

ALVA MANUFACTURING

PURCHASE ORDER QUALITY CLAUSES

By accepting a purchase contract from Alva Manufacturing, you are accepting responsibility for all quality clauses listed in the body of the Purchase Order as described below:

AMPOQC-01 - SUPERSEDEENCE:

The supplier shall contact Alva Manufacturing to request written clarification or correction from purchasing in the event of conflict between the purchase order's stated requirements and the purchase order's summarized quality clauses, where supersedence is not specified.

AMPOQC-02 - RIGHT OF ACCESS:

Right of Access by Alva Manufacturing, Alva Manufacturing's customer, and regulatory authorities to all facilities involved in the purchase order and to all applicable records. Alva Manufacturing and Alva Manufacturing's customer reserve the right to conduct a survey/audit of the supplier's facility and the supplier's sub-tier suppliers to determine their capability to comply with the requirements of the purchase order. The supplier will be notified 48 hours in advance of the date that a survey/audit will occur.

AMPOQC-03 – RECORDS RETENTION:

The supplier's records, to demonstrate conformance, shall be on file and available for review by Alva Manufacturing, Alva Manufacturing's customer or regulatory authorities upon request. Records shall be retained for a minimum of ten (10) years after final payment or longer as required by Alva Manufacturing customers. The supplier shall notify Alva Manufacturing in writing at least thirty (30) days prior to destruction of records, and must comply with any written response from Alva Manufacturing requesting a delay of such destruction.

AMPOQC-04 - SUPPLIER SUB-TIER PROCESS CONTROL:

The Supplier shall notify Alva Manufacturing if the supplier is using a sub-tier supplier. All requirements invoked or applied to Alva Manufacturing's customer purchasing order, including this clause, shall be flowed down to the Alva Manufacturing's suppliers and the supplier's sub-tier suppliers.

AMPOQC-05 - CHANGES TO PROCESS OR QUALITY SYSTEM:

The supplier shall notify Alva Manufacturing of any changes of, product, processes, suppliers, and facilities processing lines, primary manufacturing equipment for standard processes, and points of contact for Alva Manufacturing. Supplier shall notify Alva Manufacturing of loss or suspension of certification or eligibility for AS9100, ISO13485, ISO 9001:2008, or ITAR.

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AMPOQC-06 - CONTROL OF NONCONFORMING PRODUCT AND CORRECTIVE/PREVENTATIVE ACTION:

The supplier shall provide prompt, written notification to Alva Manufacturing, when nonconforming material or products affecting drawing, purchase order, or specification requirement issues are discovered. The supplier shall not ship such nonconforming until authorization to ship has been obtained from the Alva Manufacturing Purchasing agent. The supplier may submit requests for nonconforming material or product review by Alva Manufacturing at the time of notification. The supplier shall provide written proof of correction or corrective action when discrepant material is received by Alva Manufacturing; such proof shall be furnished within a reasonable time, which is specific and conclusive in nature, to prevent a recurrence of the discrepancy.

AMPOQC-07 - MEASURING AND TEST EQUIPMENT/CALIBRATION SYSTEM:

The supplier shall establish and maintain documented procedures to control, calibrate and maintain inspection, measurement and test equipment (including test software and tooling), used by the supplier to demonstrate the conformance of product to the specified requirements, in accordance with ANSI Z540 -1 (formerly MIL-STD-45662), ISO 10012-1, or ISO 17025.

AMPOQC-08 - PACKAGING/SHIPMENT:

All items delivered on the order must be adequately preserved, packaged and contained to prevent deterioration and damage during shipment. The shipping method should ensure safe arrival at destination in accordance with good commercial practices, unless special packaging and shipping instructions are specified in the purchase order and drawings/specifications.

Note: The use of newsprint for packaging is prohibited.

AMPOQC-09 - IDENTIFICATION/MARKING:

When specified on the purchase order the supplier shall identify all items, parts, components, subassemblies and assemblies with the appropriate part number and revision level as noted on the part drawing or as otherwise specified in the purchase order. Parts and materials that are not suitable for marking due to size and configuration may be identified using the bag and tag methods outlined in MIL-STD-130.

AMPOQC-10 - C.O.C. (CERTIFICATE OF CONFORMANCE):

The supplier shall provide a certificate of conformance that certifies that all materials and processes supplied are in accordance with the purchase order. The document shall be signed and dated by the supplier's representative. Specifications, standards and engineering and other drawings noted on the purchase order shall be the latest revision unless specified (e.g., Rev. A). Raw materials will have mill certificates. Machining services are exempt.

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AMPOQC-11 - QUALITY SYSTEM:

11A) The supplier shall establish, document, implement, maintain and continually improve the effectiveness of a Quality System that meets or exceeds the current revision of ISO 9001:2008 or AS 9100.

AND

11B) The supplier shall establish, document, implement, maintain and continually improve the effectiveness of a Quality System that meets or exceeds MIL-I-45208A.

OR

11C) The supplier shall establish, document, implement, maintain and continually improve the effectiveness of a Quality System that meets or exceeds industry standards and ensures adequate product conformance and appropriate objective evidence to meet usual business responsibilities.

