102 and ASME Y14.41 for guidance)

- 100% inspection verification of all drawing characteristics including part number and revision.
- Each characteristic shall be listed including the applicable drawing tolerance
- The corresponding actual measurement results shall be recorded
- The report shall be reviewed and accepted by the Seller's authorized Quality Assurance representative.

A change in manufacturing source or inspection methods, location, tooling, or materials as well as a change in numerical control program or impact from a natural disaster shall be cause for manufacturer/seller to notify LaunchPoint for determination of the need for a new First Article. Additionally, LaunchPoint may require the performance of a new First Article as part of corrective action for a part with repetitive rejection history.

Lapse of production does not apply to existing material (overrun) produced from a previous production lot that can be traced to a LP EPS approved First Article.

Unless otherwise directed by LP EPS, forms provided within **SAE AS9102** Aerospace First Article Inspection Report (FAIR) shall be used.

Complete Forms 1 through 3 in accordance with the latest revision of the specification. Completed FAIR documents (*AS9102 Forms and supporting certification/test reports, etc.*) shall be provided to LP EPS with delivery of the first article sample for review. The FAIR will represent compliance to all LP EPS drawing and PO specification requirements. Inspection results noted on Form 3 shall list equipment used to validate dimensions (Note: Unique equipment identifier will be acceptable). The unit used for performance of the FAIR shall be identified (e.g., tagged, etc.). All FAIR documentation shall include "ballooned" or "bubbled" drawing(s) identifying each feature (to include all drawing notes and title block information) that can be associated with the applicable item number noted on the FAIR dimensional report / AS9102, Form 3. Submission of FAIR to LP EPS with delivery of product is required.

**NOTE 1:** This clause does not apply to the following items:

- V/SICD (Vendor / Supplier Item Control Drawings),
- SCD (Source Controlled Drawings)
- Any LP EPS product identified as Tooling.

# LAUNCHPOINT

#### SUPPLIER PO QUALITY CLAUSES

## Q-2 Source Inspection

When Q2 is listed on the purchase order, Source Inspection is required prior to shipment of the product. The manufacturer/seller shall furnish at no cost to the buyer the necessary facilities, equipment, and support to perform verification or validation of the inspections and tests required to demonstrate conformance to the purchase order or subcontract requirements.

Manufacturer / seller shall notify LP EPS buyer 7 days prior to verification needed to permit scheduling. Inspection will take place within 2 days from agreed schedule, or source inspection requirement shall be waived with inspection acceptance upon receipt at LP EPS regardless of destination.

The supplier shall have documented evidence of their inspection/ & test performance (including inprocess, final test, and First Article history) available and present upon request. Required documentation for shipment must be completed and signed by the supplier's authorized quality representative and available for the LP EPS quality representative review prior to meeting. Supplier Quality and/or Engineering representative, LP EPS Quality and/or Engineering representative and when required LP EPS Customer representative will be responsible for coordinating these source inspection activities.



## Q-3 Manufacturing Plan Submittal for Designated Parts

When a Manufacturing Plan is imposed by call out of this Quality Clause, the manufacturer is required to generate and submit a manufacturing plan that shall contain a process flow diagram which shall include sequential fabrication and process steps as well as inspection and test steps in the order required to fabricate hardware compliant to the imposed engineering requirement.

The Manufacturing Plan shall be submitted to the appropriate LP EPS representative, through the buyer, for review and approval **14 days** prior to the start of production or as stated in the purchase order. Processing of hardware in advance of LP EPS approval is at the manufacturer's own risk and may result in rejection of hardware if changes are required based on inadequacies or omissions in processing, fabrication, inspection, or test.

Upon LP EPS approval of the manufacturing plan, the manufacturer shall control all manufacturing, processing, testing and inspections as stated in the approved plan. No Deviations, including in the selection of manufacturer sub-tier processors, is permitted without LP EPS prior approval. Details of the Inspection and test operations required shall include direct callout of the engineering criteria and tolerance callouts.

#### PRE-WORK AUTHORIZATION REVIEW EQUIREMENTS

- **1.** Seller shall provide access to its facility for a Pre-Work Authorization Review (PWAR) and a Post Award Review (PAR) assessment for the material specified in this purchase order.
- 1.1. The PWAR shall be held no later than the placement of the purchase order, Inter-Organizational Transfer (IOT), or Advance Authorization.
- 1.2. The PAR shall be held prior to the Seller starting fabrication/assembly of deliverable hardware. The seller's work procedures, tooling, fixtures, materials, drawings, and schedule shall be made available for review at the time of the PAR.
- **2.** Seller shall provide access to its facility for additional assessments as determined by LaunchPoint EPS. These assessments may include Product Process Verification (PPV) and Total Business Assessment (TBA).

