

Blue Origin, LLC Quality Clauses

The quality clauses listed below are applicable for Blue Origin hardware and material. Questions regarding the clauses or a need to resolve conflicting requirements contained in a purchase contract should always be directed to the Blue Origin Buyer. Quality clauses are only applicable when specified on the PO.

QC-001 Certificate of Conformance. Supplier shall submit with each shipment either on their packing list, or attachments, a certificate of conformance or certificate of compliance, which shall be dated and bear the signature and title of an authorized Suppliers Quality Representative, stating that the materials furnished to Blue Origin are in conformance with the applicable requirements of the contract, drawings, and specifications. The Certificate of Conformance shall validate that the form, fit, or function of the part has not changed since the part was purchased. It shall also state that the supporting documentation is on file and will be made available to Blue Origin or any regulatory or statutory agency upon request. An example of an acceptable statement of Certificate of compliance/conformance is as follows: "This is to certify that all items noted are in conformance with the contract, drawings, specifications, and other applicable documentation, and that all process certifications, chemical and physical test reports are on file at this facility and are available for review by Blue Origin". Certification must include the following:

- a. The supplier's full name and address
- b. Blue Origin purchase order number
- c. Blue Origin Part number
- d. Blue Origin Drawing Revision Level, as noted on the purchase order. If no revision is noted on purchase order, provide and certify to the latest blue print revision at the time of purchase order placement.
- e. Serial numbers (where applicable)
- f. PO quantity
- g. Quantity shipped
- h. Lot / Date Code
- i. Name of lower-tier supplier and description of service provided (if applicable);
- j. Authorized signature and date

QC-002 Counterfeit Parts.

- a. For purposes of this clause and the definition of Counterfeit Work, Work consists of those parts delivered under this Contract that are the lowest level of separately identifiable items (e.g. articles, components, goods, and assemblies).
- b. Supplier shall not deliver Counterfeit Work to Blue Origin under this Contract.
- c. Supplier shall only purchase products to be delivered or incorporated as Work to Blue Origin directly from the Original Component Manufacturer (OCM)/Original Equipment Manufacturer (OEM), or through an OCM/OEM authorized distributor chain. Work shall not be acquired from independent distributors or brokers unless approved in advance in writing by Blue Origin.
- d. Supplier shall notify Blue Origin with the pertinent facts if Supplier becomes aware or suspects that it has furnished Counterfeit Work.

When requested by Blue Origin, Supplier shall provide OCM/OEM documentation that authenticates traceability of the affected items to the applicable OCM/OEM.

- e. This clause applies in addition to any quality provision, specification, statement of work or other provision included in this Contract addressing the authenticity of Work. To the extent such provisions conflict with this clause, this clause prevails.
- f. In the event that Work delivered under this Contract constitutes or includes Counterfeit Work, Purchaser shall, at its expense, replace such Counterfeit Work with genuine Work conforming to the requirements of this Contract. Notwithstanding any other provision in this Contract, Supplier shall be liable for all costs relating to the removal and replacement of Counterfeit Work, including without limitation Blue Origin's costs of removing Counterfeit Work, of installing replacement Work and of any testing necessitated by the reinstallation of Work after Counterfeit Work has been exchanged. The remedies contained in this paragraph are in addition to any remedies Blue Origin may have at law, equity or under other provisions of this Contract.



g. Supplier shall include paragraphs (a) through (f) and this paragraph (h) of this clause or equivalent provisions in lower tier subcontracts for the delivery of items that will be included in or furnished as Work to Blue Origin.

QC-003 Parts Substitution. Part substitutions are not authorized unless Blue Origin has approved them in writing. The supplier shall notify Blue Origin of any End of Life, obsolete or Form, Fit, or Function issues.

