# WERLATONE

## STANDARD QUALITY ASSURANCE PROVISIONS FOR PURCHASED MATERIALS

Issued by: Quality Assurance

Eff. Date: 09/09/2016

Revision: C

QF-74-01-3

# 1. GOVERNMENT/CUSTOMER SOURCE INSPECTION:

- a. Government/Customer inspection is required prior to shipment from your plant. Upon receipt of this order, promptly notify the Government/Customer representative who normally services your plant so that appropriate planning for Government/Customer inspection can be accomplished.
- During performance on this order, your quality control or inspection system and manufacturing processes are subject to review, verification and analysis by authorized Government/Customer representatives.
  Government/Customer inspection or release of product prior to shipment is not required unless you are otherwise notified.
- c. Upon receipt of this order, promptly furnish a copy to the Government/Customer representative who normally services your plant, or, if none, or cannot be located, the Buyer shall be notified immediately. Government/Customer Inspection does not relieve Seller of contractual responsibilities to Buyer. Seller shall provide such facilities and assistance as may reasonably be required by the Buyer to assure product integrity.

# 2. QUALITY PROGRAM & INSPECTION SYSTEM REQUIREMENTS:

- a. Seller shall provide and maintain a Quality Control System acceptable to buyer. All supplies and services specified in the Purchase Order shall be subject to appropriate control of quality as necessary to assure compliance with referenced drawings and specifications. Records of all inspection, tests and other verifiable documentation of quality shall be kept complete and available for Buyer's review.
- b. MIL-I-45208 A "Inspection System Requirements".
- c. ISO-9001 Quality Management System Requirements or equivalent.
- d. AS9100 Quality Management System Requirements or equivalent.
- e. Seller shall provide such facilities and assistance as may reasonably be required by the Buyer's Quality Assurance representatives in the performance of their functions.

Buyer's Quality Assurance representatives may perform audits and maintain surveillance of Seller's facility to assure compliance with the Quality Program, and evaluate the degree of capability and the continuing application of such ability to comply with these requirements.

This function may also apply to sub-suppliers within Seller's cognizance.

- **3. CHANGE CONTROL:** Seller specifically agrees that no changes will be made in design, configuration, material, manufacturing process, testing method, or testing sequence, without the prior written approval of Buyer.
- **4. INSPECTION AND TEST PLAN**: Seller shall prepare an Inspection and Test Plan covering the material on this Purchase Order. The plan may be in any form appropriate to the circumstances but shall include, as a minimum, a description of the general and sequential controls in effect to maintain quality requirements throughout the manufacturing cycle. The plan shall be maintained under change control by Seller. Two (2) copies of the plan shall be submitted to Buyer for approval prior to the start of manufacturing.
- **5. PHYSICAL AND CHEMICAL ANALYSIS:** Each shipment of items defined in this purchase order shall be accompanied by the actual chemical and physical test report for each part number, serial number, lot, batch or heat, as applicable. Test reports shall reference Buyer's Purchase Order number, complete part number, including revision letter, nomenclature and specification number.
- **6. GEAR TEST DATA-(**Intentionally left blank).
- **7. RADIOGRAPHIC INSPECTION:** The material on this Purchase Order requires radiographic inspection by a laboratory certified to MIL-STD-453 and approved by Buyer and/or Customer. The radiographs and a copy of the laboratory X-Ray report shall accompany the material to Buyer's facility.
- **8. LOT TRACEABILITY:** All items on this order are subject to traceability at Seller's facility: which is defined as the ability to trace the history, application, use and location of an individual item or characteristic lot of items through the systematic assignment, recording and correlation of control identification numbers.

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**9. MERCURY EXCLUSION:** Seller shall submit a statement with each shipment of this purchase order that products furnished have not come in contact with or contain functional mercury in any form.