#### POST AWARD REVIEW (PAR) REQUIREMENTS

- **1.** The seller shall be responsible for notifying the LP EPS buyer to schedule the Post Award Review (PAR) prior to the start of manufacturing.
- 2. The PAR shall be conducted at the seller's facility.



# Q-4 Part Marking Requirements

Seller shall mark parts and assemblies manufactured to LP EPS design documentation. These markings shall be in compliance with **Mil-STD-130** (*current version at time of purchase order*).

Unless otherwise stated in the engineering requirements, the external provider shall apply the following:

- LP EPS Engineering Part/Drawing number and revision invoked on Purchase Order
- Date of Manufacture, lot/date code or other control identifier number traceable to build documentation.
- Manufacturer's CAGE Code or LP EPS assigned Supplier ID number as stated on the Purchase Order as applicable per Purchase Order.
- Serial Number(s) or Lot #s if imposed on LP EPS Engineering or invoked on Purchase Order.





# Q-5 Certified Material Test Report(s) / Documentation

The seller shall supply one copy of material test reports indicating chemical composition and/or actual physical properties identifiable to each lot, batch or heat treat lot. This report shall accompany the shipment of product(s) produced from the lot. The report shall be validated by an authorized supplier's representative, by either an inspection stamp or signature and title. Supplier shall maintain records of traceability for no less than 10 years.





## Q-6 (A or B) Control of Special Process

#### Q-6A

When the LP EPS purchase order requires special processing in accordance with specifications designated by LP EPS, the supplier and any sub-tier suppliers performing special processes (i.e. soldering, cleaning, non-destructive examinations, plating, welding, brazing, etc.) shall utilize qualified procedures, personnel, and equipment to perform the work. The supplier shall provide LP EPS with certification (from the applicable source or internally) that they have only utilized qualified procedures, personnel, and equipment to perform the special process in accordance with the appliable special process specification(s). This certification shall include the number and revision of the applicable special process specification. Records of traceability must be retained for no less than 10 years.

#### Q-6B

When special process specification (e.g. heat treat, soldering, welding, anodizing, chemical film treatment, non-destructive examinations, etc.) are a contract and/or drawing requirement, the supplier is responsible for maintaining a system to certify (either through 2<sup>nd</sup> party or NADCAP) and control performance of special processes within their facility. In addition, all subcontracted special process sources shall be either NADCAP approved or have special process approval, in writing, by LP EPS. LP EPS approval of subcontracted special process sub-tier suppliers does not relieve the supplier of the responsibility for exercising those control measures necessary to ensure that work performed complies with applicable specification requirements.

To view approved NADCAP-approved sources, follow this link: <a href="https://www.eauditnet.com/eauditnet/ean/user/login.htm">https://www.eauditnet.com/eauditnet/ean/user/login.htm</a>





## Q-7 (A or B) Inspection Report / Test Data

**Q-7A** Inspection Data (Final Inspection Report)
DOCUMENTATION REQUIRED WITH SHIPMENT WHEN INVOKED
Use of supplier report format is acceptable.

The supplier shall inspect, to the most current version of ANSI/ASQC Z1.4 AQL (or equivalent) sampling plan (C=0), all drawing characteristics of the product that represent the shipment lot quantity. The supplier shall record 100% of the actual measurements (IAW supplier AQL sample plan), against the LP EPS drawing requirements including all specifications called out (e.g., MS, AS, NAS, etc.), and supply a Final (dimensional) Inspection Report to LP EPS with the shipment of product.

An authorized supplier's Quality representative shall validate the report, by either an inspection stamp or signature, date, and title. Note: Final Inspection Reports should represent the dimensions at the end of the manufacturing or assembly operation(s) for the product shipping lot, unless otherwise stated.

#### Q-7B Test Data (Performance Data)

DOCUMENTATION REQUIRED WITH SHIPMENT WHEN INVOKED.

