



## QUALITY ASSURANCE REQUIREMENTS

### GENERAL INFORMATION

This document establishes quality requirements for procurement and defines supplier responsibilities for ensuring that purchased items and processes conform to company drawing, specification, and procurement requirements. Applicable requirements are indicated by code number in the purchase order document.

- Notes:**
1. The Quality Codes specified on the applicable purchase order are the minimum that apply to that specific procurement.
  2. The quality system of each supplier may be subject to periodic audits by Raycon.
  3. The supplier must implement appropriate action to correct recurring or repetitive nonconformities.

### SYSTEM REQUIREMENTS

❑ **1. Quality System** - The supplier shall maintain a quality system that complies with **AS9100D Series or equivalent** - Model for quality assurance in design (if applicable), development, production, installation and servicing. Raycon Industries, Inc. requires the use of "Acceptance on Zero" sampling tables. "Acceptance on Zero" means that if any nonconformances are found in the sample, the lot is not accepted. Note: If you PLAN TO CHANGE facility locations or outsource the work, you **MUST** inform the responsible Raycon Purchasing Representative in writing for approval.

❑ **1a. Special Processes**- Raycon Industries requires any special process required by the purchase order to be performed by a Raycon approved special processor, Supplier's sub-tier special processor with NADCAP Accreditation or Customer Approved Source(s). The use of a Customer Approved Source will be specified on the Raycon purchase order. The NADCAP Accredited supplier **must** be approved for the process being performed and provide their certification with the NADCAP Accredited Emblem on their certificate or provide a legible copy of the special processor's NADCAP Certificate & Scope with each shipment included in Supplier's certification package (*Note: To ensure the special processor is approved for a given process, click on <http://www.eauditnet.com> to access the NADCAP website on the Internet*). Special processes included under this requirement are heat treating, metal joining (welding and brazing), plating, anodizing, and NDT/NDE.

❑ **2. Calibration System Requirements** -The supplier shall maintain a calibration system in accordance with **ISO-10012**, Quality assurance requirements for measuring equipment, Part 1: Metrological confirmation system for measuring equipment or, American National Standard for Calibration. If measuring and test equipment is calibrated by an outside service, the aforementioned requirements must be contained in your purchase order for these services.

❑ **3. Flow Down** - All requirements of this purchase order, including key characteristics where required, must be flowed down to all sub-tier suppliers. All production/quality related documents must be retained for a minimum period of 10 years.

#### Counterfeit Product Statement:

Supplier is required to insure that all products supplied to Raycon Industries are manufactured in accordance with all specifications, standards, drawings, or purchase order requirements. Supplier shall also be responsible to ensure that all products are genuine in origin and are not counterfeit products. Supplier shall incorporate a system to prevent counterfeit products or materials from entering the product cycle. If the purchased items become the subject of a legal or counterfeit issue, the supplier must disclose the source of the product.

### INSPECTION REQUIREMENTS

❑ **4. Source Inspection (Mechanical or Visual)** All items specified by the purchase order are subject to inspection at the supplier's facility by Raycon Quality Assurance Personnel before shipment. The supplier shall provide no

less than 48 hours advance notice to the responsible Raycon Purchasing Representative to permit scheduling of source inspection.

❑ **5. Source Inspection (Test)** - All items specified by the purchase order are subject to witnessing (by Raycon Quality Assurance Personnel) of testing being performed by supplier personnel prior to shipment. The supplier shall provide no less than 48 hours advance notice to the applicable Raycon Purchasing Representative to permit scheduling of test witnessing.

❑ **6. Source Inspection (Government)** - The items/service produced on this purchase order is subject to government inspection at point of manufacture. On receipt of this purchase order, promptly furnish a copy to the government Defense Contracts Management Agency (DCMA) Representative who normally services your plant or to the nearest Army, Navy, or Air Force Inspection Office. If the representative or office cannot be located, the Raycon Purchasing Representative shall be notified immediately. When material is ready for inspection (or, if practical, before that time), the supplier shall notify the government representative who normally services its plant. Evidence of government inspection must be shown on all shipping documents.

### TECHNICAL REQUIREMENTS

❑ **7. Identification of Shelf Life Material** - Supplier shall identify each item, package, or container of shelf life material with its cure or manufacture date, expiration date, and special storage and handling conditions in addition to the standard identification requirements. Materials may not be shipped to Raycon with less than 75% of their useful life remaining.

❑ **8. First-Article Inspection Report (FAIR)** - Upon initial production or any subsequent change to the engineering drawing revision level, supplier's process change or a tooling change occurs; the seller shall perform a **New** First Article Inspection Report. The first article shall be done on one piece, representative of the production lot, and be documented on a report in the supplier's own format. The report shall include actual dimensions and verification of all dimensions, drawing notes, current revision level, bill of material requirements, processes and key characteristics contained on the engineering drawing. The use of statistical techniques may be required if noted on the Raycon purchase order.

Note 1: Record on FAI Report the reason for initiating the FAI Report, i.e., drawing change or tooling change. This report shall be approved by the supplier's quality organization and shall be submitted with the shipment unless otherwise directed by the responsible Raycon Purchasing Representative. An approved current FAI Report and any FAI supplemental (Delta) must be on file for Raycon review.