QC-004 Foreign Object Debris (FOD) Prevention and Part Cleanliness. The Supplier shall conduct production processes appropriate to prevent, detect, and remove all FOD from product(s) during manufacture and provide parts clean and free of all FOD prior to shipment to Blue Origin. FOD contamination can be cause for rejection of material. If processes are required in a cleanroom environment, cleanroom must be maintained to the required class in accordance with ISO 14644. If any product requires a cleanliness level, the product shall be cleaned to specified cleanliness levels per the latest revision of IEST STD-CC1246.

QC-005 Deliverable Data: First Article Inspection. A first article inspection in accordance with AS9102, Blue Origin approved processes, or equivalent is required for this purchase order. All first article inspections performed by the seller will be accompanied with a First Article Inspection Report (FAIR) and all other approved documentation showing conformance to the contract, purchase order, drawing, or performance requirements specified by Blue Origin. The completed First article inspection report (FAIR) shall accompany the product when shipped to Blue Origin.

QC-006 Deliverable Data. Placeholder

QC-007 Deliverable Data. Nondestructive Test (NDT Report): The Supplier shall provide a copy of an NDT reports (radiographic, ultrasonic, penetrant, etc.) for each item, authorized by a representative of the Supplier's Quality function, with each shipment.

QC-008 Deliverable Data: Dimensions. The Supplier shall provide a final inspection report of critical dimensions for each item in Supplier form, and as authorized by a representative of the Supplier's Quality function with each shipment.

QC-009 Deliverable Data. Material Property Test or Material Certification Data: The supplier shall provide the results of any material property test required by the engineering drawing, referenced specification or component specific criteria for each material lot.

QC-010 Deliverable Data: Acceptance Test Procedures (ATP). The Supplier shall generate an ATP for final acceptance testing, to include any revision of the ATP, as well as test programs, software, and hardware. The ATP shall include equipment lists, equipment calibration status, and test procedure and data sheet(s) necessary to verify the functional requirements, weight, and outline of dimensions required by the equipment specification. This ATP and any subsequent changes must be submitted in advance prior to testing deliverable end items. The Supplier shall provide final complete detailed ATP data for each item, in Supplier format, and as authorized by a representative of the Supplier's Quality function with each shipment.

QC-011 Deliverable Data. Machined Material Inspection Aluminum: Prior to machining Aluminum, supplier shall inspect all aluminum material to ASTM B594, CLASS A and provide inspection documentation to Blue Origin. Material already inspected per ASTM B594 is acceptable as is. All Metal except Aluminum: Prior to machining non-aluminum metals, supplier shall perform ultrasonic inspection of raw stock material per ASTM E2375, immersion method, 100% coverage required. Accept per CLASS A. Supplier shall provide inspection documentation to Blue Origin.

QC-012 Deliverable Data. Chemical Conversion Coating Class 1A: The Supplier shall perform chemical conversion coat per MIL-DTL-5541F TYPE I OR II, CLASS 1A and shall submit documentation to Blue Origin. TOUCH UP PERMITTED.

QC-013 Deliverable Data. Chemical Conversion Coating Class 3: The Supplier shall perform chemical conversion coat per MIL-DTL-5541F TYPE I OR II, CLASS 3 and shall submit documentation to Blue Origin.

QC-014 Deliverable Data – Harness. The Supplier shall take pictures showing the fabrication condition of the harness(es) of the following if applicable to the build: wire termination and connection of connector before installation of backshell/boot, Teflon film applied to cables/wires before EMI overbraid, and depth of potting material in backshell. Pictures to be flowed to Blue Origin either with the shipment or before electronically.

QC-015 Deliverable Data. Intentionally Blank

QC-016 Deliverable Data. Intentionally Blank

QC-017 Deliverable Data. Intentionally Blank

QC-018 Deliverable Data. Intentionally Blank

QC-019 Deliverable Data. Intentionally Blank



QC-20 Material Review Authority. The Supplier shall define and maintain the process for review, control, and disposition of nonconforming product (supplies or services) at their facility. Nonconforming supplier designed product may be dispositioned as use-as-is or repair, provided that the nonconformance disposition does not affect the form, fit, function, or end item performance of the Blue Origin requirements specified in the contract and related documents. Nonconforming Blue Origin designed product may be dispositioned as use-as-is or repair, after review and authorization from the appropriate Blue Origin Responsible Engineer and Quality representative. The repair process should be approved in writing by the responsible engineer prior to implementation.Material that is dispositioned to be scrapped must be destroyed in a manner to ensure that it cannot be used for its intended or similar purpose.

