VerTechs Enterprises, Inc. 10051 Old Grove Rd. San Diego, CA 92131 1-858-578-3900

July 5, 2007 Rev. NC

# Suppliers Quality Requirements Quality Standards To VerTechs Enterprises, Inc.

SQR 9001 VERTECHS ENTERPRISES, INC. SUPPLIER QUALITY STANDARD

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Approved by: Howard Hawver Quality Manager

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#### FORWARD

VerTechs Enterprises, Inc. operates in a highly competitive environment. It is essential that we continue to enhance our high standards of excellence by providing products and services, which meet the expectations and requirements of our customers.

To enable us to achieve our customer expectations, it is fundamental for VerTechs Enterprises, Inc. to develop a common set of values and objectives with our suppliers.

SQR - 9001 indicates the systems and requirements, which must be met in order to supply goods and/or services to VerTechs Enterprises, Inc. This document has the requirements needed to be flowed down per customer requirements and AS 9100:2004 and ISO 9001:2000.

At the same time, we are fully committed to the philosophy of Total Quality Management (TQM) and seek to encourage relationships so that continuous improvements may be pursued to our mutual benefit.

## INTRODUCTION

This document, SQR - 9001, contains the mandatory contractual requirements for the maintenance of a quality system by a supplier of products and/or services to VerTechs Enterprises, Inc.

## 1. General

- 1.1. If a purchase order defines requirements that are different from those in SQR 9001, the purchase order requirements shall prevail.
- 1.2. Supplier shall possess written approval of its quality systems from VerTechs Enterprises, Inc. Quality Assurance prior to performing any work for VerTechs Enterprises, Inc. The supplier shall conduct work only within the scope of the written approval.
- 1.3. Where the words "approval", "agreement" or "delegated" appear in SQR 9001, such approval, agreement or delegation shall be in writing.
- 1.4. Any approval by VerTechs Enterprises, Inc. of drawings, systems, methods or documentation produced by the supplier shall not relieve the supplier of any obligations under the particular purchase order.

# 2. Supplier Management Responsibility is to:

- 2.1. Define and document its quality systems procedures.
- 2.2. Insure that these procedures are understood and implemented throughout the supplier's organization.
- 2.3. At scheduled intervals, senior management must evaluate and approve its quality systems procedures for effectiveness and conformance to requirements.
- 2.4. Maintain records of management quality systems procedures reviews.
- 2.5. Appoint a management representative who has defined authority and responsibility to insure that the requirements of this standard, SQR 9001, are implemented and maintained. The appointed representative shall have the authority and responsibility to:
  - 2.5.1. Identify and record product quality trends and problems
  - 2.5.2. Initiate and verify implementation of solutions to correct quality problems
  - 2.5.3. Control further processing of non-conforming product until the deficiency has been corrected.
  - 2.5.4. Notify VerTechs Enterprises, Inc. of changes within supplier's systems that affect quality.
  - 2.5.5. Have direct access to supplier's senior management to correct quality problems.
- 2.6. Notify, in writing to the signatory of the latest VerTechs Enterprises, Inc. approval letter, of any change to the nominated management representative responsible for quality, significant change in suppliers organization or change in site or ownership.
- 2.7. Demonstrate, to the satisfaction of VerTechs Enterprises, Inc. that supplier staff are sufficiently experienced, suitably trained, have the appropriate authority and possess the appropriate attributes and qualifications to properly service the VerTechs Enterprises, Inc. purchase order.
- 2.8. Ensure that only products and services conforming to VerTechs Enterprises, Inc.' purchase order requirements are provided to VerTechs Enterprises, Inc.