AMPOQC-12 - FOREIGN OBJECT DEBRIS (FOD) PREVENTION PROGRAM:

The supplier shall establish and maintain effective foreign object debris (FOD) prevention program to eliminate FOD in items delivered to Alva Manufacturing. Industry specification NAS412 may be used as a guideline in complying with this clause. The written procedures/policies developed by the supplier shall be subject to Alva Manufacturing review and audit.

AMPOQC-13 – COUNTERFIET PART/MATERIAL/PROCESS SUBSTITUTIONS PROHIBITED:

Part, material, and process substitutions for items stated in the purchase order are not allowed. Parts and assemblies must include OEM certificates. Any deviations from Alva Manufacturing or Alva Manufacturing's customer drawings, specifications, and purchase order must be authorized by Alva Manufacturing or Alva Manufacturing's customer.

The supplier shall ensure that these requirements are flowed down to sub-tiers that support the items on the purchase order.

AMPOQC-14 - F.I.R. (FINAL INSPECTION REPORT):

For all machined items the supplier shall furnish an inspection report for each lot of parts submitted, based on a sample inspection of the critical features of the parts. All sampling plans must meet the requirements of ANSI/ASQC Z1.4 (formerly MIL-STD-105) and demonstrate that parts meet all drawings, specifications and purchase order requirements.

AMPOQC-15 - F.A.I. Report (FIRST ARTICLE INSPECTION):

For all machined items the supplier must furnish a complete First Article Inspection (FAI) Report for one or more parts, listing actual inspection results for all drawing dimensions and all applicable notes. The parts used to perform the first article shall be tagged. First article acceptance by Alva Manufacturing shall not constitute final acceptance of the lot nor relieve the supplier of the obligation to furnish all parts that meet all drawing, specification and purchase order requirements.

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AMPOQC-16- MATERIAL CERTIFICATION, CHEMICAL, AND /OR PHYSICAL TEST DATA, LOT TRACEABILITY

- A) The Supplier is required to supply material certifications traceable to the lot, batch, block number or heat lot (metals) supplied in accordance with the applicable specification, (latest revision applies unless specifically stated) engineering drawing and/or Alva Manufacturing, Inc. Purchase Order.
- B) The Supplier is required to supply material certifications listed on Alva Manufacturing Purchase Order. All test data and certifications traceable to the materials supplied must be kept on file for a minimum of ten (10) years unless otherwise specified by Alva Manufacturing, Inc. Purchase Order.
- C) All material shall have evidence of traceability throughout the entire chain of custody.

AMPOQC-17- PROCESS CERTIFICATION

The Supplier is required to supply Certifications of Conformance (C of C) for all special processes in accordance with applicable specifications and/or engineering drawing as required by Alva Manufacturing, Inc. Purchase Order. Special process certifications for serialized parts and/or assemblies must reference the applicable serial number(s) for traceability.

AMPOQC-18- TEMPERATURE/ SHELF LIFE SENSITIVE MATIERALS

The Supplier is required to provide certifications for temperature and age sensitive materials, i.e. epoxies, paints, prepregs, adhesives, etc., which reflect date of manufacture, date of test, shelf life, expiration date, and storage temperature as it applies to each lot/batch. Container label(s) must also reflect applicable lot/batch number(s), storage temperature and expiration date. You must not ship materials having less than 90% shelf life remaining without the written approval of the Alva Manufacturing, Inc., Purchasing Agent.

AMPOQC-19- RAW MATERIAL CERTIFICATE OF ANALYSIS (C.O.A)/ TEST REPORT

Raw material suppliers are required to provide a C.O.A. or Test Report, and test data as required by the applicable specifications, drawings, and/or Purchase Order requirements for testing performed. Each C.O.A. or Test Report shall be traceable to the material or parts tested including the specification or drawing revision level. The C.O.A. or Test Report shall include the testing method(s) used. Signature and title of authorized representative of the performing organization, and the applicable specification.

AMPOQC-20- ALVA MANUFACTURING SOURCE INSPECTION

This Purchase Order is subject to Alva Mfg Source Inspection being performed prior to shipment. If required it will be noted on the purchase order. Please notify the Alva Purchasing Agent, 48 hours in advance of the date source inspection will be required at your facility. Alva Mfg Inspection does not preclude subsequent inspection nor does it relieve the supplier of the responsibility of providing an acceptable product.

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AMPOQC-21- ALVA AND OR ALVA'S CUSTOMER WITNESS INSPECTION

Work under this Purchase Order/contract is subject to Alva and/or Alva's Customer witness inspection at supplier's facility and/or sub-tier supplier's facility. If required it will be noted on the purchase order. The supplier shall notify the Alva purchasing contact 48 hours in advance of the date if a witness inspection is to be conducted.

AMPOQC-22- GOVERNMENT SOURCE INSPECTION

This order is subject to Government Source Inspection prior to shipment from your facility. If required it will be noted on the purchase order. When required and upon receipt of the Purchase Order, the supplier will promptly notify the Government Representative who normally services your plant so that appropriate planning for Government inspection can be accomplished.

