

Pamco Quality Clauses

NOTE: The following Quality Assurance clauses are applicable when referenced on the Purchase Order. If a conflict exists between the Standard Clause numbers (requirements called out in the Purchase order) and any other documents specified on the Purchase Order (including engineering drawings), the conflict shall be brought to the attention of PAMCO Quality Assurance for clarification prior to performance of any work by the Supplier.

1. The Government reserves the right to inspect any or all materials included in this order at the Supplier's plant.

Additionally, the Government reserves the right to perform Select Evaluation of the supplier's systems.

If government Select Evaluation is being delegated on a Purchase Order, it will be signified by the Government acceptance stamp on Purchase Order and application of the following statement:

“On receipt of this order, promptly furnish a copy to the Government Representative who normally services your plant, or, if none, to the nearest Defense Supply Agency Inspection office. In the event the Representative or office cannot be located, the PAMCO Purchasing Agent should be notified immediately.”

The Supplier is required to hold all materials at Supplier's facility until completion of Select Evaluation at which time the Supplier may ship to PAMCO or call for Source Inspection, if not completed.

2. PAMCO reserves the right of access by the organization, their customer and regulatory authorities, to the applicable areas of all facilities at any level of the supply chain involved in the order and, to all applicable records.

ITAR registration: Seller shall comply with International traffic in arms regulation 122.1 registration requirements.

3. Government Source Inspection: Government Source Inspection is required. The following statement applies (and is added) to the PAMCO Purchase Order:

“Government Source Inspection is required prior to shipment from your facility. Promptly notify and furnish a copy of this Purchase Order to the Government Representative who normally services your plant, or, if none, to the nearest Army, Navy, Air Force or Defense Supply Agency inspection office so that appropriate planning for Government inspection can be accomplished. In the event the representative or office cannot be located, the PAMCO Purchasing Agent should be notified immediately.”

4. PAMCO Source Inspection: All work performed under this order is subject to PAMCO'S inspection or test at the Supplier's plant. PAMCO Quality Representative may elect to perform inspection or test on a sample basis or to the extent of one hundred (100) percent. In any event when the item(s) is/are ready for final inspection, the supplier shall notify PAMCO Quality Control that source Inspection is needed (*phone #*) at least forty-eight (48) hours in advance, when practical, to permit scheduling of Source Inspection. Upon request, the Supplier shall make available to the PAMCO Quality Representative

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facilities, equipment and personnel to operate the equipment as required. Only the Director of Quality Assurance or his appointed designee may waive Source Inspection.

NOTE: Shipments received by PAMCO which have not been Source Inspected when required by Purchase Order, will be promptly returned to the Supplier.

4.1 In-Process Source Inspection: Items to be delivered under this Purchase Order required In-Process Inspection, tests or both by PAMCO Quality Representative at Supplier's facility. Parts, assemblies, processes and tests are subject to detailed inspection by PAMCO Quality Representative prior to assembly, test and/or delivery. When the product is ready for Source Inspection, the Supplier shall notify PAMCO Quality Control at least forty-eight (48) hours in advance, when practical, to permit scheduling of Source Inspection. Upon request, the supplier shall make available to the PAMCO Quality Representative, facilities, equipment and personnel to operate the equipment as required. Only the Director of PAMCO Quality Assurance or his appointed designee may waive Source Inspection. Scheduling of Source Inspection is by priority determined by the Director of PAMCO Quality Assurance.

4.2 Customer In-Process source Inspection: Items to be delivered under this Purchase Order required PAMCO Customer In-Process Inspection, tests or both by PAMCO Customer's Quality Representative at Supplier's facility. Parts, assemblies, processes and tests are subject to detailed inspection by PAMCO Customer's Representative prior to assembly, test and/or delivery. When the product is ready for Source Inspection, the Supplier shall notify PAMCO Quality Control at least forty-eight (48) hours in advance, when practical, to permit scheduling of Source Inspection. Upon request, the supplier shall make available to the PAMCO Quality Representative or PAMCO Customer's Representative, facilities, equipment and personnel to operate the equipment as required.

5. Workmanship: All items on this Purchase Order shall be fabricated and finished in a skilled, high quality manner. Particular attention shall be give to:
Freedom from blemished, cleaning, removal of foreign material (F.O.D.), identification and general appearance.

6. Part Identification: All items supplied under this Purchase Order shall be identified with complete nomenclature and part numbers in accordance with MIL-STD-130 or as specified on the Engineering drawing.