#### 3. Purchase Order Review

- 3.1. Each VerTechs Enterprises, Inc. purchase order shall be reviewed per established procedures by the supplier's quality representative to insure that the requirements are adequately defined and can be met.
- 3.2. The purchase order shall be completely reviewed with considerations given to:
  - 3.2.1. Obtaining all documentation as specified by the order, it is the supplier's responsibility to obtain the documentation required by the order. Requests should be directed to VerTechs Enterprises, Inc. Purchasing Department
  - 3.2.2. Providing the necessary skill, tooling and inspection equipment required to fulfill the contract. The review will identify any controls, processes, inspection equipment and techniques required to assure product quality.
  - 3.2.3. Taking exception to those requirements where the supplier does not have the capability to meet contractual requirements. Contract exceptions shall be submitted to VerTechs Enterprises, Inc. in writing. It is the supplier's responsibility to obtain from VerTechs Enterprises, Inc. an amendment to the purchase order incorporating the requested exception.
- 3.3. The VerTechs Enterprises, Inc. purchase order takes precedence in the event of a conflict in requirements.

#### 4. Document Control

- 4.1. The supplier shall establish and maintain procedures to control all documents that relate to the VerTechs Enterprises, Inc. Purchase Order.
- 4.2. The supplier shall insure that the latest applicable issues of appropriate documents are available at locations where operations essential to the manufacture of the product or process are performed.
- 4.3. The supplier's system shall insure that obsolete documents are promptly removed from all points of issue or use.
- 4.4. The supplier is responsible for obtaining copies and revisions of referenced and required Government and Industry Standards through a source other than VerTechs Enterprises, Inc.
- 4.5. The supplier shall ensure that applicable documents are provided to there sub contractors also.
- 4.6. The supplier shall maintain a document change control system, which includes provisions for initiation, review and approval of changes to work instructions.
  - 4.6.1. Where practical, the nature of the change shall be identified in the document of the appropriate attachments.

#### 5. Procurement

- 5.1. Requirements
  - 5.1.1. When contractually required, materials furnished or processing performed shall be from VerTechs Enterprises, Inc. approved sources only. The supplier must procure materials and/or services from those sources specified by the VerTechs Enterprises, Inc. purchase order.
  - 5.1.2. The supplier must have a documented system to ensure that all subcontractors are evaluated periodically, in addition to the receiving inspection function, for compliance with drawing, specification, and quality requirements. Requirements for these evaluations may be based on quality history records, complexity, and quantity of the items purchased.
  - 5.1.3. The supplier is responsible to flow down the applicable purchase order requirements and amendments to their sub-contractors. The purchasing document to the supplier's sub-contractors shall contain a clear and complete description of the material and/or services ordered with adequate instructions for insuring the flow-down of the applicable requirements.

- 5.1.4. The purchase order to the supplier's sub-contractors shall be reviewed and approved by the supplier's appointed quality representative or designate prior to release.
- 5.1.5. No substitution of material specification, size or arty other attribute will be allowed except by the amendment of the VerTechs Enterprises, Inc. purchase order. All materials shall be those furnished or specified by VerTechs Enterprises, Inc.
  - 5.1.5.1. When material is furnished by VerTechs Enterprises, Inc. the supplier shall maintain a documented system for inspection, protection and control of this material. Furnished material found damaged, malfunctioning or otherwise unsuitable for use shall be reported to VerTechs Enterprises, Inc.

# 6. Material Control/Storage/Traceability

- 6.1. The supplier shall document and maintain a system of material control storage and identification.
- 6.2. This system shall ensure that only conforming material is released for fabrication and that identification and traceability requirements are maintained.
- 6.3. Material controls shall be adequate to prevent material damage, loss of Identity intermingling and quality degradation throughout all phases of storage, manufacturing, inspection and transportation.
- 6.4. In the event, the hardware produced is an assembly/sub-assembly part/serial numbers and heat numbers of each component shall be documented. In the case of multiple part travelers (i.e., one traveler for 21 parts), each part must be serialized where applicable. All hardware must be traceable back to its material heat lot Records of traceability shall be maintained by the supplier as part of the objective evidence of quality control and acceptability.

# 7. Manufacturing/Inspection Controls

- 7.1. The supplier shall document and maintain procedures for the control of it's manufacturing processes arid shall provide:
  - 7.1.1.Documented instructions, duly authorized by approved personnel, for performing each manufacturing, assembly, processing or inspection operation. The instructions shall be adequate with respect to the complexity of the operation and may be defined on the supplier's traveler, job routing card, work instructions or blueprint.
  - 7.1.2. The supplier shall review manufacturing instructions prior to implementation to establish appropriate inspection points. Evidence of review shall be documented.

