

QUALITY PURCHASE REQUIREMENTS

The following Quality Purchase Requirements are imposed by clause number reference on the Sub-Contract or Purchase Order.

1. **HIGHER LEVEL QUALITY SYSTEM REQUIREMENTS:** Supplier shall maintain a Quality Management System in compliance with:

a. SAE AS9100B

b. ISO 9001:2000

The system shall be subject to review and approval at all times.

2. **STANDARD INSPECTION REQUIREMENTS:** The Supplier shall maintain an inspection system acceptable to the Buyer and shall tender for acceptance only supplies that have been inspected in accordance with the inspection system and have been found by the Supplier to be in conformity with all drawings, specifications, and other purchase requirements. The Supplier shall prepare and maintain records evidencing all inspections made under the system and the outcome. The system shall be subject to review and approval at all times.

3. **CALIBRATION SYSTEM REQUIREMENTS:** Supplier's calibration system shall conform to the requirements of:

a. MIL-STD-45662A

b. ISO 10012-1

The system shall be subject to review and approval at all times.

4. **SPECIAL PROCESS CONFORMANCE:** The Supplier and any sub-tier Supplier engaged in special processes (Examples: soldering, cleaning, x-ray, welding, magnetic particle and penetrant inspection, heat-treating, plating, painting) shall be controlled.

a. The Supplier shall have special process approval or approval of the Supplier's system to control these special processes and his sub-tier's special processes. After approval, the supplier and sub-tier supplier's special processes are subject to re-audit or recertification.

b. The Supplier shall identify any sub-tier special process provider and shall not change sub-tier without approval from the BUYER. After approval, the supplier and sub-tier supplier's special processes are subject to re-audit or recertification.

5. **SOURCE INSPECTION:** Source inspection shall be conducted at the Supplier's facility or where designated in this Purchase Order/Sub-Contract prior to shipment. The Supplier shall contact the Buyer prior to the start of fabrication so that mandatory inspection/test points can be agreed upon. Supplier shall be available, and present upon request documented evidence of inspection test performance including in-process and/or final test. Required documentation for shipment must be completed and signed by the Supplier's Authorized Quality Representative.

a. Source inspection shall be coordinated in accordance with General Dynamics Land Systems Supplier Quality Assurance Handbook SQA 3000, EQD 2A. A copy of this handbook can be found at http://procurement.gdls.com/pdf/PQA_3000_12-1-06.pdf

QUALITY PURCHASE REQUIREMENTS (cont'd)

- 6. CUSTOMER WITNESS:** A representative of the Buyer's customer may witness any required inspections or test without affecting the Buyer's exclusive right to give direction to the Supplier or to accept or reject any procedure, test data or article.
- 7. FIRST ARTICLE INSPECTION:** The Supplier shall submit a First Article for inspection and/or test as applicable prior to the production of the balance of the order. All assemblies and components shall be manufactured using the same production equipment, procedures, and processes, which will be used in filling the contract. All inspection measurements and/or test data as applicable must be recorded on a document normally used by the Supplier, or the Buyer, to record inspection test results. Documentation for each First Article item shall include;
1. Inspection/Test Report(s), with actual dimensions or test results recorded.
 2. Mill Reports/Certifications for all raw materials, as required.
 3. Heat Treat Certifications, as required.
 4. Finish Certifications, as required.
 5. A Certificate of Conformance referencing the Part Number, Revision, and Purchase Order Number.
- The "First Article" documentation submitted shall have the Purchase Order/Sub-Contract number referenced thereon and must accompany the delivery of each First Article item to be delivered.
- a.** A First article shall also be submitted whenever there is a lapse in production for a period in excess of 2 years or whenever a change occurs in manufacturing processes, inspection method, location of manufacture, tooling or material used, drawing or specification, which significantly affects the form, fit or function of the product as determined by the Buyer.
- b.** The appropriate drawing representing the First Article Inspection shall be ballooned ("bubbled") such that the numbered balloons shall correspond to the numbered FAI Report. All dimensions, tests and notes shall be enumerated on the FAI Report.
- 8. FIRST PIECE INSPECTION:** A First Piece Inspection is required under this purchase order. It is the supplier's responsibility to conduct a FPI on one of the first five pieces delivered under this order to verify conformance of all physical, chemical, and test requirements specified as part of this order. Upon completion of the inspection, the supplier shall notify the buyer and/or GDRS quality representative. Objective evidence of this requirement shall be available and verified by GDRS prior to commencing shipments on this order. A five (5) day notice shall be required for scheduling verification.
- 9. CUSTOMER ACCESS CLAUSE:** During performance on this order, Supplier's quality system, inspection system and manufacturing processes are subject to review, verification and analysis by authorized customer and/or regulatory authority representatives, upon request. Customer inspection prior to shipment is not required unless otherwise notified.
- 10. PURCHASING DOCUMENTS:** On receipt of this order promptly furnish a copy to the Government representative who normally services Supplier's plant or, if none, to the nearest Army, Navy, Air Force, or Defense Supply Agency inspection office. In the event the representative or office cannot be located, Buyer's purchasing agent should be notified immediately.
- 11. GOVERNMENT SOURCE INSPECTION:** Government source inspection is required prior to shipment from Supplier's facility. Upon receipt of this order, promptly notify the Government representative who normally services Supplier's plant so that appropriate planning for Government inspection can be accomplished.
- 12. ACCEPTANCE AT DESTINATION:** All articles delivered under this Purchase Order/Sub-Contract are subject to final acceptance at destination. Failure to comply fully with all requirements indicated on this Purchase Order/Sub-Contract may be cause for rejection of shipments and delay payment of Supplier's invoice.

