



# **PAMCO**

# **Supplier Quality**

# **Requirements**

F8.4.1-1  
Revision L  
Effective 9/29/2022

A Current Revision of The  
PAMCO Supplier Quality  
Requirements Document  
Can Be Found at  
[www.PAMCO-Inc.com](http://www.PAMCO-Inc.com)



**NOTE:** The following Quality Assurance Clauses are applicable when referenced on the Purchase Order. If a conflict exists between the 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 the supplier performing any work.

## Quick Reference by Procurement Activity and/or Commodity

Procurement Activity / Commodity	Standard Clauses
Forgings and Castings	1, 2, 8, 9, 10, 11, 12, 13, 14, 15, 21, 22, 23, 24, 25
Material, Components, Consumables, Life Sensitive Material	1, 2, 8, 9, 10, 11, 12, 13, 14, 15, 21, 22, 25, 26, 27
Manufacturing / Machining	1, 2, 8, 9, 10, 11, 13, 14, 15, 16, 28
Special Processing	1, 2, 8, 9, 10, 11, 13, 14, 15, (18, 19, 20, 22, 23, 24 as applicable)

**Suppliers are required to review ALL clauses annotated in the body of the PO as they can differ from the Quick Reference by Procurement Activity and/or Commodity clause groups, and they may contain special instructions**

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#### 1. Right of Entry

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.

#### 2. Defense Contract Material "Select Evaluation"

The Government reserves the right to inspect any or all materials included in this order at the supplier's facility(s). 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 stated on the Purchase Order as follows:

"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 Contract Management Agency inspection office. In the event a Government representative or office cannot be located by the supplier, the PAMCO Purchasing Agent must be notified immediately."

**NOTE:** 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.

#### 3. Government Source Inspection

If 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 Defense Contract Management Office so that appropriate planning for Government inspection can be accomplished. In the event a government representative or office cannot be located, the PAMCO Purchasing Agent should be notified immediately."

#### 4. PAMCO Customer Source Inspection

Items to be delivered under this Purchase Order require PAMCO Customer Source Inspection; by PAMCO's Customer Quality Representative at the supplier's facility. Parts, assemblies, processes, and tests are subject to detailed inspection by PAMCO's Customer Quality Representative prior to assembly, test and/or delivery.

When the product is ready for Source Inspection, the supplier shall notify PAMCO Quality Assurance (818-768-5900 Ext.213 or 229) at least forty-eight (48) hours in advance, when practical, to permit scheduling of the Inspection. Upon request, the supplier shall make available to PAMCO's Customer Quality Representative; facilities, equipment, and personnel to operate the equipment as required.

#### 5. PAMCO Source Inspection

All work performed under this order is subject to PAMCO'S inspection or test at the supplier's facility(s). 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 Assurance that PAMCO Source Inspection is needed (818-768-5900 Ext.213 or 229) at least (24) hours in advance, when practical, to permit scheduling of the 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 PAMCO Quality Assurance Manager or his appointed designee may waive PAMCO 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.



#### 6. PAMCO Customer Approved Sources ONLY

All material suppliers and special process suppliers such as surface treatment, heat treating, plating, welding, painting, cleaning, and non-destructive testing required for completion of this Purchase Order shall be performed only by PAMCO Customer Approved Sources specifically identified on this purchase order.

**NOTE:** Use of non-approved suppliers shall result in rejection and return of material to supplier for Credit, Rework, or Replacement.

#### 7. PAMCO Approved Sources ONLY

All material suppliers and special process suppliers such as surface treatment, heat treating, plating, welding, painting, cleaning, and non-destructive testing required for completion of this Purchase Order shall be performed only by PAMCO Approved Sources specifically identified on the current Pamco Approved Supplier List.

Contact PAMCO Quality Assurance for verification of current PAMCO Approved Suppliers – 818-768-5900 Ext 213 or 229.

**NOTE:** Use of non-approved suppliers shall result in rejection and return of material to supplier for Credit, Rework, or Replacement.