# 10. CERTIFIED INSPECTION/TEST DATA:

- a. Certified test data (or a true copy thereof) on stationery of the organization performing the test/testing shall be supplied with each shipment.
- b. A dimensional check sheet shall be furnished with each part submitted for inspection. All check sheets shall include the heat, batch, or lot number (as applicable) traceable to the raw material used, shall specify the characteristics inspected and shall indicate acceptance by Seller's Acceptance Stamp. Unless otherwise specified, recording of actual dimensions is not required. Whenever fixtures or tooling are used in lieu of inspection gages, fixture or tool numbers must be so referenced on the check sheet.
- c. Seller shall submit three (3) copies of proposed test procedure and data sheets to Buyer not less than 30 calendar days in advance of Seller's scheduled date for testing, to allow Buyer time to review and evaluate the proposed documents. One copy will be returned to Seller, either with a statement that the proposed methods and forms are approved by Buyer, or with a statement pointing out deficiencies. In the event of the latter, Seller shall re-submit his revised methods and forms for approval.
- d. Test data confirming that "100% Continuity check was performed." Shall be furnished with this shipment and shall indicate acceptance by Seller's Acceptance Stamp and date performed.
- e. Certified special mechanical testing and/or data(s) with each shipment.
- f. Crimp pull test required for cable assembly (AQL).
- g. 100% VSWR and Insertion Loss testing required on all RF cables.
- h. 100% Insulation Resistance and Hi-Pot testing required.
- **11. DOCUMENT AVAILABILITY:** A statement shall accompany each shipment which states that inspection records, test reports and/or other verifiable evidence of Quality, indicating conformance to all applicable specifications, are maintained at the point of manufacture and/or fabrication, and are available for review by authorized Buyer and/or Government/Customer representatives.
- **12. SPECIAL CERTIFICATIONS:** In additional to Certificate of Compliance (clause 13), Seller shall provide required certification(s) as applicable.
  - a. Material Certification
  - b. Special Processes Certification
  - c. Government QPL Source Certification
- **13. CERTIFICATE OF COMPLIANCE:** Seller shall submit with each shipment of material a signed (Signature of responsible party may be original or electronic) Certificate of Compliance, which certifies the following: "All material and/or services supplied are in conformance with the requirements of the purchase order. Test reports, inspection records, or other verifiable documentation of quality are maintained at the point of manufacture and are available for review by Buyer and/or Government/Customer representatives." Supplier must use their Company letterhead and own format.
  - a. Source Delegation Program applies to this part number.
- **14. AUTHORIZED DISTRIBUTOR OF GOVERNMENT/CUSTOMER INSPECTED STOCK:** Material shipped from an authorized distributor must be accompanied by a reproduced copy of the original shipping document bearing evidence of Government/Customer Source Inspection. Where reproduction is impractical, the distributor's shipping document shall be signed by a responsible official and contain this statement:
- 15. ANNUAL CERTIFICATION PROGRAM- (Intentionally left blank).
- 16. BUYER'S SOURCE INSPECTION



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QF-74-01-3

- a. At the option of Buyer, all items covered by this Purchase Order are subject to in-process and/or final inspection by Buyer's inspector at the point of manufacture. This will include surveillance of the products, and Seller's systems, procedures and facilities. Seller shall furnish at no cost to Buyer, the necessary facilities and equipment and perform tests as required by Buyer to demonstrate conformance to the Purchase Order and referenced documents. Buyer may arrange for source inspection during the manufacture or processing of the material on the Purchase Order. Seller shall notify Buyer in sufficient time to permit adequate inspection scheduling. When this option is exercised by Buyer, evidence of source inspection must accompany each shipment. Final acceptance shall be made by Buyer at destination, unless otherwise specified in the Purchase Order.
- b. Buyer Source inspection during the manufacturing and test/inspection cycles is required. Seller shall provide a manufacturing/inspection/test schedule to enable Buyer to provide source surveillance at the predetermined points.
- c. Buyer Source inspection is required on the final product.
- **17. NOTICE OF REJECTION:** Resubmittal of previously rejected supplies, including lots rejected on the basis of sampling inspection, shall be accompanied by the statement "Resubmittal Lot" on Seller's shipping document and shall reference Buyer's rejection report number. Such resubmittal shall be made on a separate Seller shipping document.
- **18. INSPECTION AND/OR PRODUCTION TOOLING:** Seller is held responsible for the control, protection, calibration and care (other than normal wear) of all production and inspection tooling and equipment furnished by Buyer for use in performance of Purchase order requirements. All tooling shall be subject to Buyer surveillance and/or inspection upon notice. Said tooling, or replacement tooling of equal quality, shall be returned to Buyer in an acceptable condition upon demand or notice.