QC-021 Electronic Data Transmission. The Supplier shall communicate all data and documentation as specified by general notes, quality clauses, and/or other required documentation electronically. Documents shall be sent via:

- 1. The Blue Origin Supplier Portal.
- 2. Email to the buyer and copied to SupplierQuality@Blueorigin.com with the Blue Origin Purchase Order number in the subject line. Files should be named as followed: "Part Number_PO Number" (example: 123-4567-890_PO1234) Supplier shall attach to the email an individual file for each line item. Documents corresponding to that line item shall be submitted via PDF. Note that all ITAR restricted information must be encrypted and the password supplied separately.
- 3. FTP Server.

QC-022 Change Control Requirements. The supplier shall operate and maintain a configuration management system, which shall ensure:

- a. Changes are properly evaluated, classified, and documented.
- b. Traceability of all changes made after the initial baseline is maintained.
- c. Baselines are clearly defined and are re-creatable from configuration management records. Supplier shall not change any process, material or procedure without prior written approval by Blue Origin if such process, material or procedure was originally subject to approval by Blue Origin. Blue Origin shall have the opportunity to qualify the product in the new location or qualify the source of the new product. The Supplier shall not change any process, material or procedure which was used to qualify the product without prior notification to Blue Origin and approval by the Procurement Agent.

QC-023 Temperature / Perishable / Shelf Life Sensitive Materials. The Supplier shall provide certifications for temperature, perishable and age sensitive materials (e.g. epoxies, paints, bonding agents, 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, expiration date, and date of shipment. Product delivered to Blue Origin shall have a minimum of 80% remaining of shelf life upon receipt, unless approved by Blue Origin in advance. When temperature controlled material is involved, the Supplier shall provide material packaging suitable to maintain proper temperature during transportation from their facility to Blue Origin. The Supplier shall provide the necessary temperature measuring equipment to monitor the material during transportation to assure compliance to the specifications of the Purchase Order.

QC-024 Software. Any software used for qualification or acceptance of hardware or software deliverables, including firmware, shall have a system for control including procedures, records and revisions available for review any time upon request from Blue Origin. All software shall be backed up in a supportable format by the Supplier and shall be retained for a time no less than 7 years.

QC-025 Sub-tier Suppliers. The Supplier shall flow down all relevant quality requirements imposed by Blue Origin to any sub-tier suppliers processing Blue Origin materials. The Supplier shall not subcontract work on any article to be supplied under the Blue Origin Purchase Order unless the company is AS9100/ISO9001/NADCAP certified or without prior written approval of the Buyer. For all Blue Origin materials, special processes, as well as certain additional processes not typically categorized as "special", are source controlled, and must be performed by a Blue Origin approved vendor. All source controlled processes and approved suppliers can be identified by contacting the Buyer. Approval to perform one process does NOT imply approval for any additional processes. A vendor must be approved for each special and/or controlled process it performs. If a preferred source has not been approved by Blue Origin, the Supplier can request approval prior to beginning work by contacting Blue Origin Quality Management. The requirement to use Blue Origin approved and/or mandated suppliers must be flowed down to any sub-tier providers. All material furnished or processing performed by a sub-tier supplier under this Purchase Order must be by a source approved by Blue Origin. Contact Blue Origin prior to placing any sub-tier order. The Supplier shall pass on to its sub-tier supplier(s) the applicable requirements of this Purchase Order. The requirement to use a Blue Origin approved and/or mandated sub-tier supplier does not alleviate the Supplier of the responsibility of monitoring that supplier and providing conforming product to Blue Origin. For each special and/or controlled process performed, the Supplier shall furnish a Certificate of Conformance in accordance with applicable specifications and/or engineering drawings. The Certificate of Conformance must meet all requirements as specified in item 6 under 'General Requirements' of this document.