#### 8. Quality Management Systems

This clause provides the minimum Quality System Requirements to suppliers of direct materials, manufacturing, and special processes to PAMCO Inc. suppliers of direct materials, manufacturing and special processes must initially meet this requirement, **as applicable to their business and/or service**, and maintain a Quality Management System that supports the requirements outlined herein. This clause also provides the contractual Quality Assurance Requirements being flowed to the suppliers from the customer contracts of PAMCO Inc.

Additional specific PAMCO Inc. Supplier Quality Requirements may appear on individual purchase orders. It is the responsibility of the suppliers to review this document as well as the purchase order to ensure all Supplier Quality Requirements are complied with.

PAMCO suppliers are required to notify PAMCO Quality Assurance in writing when any changes are made to the quality control system that may affect product quality. All or any part of the quality control system may be disapproved by PAMCO Inc. when the system does not meet the minimum requirements of this document or the purchase order.

- a) Certificated: Supplier's Quality Management System and/or Special Process is currently certified by a recognized aerospace accredited registrar or special process registrar (Nadcap, etc.) for their applicable business model or service offered at time of receipt and processing of PAMCO Purchase Order and associated material, as applicable.
- b) Compliant: Supplier's Quality Management System is currently "compliant", but not certificated, to a recognized aerospace standard at time of receipt and processing of PAMCO Purchase Order and associated material, as applicable.
- c) ITAR Compliance: Supplier shall comply with International traffic in arms regulation 122.1 registration requirements when controlling PAMCO or PAMCO customer "Proprietary Design Data" and associated product.
- d) Proprietary Product Control: The supplier shall notify PAMCO in writing of any changes proposed in product design, fabrication methods, materials, or processes of PAMCO 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, including but not limited to changes of suppliers, changes of manufacturing facility and location.
- e) Proprietary Information: All specifications, blueprints, and other material provided by PAMCO, are considered proprietary information. Copies of PAMCO's customer drawings, specifications and/or procedures supplied by PAMCO shall not be reproduced except for internal use. Such proprietary items shall be controlled to preclude their use for other than PAMCO contracted work and shall be returned or destroyed upon completion of the contracted work.
- f) Flow Down Provisions: PAMCO suppliers shall pass on to their sub-suppliers all applicable Quality assurance requirements stipulated in the Purchase Order including, customer requirements.