7. Packaging and Shipping: Parts shall be packaged in containers bearing the PAMCO part number and Supplier's standard part number, when applicable. Materials are to be shipped in containers or pallets for large items and should be in keeping with good commercial practice to preclude any damage incurred during shipping and storage at Buyer's plant. Each package shall be identified with the Purchase Order Number on the outer container. All parts must be protected from corrosion at all times.

Quality Unit Packaging Requirements: The Supplier shall package the parts under this Purchase Order in envelopes, plastic bags or containers in accordance with PAMCO Purchase Order and in the quantities stated by the following clause when specified by Purchase Order:

7.1 Parts must be individually packaged.

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- 7.2 Parts must be packaged in quantities of 10 maximum.
- 7.3 Parts must be packaged in quantities of 25 maximum.
- 7.4 Parts must be packaged in quantities of 100 maximum.
- 7.5 Parts must be packaged in quantities of _____ .

- 8. Report of Nonconformance: any nonconformance which will not meet final requirements of the drawing must be reported to PAMCO. A preliminary disposition must be received from PAMCO Purchasing prior to shipment of nonconforming parts. The appropriate certifications shall so state the exact nonconformance and authority to ship. If the nonconformance is accepted on a one-time waiver or deviation basis, PAMCO may impose a reduction in the purchase price as consideration to compensate for the processing the waiver in-house and/or with PAMCO Customer.
- 9. Resubmitted Articles: When articles are resubmitted to PAMCO after having been rejected back to the Supplier, documentation that accompanies the material shall be identified with the PAMCO Rejection Report Number. The shipping document shall indicate whether material was “reworked”, “replaced” or “returned as is”. Resubmitted articles shall not be mixed with new materials.
- 10. Flow Down Provisions: PAMCO Suppliers shall pass on to their sub-suppliers all applicable Quality assurance requirements stipulated in this Purchase Order.
- 11. General Certification Requirements: All certifications must contain the minimum following information as shown in the matrix below:

Requirements	COC (12)	Process (13)	CMTR (14)	Raw Mat'l (15)	FTC (16)	FTR (17)
Date	X	X	X	X	X	X
P.O. & Item No.	X	X	X	X	X	X
Spec. & Revision	X	X	X	X	X	X
Title, Printed Name & Signature of Authorized Rep.	X	X	X	X	X	X
Company Name	X	X	X	X	X	X
Description of Process		X				
Mat'l Type, Cond. & Form		X	X	X		
Heat No. *		X	X	X		
Qty. Run, Qty. Acc., Qty. Rej.		X				X
Wording per PAMCO QA Clause	X				X	
Part Number & Revision	X	X	X	X	X	X

*Must be Level I certifications. ** The number within the parentheses () refers to the PAMCO QA Clause Number.

- 12. Certificate of Conformance: The Supplier is to submit with the packaging sheet covering each shipment of articles **FORM 14 REV.1 1/91** or the Supplier’s equivalent certification worded substantially as follows:
 “This is to certify that all material s and processes used in fabrication conform to all applicable Purchase Order, Drawing and Specification requirements. Certification and test reports are on file at

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our plant subject to examination.”

13. Special Process Certification: For all processes required by Purchase Order and performed by the Supplier or by his sub-tier suppliers, the Supplier shall furnish the original certification/test report or an exact duplicate/copy issued by the Supplier or the sub-tier supplier that actually performed the process. The certification/test report shall include a complete description of the special process performed (name, applicable process specification, type, class, grade, etc.), the quantity and description (parts number, name) of the items processed and when applicable a statement that the process was performed by certified operator (s). The following criteria shall be used to define original certification/test reports or an exact duplicate/copy:
 - Certifications/documents that have been written in ink, typed, or typed carbon copies, signed by a responsible official of the issuing organization in ink, with printed or typed name of that official. Signature stamps are not acceptable.
 - Computer prepared certifications/documents that have been signed by a responsible official of the issuing organization in ink, with printed or typed name of that official.
 - Reproduced copies of certifications/documents that have been attested and notarized in ink as true copies of the original certifications/documents.

NOTE: Generally most special process suppliers will provide extra copies of certifications/test reports that meet the above requirements upon request. It is the Supplier’s responsibility to assure that sufficient copies of such certifications are obtained and available.
14. Typical Certified Material Test Reports: Furnish manufacturer’s typical certified material test reports (mill test reports) for the raw material supplier or used during fabrication under this Purchase Order. Refer to the matrix in clause #11.
15. Raw Material Test Reports: furnish quantitative physical and/or chemical characteristics of the raw material supplied or used during fabrication under this Purchase Order. Test reports must attest to the acceptability of all characteristics required by the material specification and shall be identifiable to the specific material tested. Refer to the matrix in clause #11.
16. Functional Test Certificate: Furnish with each shipment a certification signed by a responsible representative of the seller and worded substantially as follows:

“This is to certify that functional testing was performed in accordance with all Purchase Order and specification requirements. Actual test results identifiable with items submitted are on file subject to examination.” Refer to the matrix in clause #11.
17. Functional Test Reports: Furnish test results (data sheets) with documented reading for all functional test parameters. Test reports must be identifiable with each individual item submitted by serial number of lot number, and signed by a responsible representative of the Supplier. Refer to the matrix in clause #11.
18. Prohibited Material: Mercury – The use of Mercury bearing instruments or equipment is prohibited during fabrication, assembly, testing or any phase of manufacture of any material furnished under this

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Purchase Order. Certification to this effect must be furnished with each shipment. During assembly, testing, storage and shipment, components shall not come in contact with materials containing halogens in excess of 250 ppm.

- 18.1 Prohibited Material: Lead – or other low melting point metals, their components, or materials containing low melting metals as a basic chemical constituent, shall not be used in direct contact with the stainless steel surface of these items at any time. This prohibition includes tooling, fixtures, marking materials, fluxes, temperature crayons, paints, coating, etc. used during fabrication.

19. Domestic Material Only: A statement of certification or separate certification is required stating that only domestic material has been used.

20. PAMCO Furnished Material: Place on packing sheet, or include as a separate document with each shipment, a statement certifying that articles were fabricated from material furnished by PAMCO and that no material substitution was made. Should make-up material be required, contact the responsible PAMCO Buyer as to how this is to be handled.

21. Aerospace Inspection/Quality Programs:
 - 21.1 PAMCO Quality System Requirements: *The Supplier shall meet the minimum requirements of the quality Program approved by PAMCO. The minimum requirement for suppliers is MIL-I-45208A. Pamco does prefer that all suppliers meet AS9100 and/or Nadcap and preferences will be given to these suppliers.*

22. Calibration Control (Department of Defense): The Supplier shall control the calibration of all measuring and testing devices against certified standards traceable to the National Institute of Standards Technology. The Calibration Program shall be in accordance with at a minimum Specification MIL-STD-45662A, “Calibration System Requirements”.

23. Approved Sources: All special processes or services such as material supply, surface treatment, heat treating, plating, welding, painting, cleaning and non-destructive testing required for completion of this Purchase Order shall be performed only by sources listed within the current PAMCO Approved Supplier List.

NOTE: Use of non-approved suppliers shall result in rejection and return of material to Supplier.

24. First Article Inspection: The Supplier shall submit fully processed a sample first article to PAMCO Receiving Inspection along with a formal dimensional report and complete certification for PAMCO review and approval prior to making production item (s). It is emphasized production parts are not to be run prior to formal first article approval unless so authorized by Quality Assurance on a limited quantity to support schedule. Should the Supplier still elect to run production concurrent with the first article, the Supplier does so at his own risk.

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25. Proprietary Products Control: The Supplier shall notify PAMCO in writing of any changes proposed in product design, fabrication methods, materials, or processes of proprietary products; and shall obtain PAMCO approval prior to effecting such proposed changes. In the event of PAMCO approval, Supplier shall identify those articles on which the change is incorporated.
- 25.1 Manufacturer's Catalog or Drawing: The Supplier shall furnish two (2) legible and reproducible copies of the manufacturer's catalog, drawing or blueprint which fully describes the items being supplied, along with the initial shipment of this Purchase Order.
26. Traceability: A lot identification code number which is unique to a single raw material lot, batch or heat or raw material must be permanently marked on each item of raw material. The lot number must be reflected on the associated test report or certification.
27. Cost Related to Quality: The Supplier shall maintain and use Quality Cost data as a management element of his identifying both the prevention and correction of nonconforming supplies.
28. Synthetic Rubber Products: Each package of synthetic rubber products shall be marked with date of cure, shelf life, expiration date, compound number, part number, quantity, Purchase Order, drawing or specification. Cure on "O" rings shipped to PAMCO shall be within the limits imposed by MIL-HDBK-695 and/or PAMCO Purchase Order. Items which have shelf life limitations shall have at least 5/6 of the shelf life remaining upon receipt at PAMCO unless modified by Purchase Order.
- 28.1 Packing of Synthetic Rubber Products: Rubber products shall be packaged in a manner to minimize deterioration due to such factors as temperature, humidity, ozone, sunlight, oils, solvents, corrosive liquids and fumes, insects and rodents.
- 28.2 Original Copy of Test Reports: Supplier shall provide original copy of test report covering the full range of required military specification conformance tests.
29. Test Specimens (Castings): The Supplier shall furnish with each shipment of castings:
- 29.1 Mechanical Properties: Test bars produced from the same heat of material as the forgings supplied. The quantity of test bars to be submitted shall be specified on the Purchase Order, drawing or specification. Specimens shall conform to Federal Test Standard Number 151. Test bars shall be permanently identified with the Suppliers' name or trademark, melt/heat number, heat treat lot number and alloy identification.
- 29.2 Chemical Composition: One (1) spectrographic disc representative of the entire melt. The disc shall be permanently identified with the Supplier's name or trademark, melt/heat number, heat treat lot number and alloy identification.
30. Test Specimens (Forgings): The Supplier shall furnish with each shipment of forgings:
- 30.1 Mechanical Properties: Test produced from the same heat of material as the forgings supplied. The quantity of test bars to be submitted shall be as specified on the Purchase Order, drawing or specification. Specimens shall conform to Federal Test Standard Number 151. Test bars shall be