#### 7.2. Receiving Inspection

7.2.1.The supplier shall insure that incoming product is not used until it has been inspected or otherwise verified as conforming to purchase order requirements. Verification shall be in accordance with documented procedures.

#### 7.3. In Process Inspection

7.3.1. The supplier shall inspect and identify the product as required by the quality plan or documented procedures.

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#### 7.4. Final Inspection

- 7.4.1. The supplier shall carry out all final inspection per the quality plan or documented procedures to complete the evidence of conformance of the finished product to specified requirements.
- 7.4.2. The quality plait or documented procedures for final inspection shall require that all specified inspections, including those either on receipt of product or in-process has been carried out and that the inspection data meets specified requirements.
- 7.4.3. No product shall be shipped to VerTechs Enterprises, Inc. until all the activities specified in the documented procedures and the associated data have been satisfactorily completed.
  - 7.4.3.1. Records of inspection shall indicate the number of observations made, the number and type of observations made, the number and type of deficiencies found, and the quantities approved or rejected.
  - 7.4.3.2. Supplier shall include a certification of conformance with each shipmen as applicable, the certification shall identify the following Supplier's name and address, VerTechs Enterprises, Inc. purchase order number, supplier packing list or invoice number, part number, quantity shipped, operation/drawing number and revision level, serial and/or heat lot number, material or process specification and revision level Supplier must also provide certification information for any sub-contractors used, including material sources

#### 8. Inspection, Measuring and Test Equipment (IM & TE)

- 8.1. The supplier shall control, calibrate and maintain IM & TE, whether owned by the supplier or its employees, on loan or provided by the purchaser, to demonstrate the conformance of product to the specified requirements.
- 8.2. TM & TE and measurement standards shall be calibrated in an environment controlled to the extent necessary to assure continued measurements of required accuracy giving due consideration to temperature, humidity, vibration, cleanliness or other factories affecting precision equipment. IM & TE shall be properly handled, stored and transported to assure that accuracy and fitness for use is maintained.
- 8.3. The supplier shall identify, calibrate and adjust all IM & TE that can affect product quality at prescribed intervals, or prior to use, against certified equipment traceable to the National Institute of Standards and Technology (NIST).
- 8.4. IM & it shall be calibrated at periodic intervals established on the basis of stability, purpose, degree of usage and previous calibration results.
- 8.5. Supplier shall establish a recall system for the mandatory recall of measurement standards and liv & it within established time limits or interval frequencies.
- 8.6. The calibration due date, date of last calibration and identity of the person who performed the calibration shall be displayed on each item of IM& TE together with sufficient identification to provide traceability to calibration records. When size of equipment or other characteristics limit display of calibration information, suitable procedures shall be employed to assure adherence to calibration schedules (i.e., stickers, color-coded dots, etc.).
- 8.7. Written procedures shall be used for the calibration of all IM & TE. As a minimum, calibration procedures shall specify the measurement standards to be used, the required parameter, range and accuracy of the measurement standard and the acceptable tolerance of each characteristic being calibrated. Accuracy levels of standards must be higher than the accuracy level of the equipment being calibrated.
- 8.8. Tamper-resistant seals shall be affixed to operator accessible controls or adjustments on IM & TE, which, if moved, will affect the calibration.