## 19. FIRST ARTICLE INSPECTION, REPORT & APPROVAL

- a. A First Article inspection shall be performed by Seller prior to submittal of material on this Purchase Order. A detailed report of inspection results and the article inspected shall be submitted to Buyer. The First Article report shall include, as a minimum, results of dimensional measurements, and when applicable, results of mechanical test, functional tests and non-destructive tests. Buyer's representative may witness the First Article inspection. At least 48 hours in advance of such inspection, Seller shall advise Buyer for scheduling of Source Inspection.
- b. Seller shall furnish Buyer with a First Article of the items required under the Purchase Order.
- c. Seller shall obtain acceptance of the First Article from Buyer prior to the manufacture or fabrication of any production units.
- d. First Article Inspection required for each production lot(s), FAI format to be determined by Seller. Verification of First Article inspection results of acceptance of the First Article Sample does not constitute acceptance of any other item, nor relieve Seller of his obligation to furnish items which conform to all requirements of the Purchase order.
- **20. WORKMANSHIP STANDARDS:** The supplies on this Purchase Order are subject to workmanship specification requirements. In case of a conflict between Buyer and Government drawings and/or specifications. Buyers drawings and/or specifications shall govern.

# **21. IDENTIFICATION:**

a. Seller shall legibly and permanently identify each part, assembly and material in the methods, and with the information, prescribed by the detail document. For example: purchase order number, gage or tool number, cure date (for limited shelf life items), Buyer part number, etc., as required. Parts assemblies and materials not having sufficient space for, or which could be damaged by marking, shall be identified by a tag attached to the part or container.



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Eff. Date: 09/09/2016

Revision: C

QF-74-01-3

- b. Rubber cures date (cure date required). Seller's shipper and/or packing sheet must specify curing date. Packages and containers (and parts when required by blue print call out) must be marked with curing date and referenced Military Specifications therein, as applicable. Cure date age at time of receipt by Buyer shall not exceed four quarters. Rubber and/or synthetic material or parts not having sufficient space for marking, will be identified by a tag, bearing the cure date and attached to the part or part container.
- c. Materials with a limited shelf life shall reflect the Manufacturing (cure Date), and Expiration Date on the container (e.g., epoxies, paint, etc.). A minimum of 85% of shelf life must remain upon receipt at Buyers facility.
- **22. PACKING & PACKAGING REQUIREMENTS:** Seller shall assure that the supplies on the Purchase Order are packed and packaged using materials of a grade, size, and weight which will .provide adequate physical protection from damage and contamination during handling and transport to the point of delivery. When required by the Purchase Order and/or referenced documents, Seller shall pack and package supplies to specific packing and packaging specifications. Sellers of bare printed circuit boards shall package individual boards with package containing desiccant and humidity indicator. IAW MIL-STD-2073-1D paragraph 5.2.3.7 'unit packs of ail these methods shall include a humidity indictor. And 5.2.3.7 a 'the bagged; activated desiccant shall conform to MIL-D-3464. Type I shall be used unless Type II or III is specified or required because of special characteristics of the item.
- **23. NONCONFORMING MATERIAL:** Seller is not granted MRB authority. All requests for use of nonconforming material shall be submitted to buyer.
- **24. ELECTROSTATIC DISCHARGE (ESD):** Any sensitive devices subject to damage from electrostatic discharge shall be handled and packaged to provide protection from ESD damage. Only conductive non-static materials shall be used in packaging for shipment Ail packaging must be clearly marked as containing ESD sensitive devices.

# 25. PRINTED CIRCUIT BOARD TEST REQUIREMENTS:

- a. Net-list electrical test. Seller shall perform an electrical test using 'net-list' information supplied with Werlatone design files or by the Werlatone Engineering Department (IPC-356 file, other formats available if needed). Add statement to COC stating that "Net-List Testing Has Been Performed." NOTE: Comparison testing or self-programmed testing is not an acceptable substitute for net-list testing.
- b. Electrical test using comparison testing or self-programming: Add statement to COC that "Comparison (or Self-Programming) Testing Has Been Performed."
- c. Seller shall assure and certify the PCB on this purchase order has been manufactured in accordance with IPC-A-600, Acceptability of Printed Boards, latest revision.
- d. Microsection reports required with each shipment of a new lot, in accordance with IPC-6018, current revision and IPC-TM-650 method 2.1.1
- e. Delamination testing per be IPC-TM-650

# **26. SUPPLIER NOTIFICATION OF CHANGE:**

a. Supplier shall notify Werlatone 30 days in advance when there is a change in the company name, location, executive management, product and or commodities or whenever a change directly affects quality. In the event there is an interim manager in place, notification of delegation is required within 2 weeks upon such placement. Re-notification is required within 2 weeks when an interim post is replaced by a permanent position

## **27. CALIBRATION:**

The contractor's calibration system must comply with ANSI/NCSL Z540-1, of Mil-STD-45662. All certifications will state as a minimum, that all standards used are traceable to the National Institute of Standards and Technology, date of calibration, date of expiration, list of standards used, and the technicians signature.