AMPOQC-23- ALVA CUSTOMER'S SURVEY / AUDIT

Alva or Alva's customer reserves the right to conduct a Survey/Audit of the supplier's facility and the supplier's sub -tier suppliers to determine their capability to comply with the requirements of the Purchase Order. The supplier will be notified 48 hours in advance of the date that a Survey/Audit will occur.

AMPOQC-24- PROHIBITED MATERIALS

The use of pure unalloyed tin is prohibited in the construction and surface finish of space hardware. Parts with tin alloys containing less than 97% tin are acceptable. The use of cadmium or zinc is prohibited in the construction and surface finish of space hardware. Parts containing cadmium alloys or zinc alloys (e.g. brass) must be completely over plated with an approved metal. Any exceptions to these prohibitions must be approved in advance by Alva Manufacturing, Inc., in writing.

AMPOQC-25- ACQUISITION/USE OF NON-DOMESTIC SPECIALTY METALS

The seller agrees not to incorporate into any articles to be delivered under this purchase order, specialty metals not melted in the United States, its possessions, Puerto Rico, or a qualifying country. Specialty metals are defined in Defense Federal Acquisition Regulation Supplement (DFARS 252.225-7014 and its Alternate 1).

Qualifying countries are listed in DFARS 225.872-1(a).

In addition, all articles containing specialty metals must follow all applicable contract requirements.

SELLER FURNISHED MATERIAL CERTIFICATION FOR METALS

Seller shall supply, document and maintain material certification containing the following:

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- 1) Description of the material used in the manufacture of the end-item.
- 2) Material specifications.
- 3) Lot, heat or batch number identification.
- 4) Source of procurement.
- 5) Origin of material.
- 6) Name and location of Melting facility.
- 7) Name and Location of mill.
- 8) Mill certification.
- 9) All other requirements as specified in the applicable raw material specification including chemical and physical analysis.

Note: Seller shall retain certification for a period of no less than ten (10) years after final payment.

Note: Specialty Metals are defined in the Defense Federal Acquisition Regulation Supplement (DFARS) clause 252.225-7014, Preference for Domestic Specialty Metals, and it's Alternate I.

AMPOQC-26- CUSTOMER SPECIAL PROCESS FLOW-DOWN REQUIREMENTS (SPECIFIC)

This clause mandates that Special processes must be performed by Customer Approved Suppliers/Processors (see the applicable customers Approved Supplier Lists). It is the responsibility of our suppliers to ensure they are approved to perform work for the company who has design authority of the product being processed.

AMPOQC-27- DIGITAL PRODUCT DEFINITION (DPD) / MODEL BASED DEFINITION (MBD) PROCUREMENT

When needed, Alva will supply required models and data in Digital Format. Supplier shall conform to Alva's Customer's requirements for DPD / MBD processes (AP-743) prior to delivery of a procured product or service. Alva has the right to audit Supplier's DPD process and certification.

AMPOQC-28- GIDEP (Government-Industry Data Exchange Program)

The supplier shall notify Alva Manufacturing Inc. in writing if a GIDEP Alert is received and the alert affects product delivered or in transit to Alva Manufacturing.

AMPOQC-29- TITANIUM MATERIAL CONTAMINATION.

Titanium shall not come into contact with halogenated fluids, such as: trichloroethylene, Freon, hydrochloric acid, anhydrous methyl alcohol and substance containing mercury, cadmium, silver and gold. Any fluorinated and sulfonated lubricants are prohibited for use on Titanium hardware.

Upon commencement of machining process, handling shall be performed with glove- protected hands as bare skin contact is prohibited. Tools which are used on Titanium, such as grinding wheels, shall be controlled such a way that they do not come into contact with other alloys. During grinding operations no sparking is allowed. The supplier shall flow down this requirement to any sub-tier suppliers that are responsible for operations that occur after the machining process.

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AMPOQC-30- MERCURY FREE CERTIFICATION

A mercury free statement shall accompany all shipments to Alva Manufacturing Inc on this purchase order. The mercury free statement may be made directly on all the test report/certificate of conformance or may be a separate certification. The statement shall certify that during the manufacturing process, material furnished on the above purchase order did not come in contact with mercury or its compounds or any mercury containing devices with a single boundary of containment.

The supplier may choose to verify the material with a mercury sniffer and provide a final certification stating a mercury free statement based on the product verification.

AMPOQC -31- DPAS Rating

This PO has a default DPAS rating of DO-C9 please ensure proper priority is given to this order pursuant to applicable FAR clauses including 11.602(a), 11.603(2) Mandatory Extension of Priority Ratings throughout the Acquisition Chain, and 11.603(3) Priority Scheduling of Production and Delivery. If the DPAS rating is something other than DO-C9 it will be noted on the purchase order.

AMPOQC -32- Supplier Awareness of their contribution to the products being processed

Suppliers must be aware of:

Their contribution to product and/or process conformity.

Their contribution to product safety.

And the expectation of ethical behavior and decision making during and after the contracted work is performed.