- g) Sub-Contracting / Outsourcing: Suppliers will not sub-contract or outsource any PAMCO material unless specifically directed to do so in the body of the purchase order. Any requests to sub-contract or outsource will be directed in writing to the PAMCO buyer identified on the Purchase Order. If PAMCO finds the request acceptable the Purchase Order will need to be amended to reflect the name of the sub-contractor, facility address and contact information and a brief description of what work / process the sub-contractor will be responsible for completing. PAMCO reserves the right to re-call any Purchase Order and associated material a supplier is unable to effectively process within the purchase order body at any time.
- h) Configuration Management and Revision Control: Suppliers are to use current process and material specifications unless otherwise directed in the body of the PAMCO Purchase Order. Design specifications provided by PAMCO must be current and/or match the revision noted in the body of the Purchase Order. Any discrepancies will be immediately brought to the attention of the PAMCO buyer identified on the Purchase order for resolution. No work is to begin at the supplier until all issues are resolved in writing. PAMCO suppliers will provide test specimens for design approval, inspection/verification, investigation, or auditing when applicable and upon request.
- i) 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.
- j) Records: The supplier shall maintain adequate records of all manufacturing, inspections, and tests. The records shall indicate the nature and number of observations, the number and type of deficiencies found, the quantities approved and rejected and the nature of corrective action taken. These records shall be available for review, and copies of individual records furnished, upon request, to PAMCO representatives. Records shall be kept for a period of no less than Ten (10) years after final payment for supplies or services unless otherwise specified in writing from PAMCO. Examples of these records are certified material test reports, personnel qualification records, purchase orders, process sheets, travelers, inspection records, and checklists. Records associated with the processing of PAMCO or PAMCO customer owned material shall be destroyed (shredded, etc.), after 10 years unless otherwise directed by PAMCO Management.
- k) Corrective Action: The supplier shall take prompt action to correct assignable conditions which have resulted or could result in non-conforming products or services being offered to PAMCO for acceptance which do not conform to (1) the quality assurance provisions of the item specification, (2) inspections and tests required by the contract or purchase order, and (3) other inspections and tests required to substantiate product conformance. Documented corrective action statements shall include the nature of the defect, containment, immediate corrective action, root cause and root cause correction taken to prevent recurrence. Material identified as conforming delivered to PAMCO that is later determined nonconforming by PAMCO Quality Assurance may constitute a Supplier Corrective Action Report (SCAR) be issued for completion.
- l) 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. Special Process suppliers are not responsible for permanently marking the material unless specifically directed to do so in the body of the Purchase Order. However, lot segregation is required through all phases of receipt, processing, and packaging for return to PAMCO.
- m) Acceptance Authority Media: Supplier is required to implement necessary controls and awareness, including records of training, on Acceptance Authority Media requirements as defined in AS9100 and Federal Aviation Regulation Title 14, Chapter 1, Sub-Chapter C, Part 21, Section 21.2. The supplier is subject to compliance audits from PAMCO, PAMCO Customers, Federal Aviation Administration, Defense Contract Management Agency representatives and other relevant interested entities.
- n) Material Substitutions: Material substitutions or replacement is not permitted, unless specifically instructed in writing from PAMCO with adequate lot segregation controls in place.
- o) Counterfeit Material Prevention Program: Seller must comply with AS6174 Counterfeit Material; Assuring Acquisition of Authentic and Conforming Material, as applicable to their product or process provided.
- p) F.O.D. Control / Prevention: Supplier must maintain a F.O.D. Prevention Program as appropriate for their business model, and processes.
- q) Raw Material Marking: The raw material supplier must, at a minimum, identify the heat number and Purchase Order number on the raw material certification being supplied to PAMCO. Utilizing vibration marking tools, electrochemical etching, steel stamping of fluid marking materials, solid marking materials or a removable tag the supplier will physically identify the material with the heat number at a minimum and Purchase Order number (when allowable).





- r) Segregation of Heat Lots: When more than one heat lot of raw material, casting or forging is being supplied, the quantity of each heat lot must be noted on the certification of conformance, packing slip and invoice and each heat lot must be separately packaged or bundled.
- s) 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 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.
- 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 stainless-steel surfaces of any items, at any time. This prohibition includes tooling, fixtures, marking materials, fluxes, temperature crayons, paints, coating, etc. used during fabrication.
- Conflict Minerals - Material must comply with Section 1502 of the Dodd-Frank Wall Street Reform Act. This requirement is being flowed down to your company because some of PAMCO's customers are publicly traded and therefore, the regulation requires that publicly traded companies using materials in their manufacturing process defined as "conflict minerals" must identify and report on the source of those minerals. PAMCO suppliers must not produce any products that were smelted or originated from; the Democratic Republic of Congo, containing directly/indirectly or procured the following minerals for sale or distribution to PAMCO in any manor: (Gold, Cassiterite, Wolframite, Columbite-tantalite, Tin, Tungsten, Tantalum)
- Restriction on the Acquisition of Certain Magnets, Tantalum, and Tungsten per DFARS Clause 252.225-7052.
- Prohibition on Acquisition of Certain items from Communist Chinese Military Companies per DFARS Clause 252.225-7007.
- t) Calibration System / Control / Positive Recall: The supplier shall control the calibration of all measuring and testing devices against certified standards traceable to the National Institute of Standards Technology (NIST). At a minimum, The Calibration Program shall be in accordance with ISO 10012 OR ISO 17025 calibration system requirements.
- u) 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:
- 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.
  - 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 damaged 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.
  - Tooling, gages, or test equipment subject to calibration shall be returned by the supplier to PAMCO sufficiently in advance so that calibration can be accomplished on or by the designated due date. Repeated failure to do so will result in suspension of further loaning of tooling, gages, or equipment to the supplier.
  - The supplier's control of tooling, gages or test equipment shall be subject to review by PAMCO authorized representatives.
- v) Sample Inspection: Sampling inspection procedures used by the supplier to determine quality conformance shall be as established in ANSI/ASQC Z1.4 or specifications applicable to the product being supplied. Regardless of specification allowances; no nonconforming material will be accepted at any time. The entire lot will be inspected for the same nonconforming characteristic on the detection of one (1) nonconforming piece (c=0). Manufacturing and machining suppliers will use PAMCO's current Approved Sampling Plan and shall be non-bias and random in nature during the entire manufacturing / machining process. (i.e. – first, middle & end of each lot)
- w) Report of Nonconformance: Any material that will not meet final requirements of the drawing or purchase order must be reported to PAMCO. A preliminary disposition must be received from PAMCO Quality Assurance or the PAMCO Buyer prior