Actual functional test reports referencing contract number, supplier's name, and address and/or independent laboratories' name and address, part number, part name, serial number (if applicable), date and run time if applicable, *must accompany each shipment to be delivered*. An authorized supplier's representative shall validate these reports, by either an inspection stamp or signature and title



# Q-8 Certificate of Conformance / Origin

External Providers shall provide a Certificate of Conformance (or Origin) for each separate shipment of product with reference to the following minimum information as requested below:

- Supplier identification or Logo and address
- Date
- LaunchPoint EPS Purchase Order number and change number, if applicable
- P.O. Line-Item number
- Quantities
- Product traceability
  - May include a unique identifier such as a serial number, manufacturing lot number, job number or work order number that is traceable to the manufacturer's build, testing and inspection records or traceable to Suppliers procurement, as applicable
- Shelf-Life material date of manufacture and date of expiration (if applicable)
- Part Number
- Part Revision (not applicable to COTS)
- Part Description (optional for COTS)
- Statement attesting to the conformance of the product to the PO or subcontract requirements. For COTS items, the statement of conformance to the manufacturer's product/material specification is acceptable.
- Name/Title and signature (electronic acceptable) of an appropriate authorizing representative
- Reference to LP EPS authorized Deviation / Waiver (D/WR) if applicable.
  - See Clause Q-19 (D/WR) document sub mission process.

The C of C may be incorporated into the packing slip.



## Q-9 Quality Management System

External provider shall maintain a Quality Management System that conforms with the requirements specified by the letter designation (Q-9A through Q-9F) as follows:

- A) Manufacturer with Design Authority shall be AS9100 and/or ISO 9001 Certified.
- **B)** Manufacturer Build to Print, mechanical, (LP EPS Design) shall be AS9100 or ISO 9001 Certified.
- C) Manufacturer Build to Print, Electrical and Electronic fabrication and assembly Suppliers shall be ISO9001 certified & IPC 600, IPC 6011, and IPC 6012 compliant. Solder Workmanship shall be in accordance with IPC-A-610 or J-STD-001 or equivalent approved by LaunchPoint EPS. The manufacturer shall have a documented Counterfeit Prevention program in place that includes, training, procurement traceability of parts to the OEM/OCM, verification methods to detect counterfeit parts, monitoring of counterfeit parts reporting from external sources. Suspect or detected counterfeit parts shall be quarantined and reported to LP EPS and through GIDEP or OASIS.
- **D)** Distributors approved by the Manufacturer shall be AS 9120 or ISO 9001 Certified.
- **E)** Software providers shall be ISO 9001 Certified. AS9100/AS9006 certified preferred.
- **F)** Manufacturer Build to Print, Cable and Wire Harness fabrication and assembly Suppliers shall be ISO9001 certified & IPC /WHMA-A-620 or equivalent workmanship standard approved by LaunchPoint EPS. The manufacturer shall have a documented Counterfeit Prevention program in place that includes, training, procurement traceability of parts to the OEM/OCM, verification methods to detect counterfeit parts, monitoring of counterfeit parts reporting from external sources. Suspect or detected counterfeit parts shall be quarantined and reported to LP EPS and through GIDEP or OASIS.

**Note:** When no letter follows Clause Q-9 on the LP EPS PO, the supplier's Quality system shall be internally validated by LP-EPS Quality Management System (QMS) per established and approved Quality processes.



# Q-10 Handling and Packaging of Electrostatic Devices (ESD)

When components being delivered by the supplier have been identified as "ESD Sensitive" (typically on the LP EPS drawing) The Supplier shall maintain ESD controls during fabrication, handling and storage of parts and assemblies containing Electrostatic Sensitive items per ANSI-ESD-S20.20. The innermost layer of packaging shall be ESD protective and shall include the appropriate ESD Warning symbol. ESD protective caps shall be used on equipment eternal connectors or contacts that connect to ESD parts and assemblies within the equipment as necessary.

**NOTE 1:** All improperly packaged, handled, and stored materials and/or products are subject to return.

**NOTE 2:** Any ESD sensitive components or assemblies received by LP EPS that are not in an ESD protective package shall only be examined by authorized ESD trained personnel and only when authorized by LP EPS program authority.



## Q-11 Calibration Services

Providers of Calibration Services shall be in accordance with ISO 17025 Certified or ANSI/NCSL Z540. A Certificate of Calibration or Certificate of Test shall be issued with each item that meets the requirements of the above standards including:

- As found results
- Final left results
- Acceptance criteria
- List of equipment used to include calibration date(s)
- Traceability to the applicable national standards (NIST)
- Unique certificate tracking number
- Any limitations applied to the calibration status of the equipment
- Additional information useful to LP EPS technical staff



## Q-12 Storage and Shelf-Life Controlled Items

The provider shall identify material and articles that have definite characteristics of quality degradation or drift with age and/or the environment.