QUALITY PURCHASE REQUIREMENTS (cont'd)

- 13. MATERIAL AND PROCESS CONFORMANCE:** The Supplier shall submit with each shipment a certificate signed by an Authorized Representative of the Supplier's Quality Department. The certificate shall state that the materials furnished to us are in conformance with applicable requirements of the contract, Purchase Order, drawings and specifications and that supporting documentation, to include inspection/test reports, are on file and available to the buyer or his Customer Representatives upon request. Certification shall include name of manufacturer for materials being supplied, quantity shipped and contract or Purchase Order number.
- 14. PHYSICAL AND CHEMICAL TEST REPORTS:** A copy of actual Physical and/or chemical test reports for each lot, batch or heat are required with each delivery of the material covered by this Purchase Order. These reports shall be validated and signed by an Authorized Representative of the Supplier's Quality Department.
- 15. INSPECTION REPORTS:** Inspection Reports are required with delivery of the material covered by this Purchase Order/Sub-Contract. These reports shall include dimensional data for all characteristics and reference the part number, revision level, serial number (if required) and Purchase Order/Sub-Contract number.
- a.** Supplier shall record actuals for all characteristics utilizing the enclosed Variable Inspection Plan (VIP). The VIP shall accompany each delivery.
- b.** Key Characteristics – All components with key characteristics referenced on the model/drawing shall be serialized. Items that cannot be serialized due to size/shape shall be bagged and tagged individually and reference the inspection report number for that item. The serial number should ideally be located next to the part number and shall be legible after finish (coating, paint) requirements are complete.
- 16. TEST REPORTS:** Functional and/or qualification test results listing all parameters tested and actual readings taken during these test are required with the delivery of the material covered by this Purchase Order/Sub-Contract. These reports shall reference the part number, revision level, serial number (if required) and Purchase Order/Sub-Contract number.
- 17. NO LONGER USED**
- 18. MRB AUTHORITY:** MRB authority is hereby withheld. The Supplier must receive approval from the Buyer prior to disposition of nonconforming material or product purchased under this Purchase Order/Sub-Contract.
- a.** MRB authority is hereby granted as defined by the Buyer on the Purchase Order/Sub-Contract.
- 19. ESD:** All ESD sensitive items shall be handled, packaged and identified in accordance with MIL-STD-1686 and MIL-STD-129, or best commercial, as applicable.
- 20. SHELF-LIFE & MSDS:** Buyer's limited shelf-life materials shall be identified to indicate the start date, (date of manufacture or manufacturer's recommended start date) and the expiration date for the use of the controlled materials. Any special storage conditions shall be identified. MSDS sheets are required with each shipment.
- 21. REWORK/REPAIR:** The Supplier agrees to accept all cost, associated with rework, to include removal and replacement of the part, unless such work is necessary as a result of errant documentation supplied by the Buyer or an Engineering Change Proposal (ECP).
- 22. WARRANTY:** The Seller warrants that all items delivered under this Purchase Order/Sub-Contract shall be free from all defects in materials and workmanship and agrees to replace the item(s) if it fails from defects in material or workmanship within 18 months of acceptance by the Buyer.

QUALITY PURCHASE REQUIREMENTS (cont'd)