- 8.9. Supplier's calibration system shall provide for notification to the respective used of any IM & TE found to be significantly out-of-tolerance during calibration. IM & TE it shall be considered significantly out-of-tolerance when the condition could adversely affect product quality or measurement integrity.
  - 8.9.1.In the event of out-of-tolerance equipment being detected, components previously inspected with this equipment will be reassessed to establish true inspection status, up to a point where confidence is regained whether by previous calibration or 100% conforming components.
- 8.10. Where hardware (i.e., jigs, fixtures, templates, patterns) are issued as suitable forms of inspection, they shall be checked to prove that they are capable of verifying the acceptability of the product prior to release and shall be rechecked at prescribed intervals. The supplier shall establish the extent and frequency of such checks and shall maintain records as evidence of control. Measurement design data shall be made available, when required by VerTechs Enterprises, Inc. for verification that it is functionally adequate.
- 8.11. Where the supplier sub-contracts part or all of their calibration services, the supplier shall ensure that the calibration sub-contractor complies with ISO 10012-1, or internationally recognized equivalent. (Sub-contracting calibration services does not negate the requirement for supplier to document and maintain a calibration system).
- 8.12. The requirements of this standard shall be supported by records documenting that established schedules and procedures are followed to maintain the accuracy of all IM & TE and measurement standards.

#### 9. Inspection Status

- 9.1. The supplier shall document and maintain a system for identifying the inspection status of all products throughout the procurement, storage, processing, fabrication, and inspection, packaging and shipping operations.
  - 9.1.1.Inspections status shall be signified formally by traceable stamp and/or signature.
  - 9.1.2. If the inspection status is unknown, the product shall be stopped until status Is determined.
- 9.2. Inspection stamps used by the supplier shall identify the individual inspector.
- 9.3. Supplier's stamp design shall be such that identification of accept and reject is readily ascertainable.
- 9.4. An internal register of inspection stamps issued shall be maintained by the supplier.
- 9.5. A stamp bond period shall be specified for terminated personnel, lost or damaged stamps.

#### 10. Control of Non-Conforming Material

- 10.1. The supplier shall establish and maintain procedures to ensure that products not conforming to specified requirements are prevented from inadvertent use. Control shall provide for identification, documentation, evaluation, segregation (when practical), disposition of non-conforming product and notification to the functions concerned.
- 10.2. The supplier shall maintain a system to document non-conformance, investigate and determine root cause, initiate corrective action and follow-up in order to prevent recurring non-conformance's. Any non-conformance's to the purchase order or drawing requirements must be documented in detail on VerTechs Enterprises, Inc. Non-Conforming Material Report (Form No.: P-83-01.1 #1, NMR). Disposition of non-conformance must have formal approval by VerTechs Enterprises, Inc. Engineering and/or Quality. Nonconforming Material shall not be shipped to VerTechs Enterprises, Inc. until it is dispositioned on an NMR. The supplier is liable for any cost occurred by VerTechs Enterprises, Inc. due to rework/repair of nonconforming hardware.

- 10.3. If rework or repair is authorized, the work done must be adequately inspected to ensure the rework/repair was successful and that no other characteristics were adversely affected.
- 10.4. The supplier shall inform VerTechs Enterprises, Inc. immediately where there is reason to suspect that product previously supplied to VerTechs Enterprises, Inc. may not be in accordance with the purchase orders requirements.
- 10.5. When the supplier has been informed by VerTechs Enterprises, Inc. of non-conforming product found after deliver, not previously covered by paragraph 10.2, the supplier shall take remedial action to prevent delivery of further non-conforming product and inform VerTechs Enterprises, Inc. of corrective action in writing.

# 11. Corrective / Preventive Action

The supplier shall establish, document and maintain procedures for the following:

- 11.1. Investigating the cause of nonconforming product(s) and the corrective action needed to prevent recurrence, as well as correct possible nonconforming products already assembled or fabricated.
- 11.2. Initiating preventive actions to deal with problems to a level corresponding to the risks encountered.
- 11.3. Applying controls to ensure that corrective actions are implemented with the affectivity date clearly noted.
- 11.4. Ensuring that subcontractor generated non-conformances and associated corrective actions are adequately addressed.