Where shelf life is either a specified requirement or is needed to ensure useful life performance, the provider shall identify the date of manufacture and date at which the useful life will be expended.

For materials and articles where environmental storage conditions must be met to ensure the useful life, *the provider shall state on the label the storage conditions, i.e., temperature, humidity, etc., required to achieve the useful life*. The provider shall ship the materials in such a manner as to ensure that these environmental conditions are maintained during transit.

**NOTE**: In no case shall the materials or articles be supplied with less than 75% of its useful life remaining without LP EPS Buyer written approval. Material with less than 75% of its useful life will be subject to return to the supplier for replacement.



# Q-13 Prohibited Material (Electrical, Electronic & Electromechanical Parts)

All constructions and finishes containing pure cadmium or pure zinc shall be prohibited.

Constructions and finishes containing pure tin shall be prohibited unless they contain a minimum of 3 weight percent alloying element(s), i.e., lead, silver etc.

The providers Certificate of Conformance shall be considered objective evidence that "No Prohibited Materials are Present" in the delivered items. A statement of fact may be included within the body of the Packing Slip and/or Certificate of Conformance.



## Q-14 Counterfeit & Parts Obsolescence Management

## **Counterfeit Parts Management**

The Supplier shall:

- Have Counterfeit Parts Awareness training for employees that meets the intent and guidelines of SAE AS5553
  Counterfeit Electronic Parts for Avoidance, Detection, Mitigation and Disposition as well as AS6174 Counterfeit
  Materials for assuring acquisition of authentic and conforming material..
- Purchase parts only from authorized distributors or the OEM unless pre-authorized by LP EPS.
- The use of Non-Franchised Distributors (NFD) is prohibited unless documented approval is received from LP EPS Quality prior to shipment of material. Such approvals shall be case-by-case only.
- Maintain part traceability to the manufacturer or its authorized distributor from acquisition to shipping.
- Suspect and counterfeit parts shall be quarantined to prevent the inadvertent reintroduction of such parts into the supply chain. They shall never be returned to the source.
- Work with sub-tier Suppliers to investigate the identity and source of suspect and counterfeit parts.
- Perform the appropriate level of inspection and testing for verification. Usually, testing is not necessary when purchasing directly from the manufacturer or authorized distributors.

Suppliers are encouraged to participate in GIDEP (Government Industry Data Exchange Program) or ECIA (Electronic Components Industry Association).

Supplier must notify LaunchPoint EPS **within 48 hours** whenever counterfeit parts are found or suspected to have been provided to LP EPS and assist in the appropriate investigation. Notification shall identify traceability information such as PO, Lot, Date, Part Markings, Serial Numbers etc. to assist with LPEPS containment actions.

#### **Parts Obsolescence Management**

The Supplier shall:

- Have a parts obsolescence management plan that meets the intent and guidelines of SAE STD-0016 Standard for preparing a DMSMS (Diminishing Manufacturing Sources & Materials Shortage) Management Plan.
- Be responsible for identifying sources for required parts, processes and/or materials prior to commencing work under order.
- Promptly identify the required parts, processes and/or materials that are no longer available.
- Identify obsolescence issues and notify the buyer. This includes providing the manufacturer part number(s), the affected end item part number, and the number of components per end item.
- Provide evidence of attempts to find an alternate part(s) that is compatible with the hardware design. If an alternate part is found, the supplier must provide the manufacturer part number.
- If an alternate part cannot be found, the supplier must determine if a last time buy is possible.
- Notify the buyer within sixty (60) days after receipt of an order if unable to perform the order due to unavailability of any required part, process and/or material.

<u>Liability / Remedies</u>: Supplier shall replace, at Supplier's own expense, such Counterfeit Part with a Part from an Original Manufacturer or a LP EPS-approved Part that conforms to the requirements of the Order. Supplier shall be liable for all costs related to

- (i) the investigation and traceability of any Counterfeit Part or suspected Counterfeit Part,
- (ii) the replacement of any Counterfeit Part, and
- (iii) any testing or validation necessitated by the installation of authentic Items or components of Items after a Counterfeit Part has been replaced.