- 23. BUY AMERICAN ACT:** FAR 25.102 is hereby imposed.
- (a) The Buy American Act requires that only domestic end products be acquired for public use, except articles, material, and supplies--
 - (1) For use outside the United States;
 - (2) For which the cost would be unreasonable, as determined in accordance with 25.105;
 - (3) For which the agency head determines that domestic preference would be inconsistent with the public interest;
 - (4) That are not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities, of satisfactory quality (see 25.108); or
 - (5) Purchased specifically for commissary resale.
 - (b.) Unless agency regulation prescribes otherwise--
 - (1) The contracting officer may make a non availability determination under 25.102(a)(4) for an acquisition if--
 - (i) The acquisition was conducted by full and open competition;
 - (ii) The acquisition was synopsisized under 5.201; and,
 - (iii) No offer for a domestic end product was received; or
 - (2) The head of the contracting activity or designee may make a nonavailability determination under 25.102(a)(4) for any circumstance other than that specified in paragraph [h (b)(1) of this section.
- 24. STATISTICAL PROCESS CONTROL:** The Supplier shall establish, document and maintain statistical techniques to control and verify process capability and/or product key characteristics in the manufacture of the item(s) purchased under this Purchase Order/Sub-Contract. The Supplier upon request must make this data available for review.
- 25. GOVERNMENT PROPERTY:** The Supplier shall establish and maintain a program for the use, maintenance, repair, protection, and preservation of Government property in accordance with sound industrial practice and the applicable provisions of Federal Acquisition Regulation, Part 45.
- 26. SOLDERED ELECTRICAL AND ELECTRONIC ASSEMBLIES:** The supplier shall utilize and maintain proven electronic fabrication procedures and manufacturing processes for producing quality electronic product, which meet the requirements defined in IPC/EIA J-STD-001C for the indicated classification:
- a. CLASS 1 General Electronic Products
 - b. CLASS 2 Dedicated Service Electronic Products
 - c. CLASS 3 High Performance Electronic Products
- 27. WORKMANSHIP REQUIREMENTS FOR ELECTRICAL AND ELECTRONIC ASSEMBLIES:** The supplier shall maintain the requirements of standard IPC- A -610B, "Acceptability Requirements of Electronic Assemblies" for the indicated classification criteria:
- a. CLASS 1 General Electronic Products
 - b. CLASS 2 Dedicated Service Electronic Products
 - c. CLASS 3 High Performance Electronic Products
- 28. NO CHANGE CLAUSE:** Seller shall make no change in design, manufacturing or assembly processes or source of supply, after approval of the first production test item or after acceptance of the first completed end item, without the written approval of the buyer.

QUALITY PURCHASE REQUIREMENTS (cont'd)

- 29. QUALITY FLOW DOWN TO SUB-TIER SUPPLIERS:** The supplier's Quality System shall assure all relevant purchase order requirements are flowed-down to their sub-tier suppliers. The supplier's sub-tier suppliers are responsible to comply with the same specifications and requirements specified on this purchase order.
- 30. FOREIGN OBJECT ELIMINATION:** The material that is supplied on this purchase order shall be manufactured in an environment that is free of foreign objects. Material supplied shall be free of foreign objects. The intent of this quality note is not to necessarily change manufacturing processes but to maintain continual awareness of the need to eliminate foreign objects for all supplied material.
- 31. NON-CONFORMING MATERIAL:** Nonconforming material at the supplier's location shall not be shipped without written approval from the *GDRS* Procurement agent and Quality Manager. Requests for authorization to ship nonconforming material shall be addressed in writing to the *GDRS* Procurement agent. The Deviation Request form QF 4.2E, is the *GDRS* document used to obtain *GDRS*'s concurrence and approval.
- 32. SPECIAL REQUIRMENTS:** This order is issued under a United States Government Department of Defense prime contract or subcontract, and the regulations of the below identified clauses set forth in the Federal Acquisition Regulations (FAR) or DOD FAR Supplement (DFAR) in effect on the date of this order are incorporated herein by reference, it being understood that as used therein, the terms "Government" and "Contracting Officer" shall be deemed to mean buyer, "Contractor" seller, and "Contract" this purchase order or subcontract. The identified requirements also apply to the seller's sub-tier suppliers and sub-contractors.
- a. DFARS 252.225-7014 - Preference for Domestic Specialty Metals
 - b. DFARS 252.225-7014, Alternate 1 - Preference for Domestic Specialty Metals
 - c. DFARS 252.211-7003 - Item Identification and Valuation. (UID Labels)
 - d. DFARS 252.211-7006 - Radio Frequency Identification. (RFID)
- 33. RAW MATERIAL TEST SPECIMENS:** Items delivered under this order shall be accompanied by raw material test specimens. Specimens shall be submitted with the initial shipment from each lot or processing batch of items to be delivered under this order.
- 34. CERTIFIED PART QUALIFICATION:** A certified part is a product that has been qualified for a specific certified supplier, based on their proven capability to consistently provide the product at a high level of Quality. Certified parts may only be supplied by certified suppliers who have successfully passed the certification process. Certified suppliers are identified in Delttek. Incoming inspection of certified parts is not required; however the first lot of parts shipped require a first article inspection report documenting all specification characteristics with actual dimensions recorded. The report shall accompany the first lot shipped and be verified by *GDRS* incoming inspection. The supplier is responsible for using the *GDRS* supplied (DS) stamp on the cover of the report and on the packing list.