Note 2: Must attach the marked-up drawing (bubble) that corresponds to FAIR item numbers.

Note 3: If any deviations exist on FAIR results, you must request a Supplier Discrepancy Action Request (SDAR) and receive approval to ship known discrepant parts.

Note 4: Prefer suppliers' forward an electronic copy of the completed **FAIR results** to the responsible Raycon purchasing representative.

❑ **8a. Non-Conforming Material**- If Supplier detects a non-conforming condition with the product after shipment has been made, Raycon Quality Dept. must be notified in writing immediately. Supplier will receive product

disposition approval from Raycon which could affect supplier stock or work in process. Also, supplier must notify Raycon of any internal changes to their product, processes, suppliers and facilities as it may impact the product which is purchased by Raycon. Supplier must submit a Corrective Action document to Raycon Quality Manager within 10 days of N/C findings.

❑ **8c. First Article Inspection (FAI)** - Must utilize the AS9102A forms 1 thru 3 format.

❑ **9. Chemical and Physical Test Reports (Raw Material Certifications)** - Each shipment shall be accompanied by one legible and reproducible copy of test reports (chemical, physical, etc.) only when such tests are explicitly required to be reported by the procuring specification or the Raycon Purchase Order. The reports shall contain the signature and title of the authorized representative of the agency performing the test and must conform to specification requirements. The reports shall reference the purchase order number of the procuring agency (to provide traceability in the case of sub-tier contracts.) If Raycon p/o states DOMESTIC or DFAR'S material only, supplied certs must reflect that fact and state that material supplied is DFAR'S COMPLIANT. We also have a policy to avoid counterfeit materials so you must use due diligence to insure that you are supplying us with non-counterfeit materials.

Note: Physical Test Reports- are not required for the following reasons: Synthetic/Composite Materials, Die Castings, and Castings that have not been annealed or directed by the purchase order.

❑ **10. Certificate of Compliance** - Each shipment shall be accompanied by one legible and reproducible copy of a Certificate(s) of Compliance certifying to the conformance of the product or service to the applicable requirements. The certificate shall identify the part or process name, the Raycon purchase order number, the specification and drawing (including current revision level) to which they conform, and the name of the agency that performed/manufactured them (if other than the seller). In addition, the signature and title of the authorized representative approving the information is included. On Raycon designed products, include copies of Certificate of Compliance from sub-tier suppliers for all sub-contracted special processes and provide copies of the Actual Material Manufacturers' Certificate of Compliance.

Note: The material, special processors and NDT certifications must be referenced on the contracted suppliers' Certificate of Compliance (all paperwork must coincide with each other) or reference the applicable Raycon purchase order number on the attached documentation.

❑ **11. Test Reports** - If functional or nondestructive tests are required by product specification or other procurement document, each shipment shall be accompanied by one legible and reproducible copy of reports of actual test results identifiable with the test parameters and products submitted. These reports shall contain the signature and title of the authorized representative of the agency performing the test and must conform to specification requirements.

❑ **12. Right of Access** - The supplier shall provide Raycon Industries, its customers and regulatory authorities access to all facilities involved

in fulfillment of the purchase order and to have all applicable records when requested.

❑ **13. Tool Proofing** - Acceptance of production tools is contingent upon inspection and acceptance by Raycon of the applicable characteristics on the number of the dimensional samples specified on the purchase order. The tooling and dimensional samples must conform to the tolerance limits of engineering drawing and specifications stated on this purchase order. Items may be shipped to the Raycon for inspection, when so directed by purchasing.

❑ **14. Full Traceability of Raw Materials** - Items under this purchase order shall individually be traceable to specific test results and lots of the raw materials used. Raw materials records shall be identified by lot number as well as material type, specification, and heat number (as applicable) and must be traceable to records of acceptance. Specific details (sub-parts) utilized in assemblies shall be traceable to the lot of raw material used and provide copies of the Actual Material Manufacturers' Certificate of Compliance.

Note: Only use the specific material called out on the drawing, "ANY" substitutions will require submitting an SDAR for Raycon Engineering Approval.

❑ **15. Mixed Traceability of Raw Materials** - Items under this purchase order shall individually be traceable to a group of test results and lots of the raw materials used. Raw materials records shall be identified by lot number as well as material type, specification, and heat number (as applicable) and must be traceable to records of acceptance. Specific details (sub-parts) utilized in assemblies shall be traceable to a group of lots of raw material used.

❑ **16. Statistical Process Control (SPC) Applies** - Parts containing key characteristics produced on this order shall be controlled by an Raycon approved statistical process control plan. Approval from the responsible Raycon Purchasing Representative must be attained prior to the start of production.

❑ **17. Foreign Object Damage (FOD)** – Assemblies susceptible to introduction of any foreign materials shall be manufactured and controlled through an effective FOD program. This program shall be documented and include provisions for prevention/ detection during design (if applicable), manufacture, final acceptance, and shipping of affected products. Extreme caution should be exercised to assure that areas being closed are free of any debris or foreign objects.