LP EPS remedies shall not be limited by the Warranty Article in the Order and are in addition to any remedies LP EPS may have at law, equity, or otherwise under the Order. Supplier shall be allowed to reinvoice for any invoice deductions once the Counterfeit Part or suspected Counterfeit Part has been remedied. Supplier shall include this Counterfeit Parts Article in all of its lower tier subcontracts.



## Q-15 Printed Circuit Board Assembly Alternates

This Quality Clause documents the details of the process and rules by which the PCBA manufacturer may select & purchase components if the components on the original LP EPS BOM are unavailable due to shortages/stock issues. It also establishes how the design and tracking documentation shall be updated as a result.

#### **Integrated Circuits and Power Supplies**

LaunchPoint EPS may have "approved alternates" columns in the original EBOM listing with specific manufacturer part numbers for alternate ICs approved by the LP EPS designer. The PCBA manufacturer will notify the LP EPS designer if an alternate part is chosen. This alternate part number will be documented on the manufacturer's "approved" BOM.

#### **Passives**

#### Resistors:

The designer will provide a list of alternate part numbers and/or a list of specifications for resistance, tolerance, power rating and footprint/package that the PCBA manufacturer may use to find any alternate part. If an alternate is chosen, the part number shall be documented and sent to the designer for approval, and the approval will be documented via the board manufacturer's issue tracker.

#### Capacitors:

The designer will provide a list of alternate part numbers and/or a list of specifications for capacitance, tolerance, voltage, temperature coefficient, and package/footprint that the PCBA manufacturer may use to find any alternate part. If an alternative is chosen, the part number shall be sent to the designer for approval, and the approval will be documented via the board manufacturer's issue tracker.

#### Inductors/Ferrites:

The designer will provide a specific list of approved alternate parts that the manufacturer may choose from. The manufacturer shall document which part was selected and notify the LP designer via the updated EBOM.

The PCBA manufacturer shall provide an invoice and updated MBOM which shows the final set of components purchased for the assembly as soon as said invoice is received by PCBA manufacturer from approved component Suppliers. MBOM must include component lot traceability.

Once invoice is received, LP EPS Designer will update and commit to version control of the design files with any/all specific alternate part number that were selected and will be highlighted in the bill of materials file if already present in the "approved alternates" columns. If a new alternate was approved based on specifications (passives), the Designer will add a new column with the newly selected part listed as an approved alternate. For tracking purposes, a final invoice and BOM along with a PDF conversion of the PCBA manufacturer's DFM/issue tracking documentation will be saved along with design files for formal change incorporation.

Requests for retroactive changes to purchase orders primarily due to increased costs as required by alternate component selections (PCBA manufacturer will notify LP EPS in advance) may be authorized and documented on a case-by-case basis.

Any alternate component selection that requires a change in design files (i.e., package footprints, traces) or an alternate component selection that has different specifications than originally desired (i.e., wider tolerance) will require approval of an Engineering Change Request (ECR) and a review of any updated design files before being sent to the Supplier in a purchase order change. Once version/revision control has been initiated, all subsequent changes will require formal change incorporation which may include submittal of a Deviation/Waiver (see **Q-19**) for approval in lieu of drawing change.

# LAUNCHPOINT

#### SUPPLIER PO QUALITY CLAUSES

### Q-16 Fit Check Unit

This Clause establishes a method to implement the use of a FIT CHECK UNIT (FCU) as a representative unit from or prior to the delivery of the first production build to validate overall fit and physical interchangeability related to Supplier Build-to-Print requirements. It is also utilized to verify changes in tooling used to form parts which might affect fit and interchangeability. It also shall apply, when directed, due to LP EPS engineering changes.

Applicable to items that are formed using tooling, value added manufacturing (printed) or CNC machining base on solid models, which are difficult to verify through dimensional inspection. Key Product Characteristics (KPC) established on the engineering drawing may still require dimensional verification on deliverable production parts.

LP Build-to Print metallic and nonmetallic Finished Casting & Forgings Sheet Metal Machined Parts Honeycomb/Hollow Core Composite Parts

The Fit Check Unit shall be identified on the sellers packaging and by attaching a tag or other removable physical label to the FCU. Early receipt of an FCU that is found to be non-conforming at the time of delivery will not result in an adverse finding against the Supplier provided corrective action can be implemented prior to production deliveries. LP EPS will return a non-conforming FCU to the Supplier for rework or replacement **within 5 days** of the discovery of the nonconformance(s).