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permanently identified with the Supplier's name or trademark, melt/heat number, heat treat lot number, alloy identification and must have the same percentage of reduction as the parts supplied.

30.2 Grain Flow: For aluminum forgings, the grain flow requirements of MIL-A-22771 are to be met.

31. Documentation: All items furnished on this Purchase Order shall have documentation on file for at least three (3) years after delivery to permit traceability from the delivered item back through its manufacture and inspection to the procurement records on its constituent parts and materials. Examples of these data area certified material test reports, personnel qualification records, purchase order, process sheets, travelers and checklists.
32. Inspection Report: The Supplier shall furnish an Inspection Report Form 23 or Supplier's equivalent form along with shipment of the items to PAMCO on characteristics specified by PAMCO. The Inspection Report must indicate the actual inspection dimensions obtained during measurement of the sample items, total quantity, sample size, quantity accepted, quantity rejected and the characteristics inspected to serve as objective evidence of inspection. If the parts do not have serial numbers, the parts used in the sample shall be marked or tagged to maintain traceability and identification.
33. Supplier MRB Authority: The Supplier must maintain an effective Material Review Board for controlling nonconforming material. The Supplier may disposition nonconforming material which does not adversely affect any of the following: safety or health, performance, durability, reliability, interchangeability, effective use or operation, or weight or appearance (where a factor).
34. Raw Material Marking: The raw material supplier must, as a minimum, identify the heat number and Purchase Order number on the raw material being supplied to PAMCO utilizing vibration marking tools, electrochemical etching, steel stamping of fluid marking materials, solid marking materials or a removable tag with the heat number and Purchase Order number in permanent ink.

Segregation of Heat Lots: When more than one heat lot of raw material, casting or forgings is being shipped on a Purchase Order, the quantity of each heat lot must be noted on the shipper/ invoice and each heat lot must be separately packaged or bundled.
35. PAMCO Furnished Tooling / Gages: All tooling, gages or test equipment fabricated by the Supplier at PAMCO expense, or supplied by PAMCO for use by the Supplier shall be considered the property of PAMCO and shall be used only for production of articles on PAMCO Purchase Orders. Such tooling, gages or test equipment shall be inspected, controlled, and maintained as follows:
 - (a) Upon receipt, the Supplier shall examine /inspect tooling, gages or test equipment to assure damage has not occurred during shipment. On all items found to be damaged, the supplier shall immediately contact PAMCO Quality Assurance for disposition instructions.
 - (b) The Supplier shall be responsible for controlling and maintaining such tooling, gages and test equipment to prevent damage (other than normal wear) or deterioration. Tooling, gages or test equipment damages while in possession of the Supplier will be debited to the Supplier's account. Tooling, gages or test equipment shall not be reworked or modified without prior authorization by PAMCO in writing.
 - (c) Tooling, gages or test equipment subject to calibration shall be returned by the Supplier to PAMCO sufficiently in advance so that calibration ca be accomplished on the designated due date. Repeated

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failure to do so will result in suspension of further loaning of tooling, gages or equipment to the Supplier.

- (d) The Supplier's control of tooling, gages or test equipment shall be subject to review by PAMCO authorized representatives.

- 37. Latent Raw Material Defects: Latent raw material defects detected during subsequent processing of castings, forgings, extrusions and raw bar/rod material will be the responsibility of the Supplier.

- 38. Accident Investigation Involving Aircraft and Missiles: If the Government or PAMCO Customer elects to conduct an investigation of an accident involving aircraft, missiles or space launch vehicles in accordance with FAR 52.228-700 the Supplier shall cooperate fully and assist in the accident investigation when required by PAMCO, PAMCO Customer or the Government under this Purchase Order

- 39. Material must comply to Boeing H900 requirements.