QC-026 100% Inspection. The Supplier shall submit all inspection documentation with appropriate Quality Engineering buy-off, showing 100% inspection for all attributes noted on the drawings. Serial numbers and/or lot codes shall be referenced on the inspection documentation.

QC-027 'Critical to Quality' Dimensional Inspection. The Supplier shall submit all inspection documentation with appropriate Quality Engineering buy-off, showing acceptable dimensional data on defined 'critical to quality' attributes. Serial numbers and/or lot codes shall be referenced on the inspection documentation.

QC-028 Sampling Inspection. Sampling inspection may be utilized during performance of this order. Prior to use, the sampling plan must be submitted to Blue Origin and approved. The use of sampling inspection in no way affects Blue Origin's right to reject any unit(s) of product found defective.

QC-029 Special Processes. Certification for special processes, such as heat-treating, chemical processing, plating, etc., shall be submitted with each shipment. Specification(s) and revision level(s) used to produce the order are required. If the shipment contains multiple special processed lots within each manufactured lot, each processed lot must be segregated and identified to maintain complete traceability in each shipment. (Example: When a manufacturing work order is split into two separate heat-treated lots, each heat-treated lot shall be segregated and identified to maintain traceability in the shipment).

QC-030 Source Inspection. Blue Origin Source Inspection shall be performed as specified (in-process and/or final). Please notify Blue Origin ten working days in advance of the date source inspection will be required at your facility. A Blue Origin Source Inspection does not preclude subsequent inspection nor does it relieve the supplier of the responsibility of provide acceptable product. Source inspections may include personnel and contractors from Blue Origin in addition to Blue Origin customer representatives and/or regulatory authorities, and shall include access to all records applicable to Blue Origin product or orders.

QC-031 Quality Control System. Supplier shall provide and maintain a quality control system conforming to the requirements of the elements described in SAE AS9100. Third party registration by an accredited registrar will be accepted. Supplier declaring system compliance to AS9100 with no formal accredited registrar will be reviewed. The supplier's system will be subject to review and approval at all times by Blue Origin. All quality records to work performed under this Contract shall be kept complete and available to Blue Origin. Quality records include receiving and inspection records consisting of reports reflecting receipt and inspection of supplies, equipment, and materials, tooling; and production records of processing quality control, reliability, and inspection. The Supplier shall contact Blue Origin for approval prior to disposal of quality records. Supplier shall notify Blue Origin of any violation or deviation from Supplier's approved quality control system. Supplier shall notify Blue Origin of any work delivered to Blue Origin during the period of any such violation or deviation. If a non-conformance is discovered by the Supplier prior to shipment that does not affect fit, form, or function, a request for waiver may be submitted. All such requests may be made in writing. Under no circumstances shall shipments be made without written approval from Blue Origin.

QC-032 Calibration. The Supplier shall perform all inspections and tests using calibrated equipment. For calibration service providers or test laboratories, accreditation to ISO 17025 is preferred. Materials used to meet applicable drawing requirement and procurement documents shall not be excluded.

QC-033 Identification/Marking. The Supplier shall identify all items, parts, components, sub-assemblies and/or assemblies with the appropriate part number and revision level as noted on the part drawing or as otherwise specified by the Blue Origin Purchase Order.

QC-034 Traceability. Each manufacturer's lot within each shipment must be segregated and identified to include quantity and lot number on each Certificate of Conformance. There must be a clear link(s) (i.e. heat #, Lot number), that ties the entire certification package together. This includes process certifications performed by sub-tier suppliers. Distributors shall maintain clear traceability to the original manufacturer for each lot in a shipment.