# Q-17 Nondestructive Testing / Inspection (NDT/I)

The supplier shall ensure that all nondestructive examinations are performed by approved suppliers per Clause Q-6 in addition to qualified inspectors in accordance with applicable drawing/specification requirements and provide a report detailing the results of the examination.

An authorized supplier's representative shall validate all inspection reports, by either an inspection stamp or signature and title (optional). Copies of the examination results shall accompany the material being examined upon return to LP EPS. It is permissible to submit an advance electronic copy to the cognizant LP EPS buyer as identified on the purchase order. The buyer will forward the examination report to the appropriate personnel for review and approval.





## Q-18 Control of Work Transfers

There shall be no transfer of work for this order unless authorized in writing via LP EPS Form LP-Q1041 Deviation/Waiver Request (D/WR) prior to work being performed. All manufacturing operations (excluding special processes) shall be performed within the contracted facilities at the location of the supplier as noted on the LP EPS purchase order.

If work transfer is authorized by LP EPS, all requirements within this purchase order shall be flowed down and shall apply as applicable. A copy of the signed authorization from LP EPS shall be included in the document package and accompany completed product shipment to LP EPS with each delivery.

**Note 1:** Access to LP EPS For LP-Q1041 D/WR form can be accessed on our website. **Note 2:** Authorizations may be granted and will apply on a case-by-case basis only. www.launchpointeps.com



## Q-19 Notification, Deviation / Waiver Approval and Flow-down

The following actions shall be required by this clause:

- Prior to shipment of product, the supplier shall notify LP EPS of any noncompliance found during the manufacturing process.
- Prior to shipment of product, the supplier shall notify LP EPS of any deviations from the engineering drawings and/or specifications.
- The supplier shall notify LP EPS of any changes in product or process definition that may cause noncompliant product to ship or be delayed. The supplier will also maintain a process for the review and authorization of products and/or services that are outside the scope of the engineering documentation provided with the purchase order.
- Additionally, a change in supplier name, ownership or facility location will subject the supplier's
  Quality System to reevaluation by LP EPS. The supplier shall notify the LP EPS buyer in
  writing when any of the changes have occurred. The buyer will instruct the supplier on formal
  notification actions and specific forms to submit as necessary.
- The supplier shall flow down all applicable requirements/clauses as noted in this purchase order/contract to any sub-tier (e.g., any member of supply chain) who performs work in support of this contract. LP EPS shall be notified immediately if any requirements are unclear prior to the performance of any work.
- The supplier shall use appropriate evaluation and analysis tools (e.g., root cause analysis, 5-Whys, problem solving, mistake proofing, etc.) to determine the effectiveness of any corrective action necessary to prevent recurrence of product or process issues. In addition, the supplier shall flow down the requirement for use of these tools to their sub-tier suppliers to ensure prevention of noncompliant material escapes. Copies of the documentation for this process shall be made available upon request.

**Note:** Access to LP EPS For LP-Q1041 D/WR form can be accessed on our website. <u>www.launchpointeps.com</u>



## Q-20 Key Characteristics & Statistical Process Management

LP EPS requires the collection and reporting of drawing characteristics identified as **KPC** (**Key Process / Product Characteristic**) the Supplier shall perform 100% inspection for each identified feature(s) and document results for each part to be delivered. A Key Characteristic is a feature(s) of a material, process, or part whose variation has a considerable influence on product *fit, performance, service life*, or manufacturability. These characteristics are driven or defined by either LP EPS or Customer-specified drawing symbology.

LP EPS Key Process / Product Characteristics (KPC's) shall be categorized as follows:

- **KPC1:** Critical / Major feature (LP EPS-Defined CTQC). 100% measurement required (by Supplier) with 100% LP EPS over- inspection verification. Data to be reported and verified on an individual part basis.
- KPC2: Critical / Major feature (Customer-Defined CTQC). 100% measurement required (by Supplier) lot range data reporting is acceptable. LP EPS shall review and conduct a random sample audit of the supplier data per the most current revision of SAE AS9103 (Variation Management of Key Characteristics) which shall be used as a guideline for reporting. The supplier's inspection reporting format may be used in lieu of the AS9103 form. An authorized supplier's representative shall validate the report by either an inspection stamp or signature, title, and date.