to shipment of nonconforming parts. All nonconforming material MUST be tagged and identified with the specific nonconformance information prior to delivery to PAMCO. The appropriate certifications shall so state the exact nonconformance, quantity of conforming and nonconforming, and authority to ship. PAMCO may formally document and process any nonconforming material received from the supplier using internal documentation and processing or scrap the material upon receipt following approved internal scrap processing procedures.

- x) Resubmitted Product: 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 and lot segregation MUST be maintained.
- y) Control of Scrap: Supplier will segregate and return all scrap to PAMCO upon completion of work for each purchase order. All scrap material will be bagged and tagged separately from conforming material, with a brief description of the reason for scrap.
- z) Cost of Poor Quality: Supplier will maintain a minimum, or better than, 90% monthly rolling average of conformity of delivered product. Supplier that fall below 90% of conformity of delivered product are expected to take appropriate action to minimize excessive nonconformance's and scrap and correct process escapes to preclude recurrence.
- aa) On-Time Delivery: Supplier will maintain a minimum, or better than, 90% monthly rolling average of on-time delivery to PAMCO Purchase Order due dates. Suppliers that fall below 90% on-time monthly rolling average are expected to take immediate action to correct issues impeding acceptable on-time results. Suppliers are also expected to immediately notify PAMCO buyers when they will not be able to meet purchase order due dates, to discuss a recovery plan and possibly amend the purchase order due date. Amending PO due dates will be at the discretion of the PAMCO buyer.
- bb) Accident Investigation Support: 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 any Purchase Order.
- cc) Contribution to Product or Service Conformity: Supplier shall ensure personnel are aware of their contribution to product or service conformity e.g. access to the QMS, navigation of requirements, notification of changes, nonconformance reporting understanding of culpability and consequences.
- dd) Contribution to Product Safety: Supplier shall ensure personnel are aware of their contribution to product safety e.g. individual accountability, compliance to process, attention to detail, "Human Factors", potential impact relating to product issues.
- ee) Importance of Ethical Behavior: Supplier shall ensure personnel are aware of the importance of ethical behavior e.g. code of conduct, management/employee working relationships, fair treatment, employee work recognition, confidential reporting mechanisms, protecting anonymity, no blame culture.

## 9. Workmanship

All items on this Purchase Order shall be fabricated and finished in a skilled, high quality manner. Attention shall be given to: freedom from blemishes and burrs, thorough cleaning, and removal of foreign material (F.O.D.), legible and accurate identification, general appearance, legible and accurate processing, inspection, and certification documentation.

## 10. Part Identification

All items supplied under this Purchase Order shall be identified as stated on the drawing and/or Purchase Order, and when applicable, heat lot number, in accordance with MIL-STD-129 & 130, or as specified on the Engineering drawing.

