



Purchasing/Quality Clauses

PQ-01 Paragon Space Development Corp. Quality Acceptance

Articles ordered under this Purchase Order/Contract must be routed through Paragon Space Development Corp. quality department and are subject to final Quality acceptance.

PQ-02 Documentation Acceptance (Drop Shipment)

Articles ordered under this contract are to be drop shipped to a destination other than Paragon Space Development Corp. Final acceptance is contingent on the submittal and approval of the Quality data.

PQ-03 100% Inspection Required

The Supplier shall perform 100% end item inspection of each end item to ensure conformance with the applicable drawing and other purchase order/contract requirements. Objective evidence shall consist of records of actual readings taken during the inspection of each part, with the dimension and its tolerance noted, and including workmanship and verification of complete representative documentation.

PQ-04 Inspection/Test Record Requirement - Submittal

The Supplier is responsible for performing or having performed all inspection and tests necessary to substantiate that the supplies or services furnished under this contract conforms to contract requirements. Records demonstrating compliance with this provision must be created and retained. The test report shall show quantitative test results and tolerances for values measured, including documentation of the tooling identification number for traceability, and shall include information to demonstrate conformance to requirements of the engineering drawing/procurement specification or Purchase Order.

Actual test reports referencing Contract/Purchase Order Number, Suppliers 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. These reports shall be validated by an authorized Supplier's Representative, by either an inspection stamp or signature and title.

PQ-05 AS9102 Aerospace First Article Inspection Requirement – Deliverable Report

First Article Inspection (FAI) shall be performed by the Supplier in accordance with the requirements of AS9102. When documenting the FAI, the Supplier may use the forms contained within AS9102 or their equivalent, so long as the forms contain all the information required by AS9102.

Supplier will include a copy of the FAI report with the initial shipment of the FAI item. Additionally when a partial or re-accomplished FAI is performed as required by AS9102, Supplier will include copy of such FAI report with the initial shipment of the FAI item.



Purchasing/Quality Clauses

PQ-06 Certificate of Conformance

The Supplier shall certify that the part(s), assemblies, subassemblies or detail parts delivered conforms to the purchase order/contract requirements (e.g., manufactured, inspected, and/or tested in accordance with the engineering drawing, or specification) and that supporting documentation is on file. When applicable, the true manufacturers, lot, heat, date code, and/or serial number must appear on the certification.

The Certificate of Conformance shall contain the following:

- Paragon’s Purchase Order/Contract number
- Date of Shipment
- Part number
- Name and address of manufacturing or processing location
- Manufacturer’s lot, heat, batch, date code, and/or serial number (if applicable)
- Quantity and unit of measurement (each, box, case, gallons, etc.)
- A statement that the materials furnished are in conformance with all applicable requirements
- Stating that supporting documents are on file and will be made available to Paragon or Government Representatives upon request
- Signature and title of the Supplier’s representative.

An example of an acceptable statement of Certification of Conformance is as follows:

“This is to certify that all items noted are in conformance with the Purchase Order/Contract, drawings, specification 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 Paragon SDC.”

When the items on this purchase order are supplied by a distributor, a copy of the manufacturer’s certification or the distributor’s certification stating compliance and the manufacturer’s name and address shall be provided.

PQ-07 Special Process Certification

Special Process: A method controlled by a contractually required specification in which the product undergoes a physical, chemical or metallurgical transformation. Conformance to the specification cannot be readily verified by normal inspection methods.

Examples of special processes include but not limited to heat treat, coatings, chemical conversion coatings, anodizing, passivation, welding, soldering, brazing, dye penetrant, etc.

A special process certification shall be provided with each shipment of item(s) delivered on this purchase order/contract. Special Process Certifications may be in supplier format and shall include the following:

- Paragon’s Purchase Order/Contract number
- Part number(s)
- Serial and/or lot numbers, of the hardware processed (if applicable)
- Material process specification & revision



Purchasing/Quality Clauses

- A certification stating the special process was performed per the applicable drawing/specification requirements
- Processing Suppliers name and address
- Each certification must be signed and dated by the supplier's representative and/or the processor attesting to the acceptance of the processes performed to the required specification(s).

The Supplier shall insert the substance of this clause, including this sentence to lower-tier subcontractors for work performed under this purchase order/contract.

PQ-08 Raw Material Certificate of Conformance

A manufacturer's test report (e.g., mill test report) that states the lot of material furnished has been tested, inspected, and found to be in compliance with the applicable material specifications. The test report will list the specifications, including revision numbers or letters, to which the material has been tested and/or inspected and the identification of the material lot to which it applies.