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QF-74-01-3

## 28. INSPECTION AND/OR PRODUCTION TOOLING:

a. Seller is responsible for the protection, calibration and care other than normal wear, of all Production and/or Inspection tooling furnished by Werlatone for use in the performance of purchase order requirements. All tooling shall be subject to surveillance and/or inspection upon notice. Said tooling, or replacement tooling of equal quality, shall be returned in an acceptable condition upon demand or notice.

## 29. MATERIAL SAFETY DATA SHEETS REQUIRED:

Material Safety Data Sheets are required for the product identified on this line of the Purchase Order. Please include these sheets in an envelope that is identified on the outside as the M.S.D.S. sheets with the Packing List

# **30. LEAD FREE PRODUCT:**

By accepting this purchase order, you certify the product or service you supply to Werlatone is free from lead contamination. If lead is a component of your processes, please contact the Werlatone buyer for direction.

## **31.COUNTERFEIT MATERIAL AVOIDANCE:**

# **Definitions:**

Unless defined in a document with a higher order of precedence than this Quality provision the following definitions shall apply herein:

- a. "Counterfeit Item" is defined to include, but is not limited to, (i) an item that is an illegal or unauthorized copy or substitute of an Original Equipment Manufacturer ("OEM") or Original Component Manufacturer ("OCM") item; (ii) an item that does not contain the proper external or internal materials or components required by the OEM or OCM or that is not constructed in accordance with OEM or OCM design, but is represented as such; (iii) an item or component thereof that is used, refurbished or reclaimed but the Seller represents as being a new item; (iv) an item that has not successfully passed all OEM or OCM required testing, verification, screening and quality control but that Seller represents as having met or passed such requirements; or (v) an item with a label or other marking intended, or reasonably likely, to mislead a reasonable person into believing a non-OEM or OCM item is a genuine OEM or OCM item when it is not.
- b. "Authorized Distributor" is defined as a distributor with which the OM has a contractual agreement to stock, repackage, sell and distribute its product lines. Authorized Distributors normally offer the product for sale with full manufacturer flow-through warranty.

**Seller's Risk Mitigation** Seller shall maintain a Counterfeit Item risk mitigation process internally and with its suppliers.

Seller shall immediately notify Werlatone with the pertinent facts if Seller becomes aware or suspects that items delivered in accordance with the Werlatone purchase order are or contain suspect or confirmed counterfeit items.

When requested by Werlatone, Seller shall provide OCM/OEM documentation that authenticates traceability of the affected items to the applicable OCM/OEM.

Seller shall provide evidence of the Sellers risk mitigation process to the Werlatone Buyer upon request.

Seller shall purchase material directly from OEMs or OCMs or from Authorized Distributors of OEMs or OCMs and shall obtain approval from the Werlatone Buyer if items required to satisfy this order cannot be procured from these sources.

Seller shall present complete and compelling support for any request to procure from sources other than OEMs or OCMs or their Authorized Distributors and include in the request all actions completed to ensure the parts thus procured are not Counterfeit Items. The Seller's supporting documentation shall also include:

- Results of authentication test and analysis conducted.
- Traceability with identification of all supply chain intermediaries wherever such traceability exists.



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Revision: C

QF-74-01-3

- Identification of and traceability to the source for any remarked or resurfaced material.

Seller is not authorized to deliver any item procured from sources other than OEMs or OCMs, or their Authorized Distributors without prior written authorization from the Werlatone Buyer.

- The seller shall segregate and provide traceability identifiers (i.e. Date Code / Lot Code., Serial number) for all items delivered to Werlatone which contain an item procured from sources other than OEM"s or OCM"s or their Authorized Distributors.

Seller shall flow down to, and ensure compliance with the requirements of this Q-Note by, lower tier suppliers providing items for delivery to Werlatone under this order.