## 11. 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 possible damage incurred during shipping and storage at buyer's facility. Each package shall be identified with the Purchase Order Number on the outer container. All parts must be protected from F.O.D. and corrosion at all times. **ALL LOTS SHALL BE PACKAGED INDIVIDUALLY.**





## 12. DFARS 252.225-7009 Restriction on Acquisition of Certain Articles Containing Specialty Metals

Domestic Specialty Metals – Defense Federal Acquisition Regulation Supplement (DFARS 225.003) and 252.225-7009 requirements apply to the order. A statement of certification or separate certification is required stating that only DFAR compliant material has been used.

Note: 252.225-7014 is now Reserved in the DFARS document dated 8/26/2022 and replaced by 252.225-7009.

## 13. General Certification Requirements

All certifications and reports must contain the following information at a minimum, as shown in **TABLE 1** below:

**TABLE 1**

Certification & Report Requirements**	COC (14)	Process (15)	INSP RPT (16)	CMTR (21)	Raw Mat'l (22)	FTC (18)	FTR (19)
Date	X	X	X	X	X	X	X
P.O. & Item No.	X	X	X	X	X	X	X
Spec. & Revision	X	X	X	X	X	X	X
Title, Printed Name & Signature of Authorized Rep.	X	X	X	X	X	X	X
Company Name	X	X	X	X	X	X	X
Description of Process		X					
PAMCO Work Order / LOT#	X	X	X			X	X
Material Type, Condition & Form		X	X	X	X		
Heat No. *		X	X	X	X		
Qty. Run, Qty. Acc., Qty. Rej.	X	X	X				X
Wording per PAMCO QA Clause	X	X				X	
Part Number & Revision	X	X	X	X	X	X	X

\*Must be Level I certifications

\*\* The number within the parentheses ( ) refers to the PAMCO Supplier Quality Requirement Clause Number

## 14. Certificate of Conformance

The Certificate of Conformance will state the following, or any variation thereof, noted below:

"We hereby certify that all products/material supplied with this certificate have been manufactured, processed and inspected in accordance with all contract/purchase order requirements and conform to all OEM or industry standard(s), engineering design, and process data". "We also hereby certify; that no material substitutions were made and lot segregation has been maintained throughout all processing". "All inspection/test reports and records indicating completed processing and conformity to design and contract/purchase order requirements are retained on file for a minimum of 10 years or as required by contract/purchase order and available for review upon request".

**Note: - All procured material certifications and certification/test result packages, (excluding procured special processors), must provide thorough traceability and chain of custody to point of origin.**

(See Table 1 for more certification content requirements).

## 15. Special Process Certification

For all processes required by Purchase Order and performed by the supplier or by their 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 performed the process.

The Special Process Certification will state the following, or any variation thereof, noted below:

"We hereby certify that all products/material supplied with this certificate have been manufactured, processed and inspected in accordance with all contract/purchase order requirements and conform to all OEM or industry standard(s), engineering design, and process data". "We also hereby certify that; no material substitutions were made and lot segregation has been maintained throughout all processing". "All inspection/test reports and records indicating completed processing and conformity to design



and contract/purchase order requirements is retained on file for a minimum of 10 years or as required by contract/purchase order and available for review upon request”.

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). (See Table 1 for more certification content requirements).

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.

#### 16. Inspection Report

The supplier shall furnish a copy of the completed internal Inspection Report along with shipment of the items to PAMCO on physical/dimensional characteristics created per PAMCO PO requirement. The Inspection Report must indicate the PAMCO PO#, design/dimensional requirement, range of actual dimensions obtained during measurement of the sample items, total lot quantity, sample size, quantity accepted, quantity rejected, and date of inspection to serve as objective evidence of inspection. (See Table 1 for more inspection report content requirements).

#### 17. Production Part Approval Process (PPAP) Required

Supplier will perform all steps prior to and during processing in accordance with PAMCO PPAP requirements as stated in the body of the purchase order.