The supplier shall maintain Process Control Plans and Statistical Data (e.g., X-Bar/R Chart, Pareto, Histogram, etc.). Techniques may be employed, as applicable, to manage identified KPC features. If used, these methods shall be introduced at the earliest possible point in the manufacturing process to ensure data capture and to prevent production of discrepant material. Evidence of statistical management of characteristics shall be maintained on file at the supplier's facility but be readily available for review upon LP EPS request.



## Q-21 U.S. Government / Customer Source Inspection

For procurements made under U.S. Government contracts, the US Government has the right to inspect all the work included in the procurement document, at Seller facilities or at sub tier supplier facilities. Seller Quality Control or inspection system and manufacturing processes are subject to review, verification, and analysis by authorized U.S. Government representatives at no cost.

The seller shall notify LP EPS of any scheduled Government Inspection planned 7 days prior. The seller shall notify LP EPS of any deficiencies discovered during the Government Inspection activity within 24-48 hours of occurrence.

In addition, the LP EPS Customer has the right to inspect all the work included in the procurement document, at Seller facilities or at sub tier supplier facilities, at no cost. Seller Quality Control or inspection system and manufacturing processes are subject to review, verification, and analysis by authorized Customer representatives.

# LAUNCHPOINT ELECTRIC PROPULSION SOLUTIONS

#### SUPPLIER PO QUALITY CLAUSES

### Q-22 Disclosure of Information

Supplier shall not in any manner advertise or publish the fact that it has furnished, or contracted to furnish, the LaunchPoint EPS goods or services described on our Purchase Orders without prior written consent of LP EPS. Except as provided by law, Supplier shall not disclose any details in connection with this purchase order to any party. The Supplier is also responsible to ensure sub-tier suppliers comply with the requirements of this clause as well.

The documents attached to this purchase order or RFQ are regulated by the following:

"WARNING: This document contains technical data subject to the international Traffic in Arms Regulations (ITAR) or the Export Administration Regulation (EAR) of 1979. This data may not be exported, released, or disclosed to foreign nationals without the requisite Export License and/or a Technical Assistance Agreement. A violation of these export laws is subject to severe criminal penalties, Include this notice with any reproduction portion of these documents."



## Q-23 Restriction on Use of Certain Specialty Metals

252.225–7009 Restriction on Acquisition of Specialty Metals.

Establishes restriction on the delivery of product under this order that contains specialty metals which are not melted or produced in the United States or it's outlying areas. Specialty Metals as defined within this clause include the following:

#### I) Steel\*

- A) With a maximum alloy content exceeding one or more of the following limits: Manganese 1.65 percent; silicon 0.60%; copper 0.60% or
- B) Containing more than 0.25% of any of the following elements:
  Aluminum, Chromium, Cobalt, Molybdenum, Nickel, Niobium (Columbium), Titanium,
  Tungsten, or Vanadium

#### II) Metal Alloys consisting of:

- A) Nickel or iron-nickel alloys that contain a total of alloying metals other than nickel and iron in excess of 10 percent; or
- B) Cobalt alloys contain a total of alloying metals other than cobalt and iron in excess of 10 percent.

#### III) Titanium and titanium alloys; or

#### IV) Zirconium and zirconium alloys

\*Steel means an iron alloy that includes between 0.02 – 2.00% carbon and may include other elements.

Exceptions (partial listing, see DFAR 252.225–7009 for full description):

- Commercially available off the shelf (COTS) without modification
- Electronic Components (excluding High Performance Magnets)
- Fasteners that are commercial products
- Items manufactured in a qualifying country

Specialty Metals determined to not be acquirable as and when needed and authorized in writing by LP EPS with governmental approval.



## Q-24 Right of Access

The supplier shall allow LP EPS representatives, its customer representatives, the US government and / or regulatory agencies access to their facilities for the purpose of evaluating conformance to contractual requirements. *This right of access clause shall be flown down by the supplier to its sub-tier sources.* 

Right-of-Access activities include but may not be limited to:

- a) Examination and/or review of the quality management system and facilities,
- b) PO/Contract-related technical data and manufactured products or articles.
- c) Witness of any tests including any inspections or tests at any supplier facility (within the supply chain) necessary to determine compliance with the applicable purchase order requirements.

LP EPS shall provide reasonable, advanced notification of any planned visit to ensure access and cooperation of all involved facilities in the supply chain for themselves or their representatives.

This activity will be performed in such a manner to ensure minimal disruption to normal processing and shall be conducted on a non-interference basis.