#### **FOREIGN RAW MATERIAL RESTRICTIONS**

❑ **18a. Domestic Material Only** -The supplier agrees not to incorporate any articles to be delivered under this purchase order with any Raw Metals melted outside the U.S., its possessions, or Puerto Rico.

❑ **18b. Preference For Domestic Material** - The supplier agrees only to supply materials in accordance with Defense Federal Acquisition Regulation Supplement (*DFARS*) [252.225-7014](#). *Click on the DFAR No. to access the*

❑ **19. SAMPLING** – The sampling method shall be in accordance with the MIL-STD-1916 or ASQ H1331, TABLE 1 or a comparable aero based sampling plan unless otherwise specified by the contract. If the applicable drawing, specification, standard, or quality assurance revision (QAP) specifies critical, major and/or minor attributes, the shall be assigned verification levels of VII, IV and II or AQLS of 0.1, 1.0 and 4.0 respectively. Unspecified attributes shall be considered as major unless sampling plans are specified in applicable documents. For MIL-STD-1916, the manufacturer may use the attribute or variable inspection method at their option of per the contract. MIL-STD-105 / ASQ Z1.4 may be used to set sample lot size, but acceptance would be zero non-conformances in the sample lot unless otherwise specified in the contract.

#### **MONITORING OF SUPPLIER REQUIREMENTS**

❑ **20.** suppliers shall be measured against a goal of 90% on time delivery and 95% quality. Raycon may flow down a corrective action request any time a supplier is below the established goals. Suppliers may be subject to removal from raycon's approved supplier list if the supplier does not respond to the corrective action request in a timely manner.

#### **AWARENESS REQUIREMENTS**

❑ **21.** Suppliers shall ensure persons performing work on Raycon Industries product are aware of:

- their contribution to product or service conformity
- their contribution to product safety
- the importance of ethical behavior

#### **SPECIAL REQUIREMENTS FOR GOVERNMENT RATED CONTRACTS**

❑ **22. DPAS Priority Rating** – This is a rated order certified for national defense use, and you are required to follow all provisions of the Defense Priorities and Allocations System regulation (15 CFR part 700).

❑ **23. Federal Acquisition Regulation (FAR)** - This part sets forth basic policies and general information about the Federal Acquisition Regulations System including purpose, authority, applicability, issuance, and arrangement.

❑ **23a. FAR 52.246-2 – Inspection of Supplies – Fixed Price.**

❑ **23b. FAR 52.246-11 – Higher Level Contract Quality Requirement.**

❑ **24. DLA Packaging Requirements for Procurement** – Items shall be packaged in accordance with ASTM D3951. When ASTM D3951, Commercial Packaging is specified, all Section "D" Packaging and Marking Clauses take precedence over ASTM D3951. In addition to requirements in MIL-STD-129, when Commercial Packaging is used, the Method of Preservation for all MIL-STD-129 marking and labeling shall be "CP" Commercial Pack. The Unit of Issue (U/I) and Quantity per Unit Pack (QUP) as specified in the contract take precedence over QUP in ASTM D3951.

❑ **25. Inspection and Sampling Plan** – The sampling method shall be in accordance with MIL-STD-1916 or ASQ H1331, table 1 or a comparable zero based sampling plan unless otherwise specified by the contract. If the applicable drawing, specification, standard, or quality assurance provision (QAP) specifies critical, major and/or minor attributes, they shall be assigned verification levels of VII, IV and II or AQLS of 0.1, 1.0 and 4.0 respectively. Unspecified attributes shall be considered as major unless sampling plans are specified in applicable documents. For MIL-STD-1916, the manufacturer may use the attribute or variable inspection method at their option or per the contract. MIL-STD-105/ASQ z1.4 may be used to set sample lot size, but acceptance would be zero non-conformances in the sample lot unless otherwise specified in the contract. The sampling method shall be in accordance with MIL-STD-1916 or ASQ H1331, Table 1 or comparable zero based sampling plan unless otherwise specified by the contract.

❑ **26. Mercury Containment** - Mercury or mercury containing compounds shall not be intentionally added to, or come in direct contact with, any hardware or supplies furnished under this contract. Exception: functional mercury used in batteries, fluorescent lights, required instruments; sensors or controls; weapon systems; and chemical analysis reagents specified by navsea. Portable fluorescent lamps and portable instruments containing mercury shall be shock proof and contain a second boundary of containment of the mercury or mercury compound. (IAW NAVSEA 5100-003D).

❑ **27. Ozone Depleting Chemicals Restriction** – Class I ozone depleting chemicals are not to be used nor incorporated in any items to be delivered under this contract. This prohibition supersedes all specification requirements but does not alleviate any product requirements. Substitute chemicals must be submitted for approval unless they are authorized by the specification requirements.

❑ **28. Delegation** – Delegation for verification and approval of test report/chemical analysis content to specified standards is applied to all suppliers of raw materials and services which generate such reports. Acceptance of this purchase order indicates acceptance of these responsibilities.