When the material specification requires quantitative limits for chemical, mechanical, or physical properties, the test report will contain the actual test and/or inspection values obtained. For aluminum mill products (except castings), certifications for chemistry may indicate, compliance within the allowed range. Certifications for physical properties will show actual values.

When the vendor supplies converted material produced by a raw material manufacturer, the supplier shall submit all pre and post conversion chemical / physical test reports.

PQ-09 Metallic Raw Materials & Physical/Chemical Test Reports

A physical/chemical test report for metallic raw material is required. The report shall indicate the percentage of each element that makes up the chemical composition and the physical properties of the raw material and a statement of conformance to the applicable specification. It shall contain the following;

- Processing Suppliers name and address
- Name/number of the specification with which the material is in compliance.
- The melt/heat lot number or other traceable designation (i.e. purchase order number, invoice number, etc.)

PQ-010 Nondestructive Inspection (NDI)/Nondestructive Test (NDT) Certification

The Supplier will include with each shipment a certificate for the NDI/NDT performed. As a minimum, the certification shall contain the following information:

- Processing Suppliers name and address
- Customer's Purchase Order / Contract number
- Date of Inspection



Purchasing/Quality Clauses

- Material or item identification/traceability (quantity, part number, heat lot number) of parts tested by part number
- Specification or other requirement defining the NDI/NDT acceptance / rejection criteria
- Inspector/name/stamp and NDI/NDT certification level
Inspection results (accept/reject)

A record of the procedures or techniques used and actual results shall remain on file for at least seven years after shipment to Paragon Space Development Corp. and shall be furnished to Paragon Space Development Corp upon request. These records shall include all information required in the previous paragraph as well as acceptance / rejection criteria, and related test instrument data used in the NDI/NDT process.

PQ-011 EEE Parts Procurements

All parts listed in MIL-STD-975 (NASA) and/or the Purchase Order/Contract Statement of Work shall be procured from manufacturers/suppliers/distributors listed in the applicable Qualified Products List for the procured part(s). EEE parts shall be tested and handled in accordance with the Purchase Order/Contract Statement of Work. Pre-Acceptance testing of EEE parts shall be accomplished by a Paragon approved, independent testing laboratory in accordance with the associated part(s) specification and MIL-STD-975 (NASA). All test results/reports shall accompany standard EEE parts shipped to Paragon SDC.

All EEE parts procured from the supplier or its sub-tier supply base shall have been manufactured within three (3) years from the delivery date for Plastic Encapsulated Microcircuits (PEMs) and five (5) years for all others. This shall include all sub-assemblies of the article being procured.

PQ-012 ESD protection Program and Packaging

The supplier shall document and implement an Electrostatic Discharge (ESD) Control Program in accordance with ANSI/ESD S20.20, ESD Association Standard for the Development of an ESD Control Program for Protection of Electrical and Electronic Parts, Assemblies and Equipment (Excluding Electrically initiated Explosive Devices).

Parts must be properly packaged and identified as required in ANSI/ESD S20.20. All goods will be placed in conductive or static-dissipative packages, tubes, carriers, conductive bags, etc., for shipment. The packaging must be clearly labeled to indicate that it contains electrostatic sensitive goods. Electrical parts that may be used or shipped in conjunction with ESD sensitive parts shall be treated as ESD sensitive.

PQ-013 Age Control/Shelf Life

Suppliers of materials with limited shelf life (adhesives, paints, sealants, lubricants, etc.) shall identify each container with the applicable specification, lot number, date of manufacture, and expiration date. When the size of the item or the applicable specification does not permit marking of individual items, Supplier will label each package or box furnished.

All elastomeric parts will be identified on the part itself or on interior and exterior packaging with a cure date in compliance with the specification.



Purchasing/Quality Clauses

PQ-014 Limited Operating Life Items

Supplier shall collect and maintain records of operating time or cycles for all items designated as Limited Operating Life items by Customer's drawings or specifications. Records will include the total elapsed time or cycle for each operation, cumulative time or cycles starting with the first functional test, and remaining time or cycles.

PQ-015 Statement of Work

Articles defined in this Purchase Agreement are subject to additional requirements per a statement of work, which must be met to achieve compliance to contract requirements. Articles will not be accepted by Paragon Space Development Corp. if supplier fails to comply with the requirements of the statement of work.

PQ-016 Manned Space Flight Requirements

Articles ordered in this contract are for use in Manned Space Flight. Materials, manufacturing, and workmanship or highest quality standards are essential to astronaut safety. If you are able to supply the desired items with a quality which is higher than that of the items specified or proposed, you are requested to bring this fact to the immediate attention of the purchasing agent. This clause will be inserted in all subcontracts and purchase orders for such items down to the lowest tier.