#### 18. Functional Test Certificate

The Functional Test will state the following, or any variation thereof, noted below:

“We hereby certify that all products/material supplied with this certificate have been tested and inspected in accordance with all contract/purchase order requirements and conform to all OEM or industry standard(s), engineering design, and process data”. “We also hereby certify that; no material substitutions were made and lot segregation has been maintained throughout all processing”. “All inspection/test reports and records indicating completed processing and conformity to design and contract/purchase order requirements is retained on file for a minimum of 10 years or as required by contract/purchase order and available for review upon request”. (See Table 1 for more certification content requirements).

#### 19. Functional Test Reports

Furnish test results (data sheets) with documented actual reading for all functional test parameters. Test reports must be identifiable with each individual item submitted by lot number, and signed by a responsible representative of the supplier. (See Table 1 for more certification content requirements).

#### 20. Original Copy of Test Reports

Supplier shall provide original copy of test report covering the full range of required industry specification/standard conformance tests as required on the purchase order.

#### 21. Typical Certified Material Test Reports (CMTR)

Supplier to furnish manufacturer's typical certified material test reports (mill test reports) for the raw material supplier or used during fabrication under this Purchase Order. (See Table 1 for more certification content requirements).

**22. Raw Material Test Reports**

Supplier to 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. ([See Table 1 for more certification content requirements](#)).

**23. Test Specimens (Castings)**

The supplier shall furnish with each shipment of castings:

- a) [Mechanical Properties](#): Test bars produced from the same heat of material as the castings 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 lot number, alloy identification and all mechanical properties with requirements and actuals.
- b) [Chemical Composition](#): One (1) spectrographic disc representative of the entire melt or written report providing the same information. The disc or report shall be permanently identified with the supplier's name or trademark, melt/heat number, heat treat lot number, alloy identification and all chemical properties with requirements and actuals.

**24. Test Specimens (Forgings)**

The supplier shall furnish with each shipment of forgings:

- a) [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 stated 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 lot number, alloy identification and all mechanical properties with requirements and actuals, and must have the same percentage of reduction as the parts supplied.
- b) [Chemical Composition](#): One (1) spectrographic disc representative of the entire melt or written report providing the same information. The disc or report shall be permanently identified with the supplier's name or trademark, melt/heat number, heat treat lot number, alloy identification and all chemical properties with requirements and actuals.
- c) [Grain Flow](#): For aluminum forgings, the grain flow requirements of AMS-A-22771 are to be met. All other material forgings shall meet the grain flow requirements, as required, by industry standard specifications and/or other engineering design data unless otherwise directed on the PAMCO purchase order.

**25. 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.

**26. Consumables and Limited Shelf Life Material**

Each package of consumables and life sensitive material shall be marked ( as applicable), with date of cure and/or manufacture, date of expiration or shelf life limitation, part number, purchase order number, quantity, batch or lot#, compound number (as applicable), and manufacturer's identification (if different than the Part number on the purchase order), applicable specification number and any special storage requirements. Products must have 80% shelf life remaining upon receipt at PAMCO, any exceptions to 80% life remaining must be noted in the body of the purchase order. The supplier will include the applicable OSHA/GHS Material Safety Data Sheets with each product delivered and ensure that all packaging and containers are properly marked with OSHA/GHS MSDS and PSD information for handling and storage as required by federal, state, and local regulatory agencies.

**27. 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 85% of the shelf life remaining upon receipt at PAMCO unless otherwise noted in the body of the Purchase Order.

- [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. First Piece Inspection

It is recommended that the supplier submit a fully processed sample first piece to PAMCO along with a formal dimensional report for PAMCO review and approve prior to making production item(s). It is emphasized that production parts should not to

be run prior to formal first piece approval by PAMCO Quality, unless so authorized by PAMCO Management to support schedule and minimize machine down time. Should the supplier elect to run production without or pending first piece acceptance, the supplier does so at his own risk and will be fully responsible for nonconformance's identified after completion of a production run without 1<sup>st</sup> piece acceptance by PAMCO Quality.

## 29. Material and Processing Must Comply with Boeing H900 Requirements

Requirements for producing and processing any material designated for U.S. Government Defense Contracts applies to this purchase order. Flow down of this requirement is mandatory throughout all levels of the supply chain.