#### 12. Handling, Storage, Packaging and Delivery

- 12.1. The supplier shall establish, document and maintain procedures for handling, storing, packaging and transportation of the product. Special packaging and marking provisions shall be complied with as required by VerTechs Enterprises, Inc.
- 12.2. Handling The supplier shall provide methods and means of handling to prevent damage or deterioration,
- 12.3. Storage The supplier shall provide secure storage areas or stock rooms to prevent damage or deterioration of the product, pending use or delivery. Appropriate methods for authorizing receipt and the shipment to and from such areas shall be stipulated.
- 12.4. Packaging The supplier shall, control packing, preservation and marking processes (including materials used) to the extent necessary to ensure conformance to specified requirements and shall identify, preserve and segregate all product from the time of receipt until the supplier's responsibility ceases.
- 12.5. Delivery The supplier shall arrange for the protection of the quality of the product after final inspection. This protection shall be extended to include delivery to destination. All product delivered in connection with VerTechs Enterprises, Inc. shall be correctly identified and addressed by the supplier as directed by the purchase order and/or applicable drawing.

#### 13. Internal Quality Assessments, (Audits)

- 13.1. The supplier shall carry out a system of planned and documented internal quality assessments to determine the effectiveness of the quality system.
- 13.2. Assessments shall be scheduled on the basis of the status and importance of the activity. Assessments shall be conducted in accordance with documented procedures.
- 13.3. The results of the assessments shall be documented and brought to the attention of the personnel having responsibility in the area assessed. The management personnel responsible for the area shall take timely corrective action on the deficiencies found by the assessment.

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#### 14. Statistical Techniques

- 14.1. Where appropriate, the supplier shall establish procedures for identifying adequate statistical techniques required for verifying the acceptability of process capability and product characteristics.
- 14.2. 100% inspection shall be performed unless reduced inspection through statistical techniques has been approved in writing by VerTechs Enterprises, Inc.
- 14.3. When less than 100% inspection is used, written inspection instructions shall include adequate description of the sampling plans, frequencies, acceptance levels, etc. Written instructions must also contain provisions for tightened and reduced sampling plans based on inspection results.

#### 15. Software Quality Assurance

- 15.1. If software is involved in the performance of work for VerTechs Enterprises, Inc. the supplier shall document procedures for the development verification and control of computer software used in conjunction with measuring and test equipment for product acceptance or controlling manufacturing processes. Supplier's procedures shall comply with DOD-STD 2168 Software Quality Program Requirements.
- 15.2. Supplier's procedures shall provide for the following:
  - a. Programs and related documents are under revision control.
  - b. Revisions are approved prior to incorporation.
  - c. Master media are archived arid controlled.
  - d. Controls are in place to prevent inadvertent/unauthorized changes

# 16. VerTechs Enterprises, Inc. Owned Tooling

- 16.1. Tooling includes all manufacturing and inspection jigs, fixtures, gauges and any special cutting tools funded/supplied by VerTechs Enterprises, Inc. or its customers. The supplier shall be responsible for:
  - 16.1.1. Marking the VerTechs Enterprises, Inc. or customer tool number on tools funded by VerTechs Enterprises, Inc. or its customer.
  - 16.1.2. Storing tools to prevent deterioration.
  - 16.1.3. Maintaining all tooling in a serviceable condition.
  - 16.1.4. Keeping an up-to-date record of all VerTechs Enterprises, Inc. and customer owned tooling held by the supplier or loaned by the supplier to their sub-contractor(s), and any authorized modifications carried out on those tools.
  - 16.1.5. Returning all VerTechs Enterprises, Inc. and customer owned tooling in the event of purchase order completion or of the supplier losing VerTechs Enterprises, Inc. approval status and retrieving such tooling from sub-contractor(s) in similar circumstances.
  - 16.1.6. Calibrating tooling within the prescribed time periods and maintaining the related calibration records.
  - 16.1.7. Not using tooling If the tooling is not inspected and permanently identified or stamped by VerTechs Enterprises, Inc. tooling inspector.
  - 16.1.8. If functional testing must be conducted by the supplier using VerTechs Enterprises, Inc. tooling, Inspection results must be recorded and approved by VerTechs Enterprises, Inc. prior to production of components.

# 17. Access

17.1. The supplier shall permit "Right of Access" into the supplier's premises by VerTechs Enterprises, Inc. its customers and/or regulatory authorities. Access is required by these parties to verify compliance with system procedures and conformance of product and services with purchase order requirements. The supplier shall likewise make provision for right of access of these parties with its sub-contractors. A supplier representative familiar with the supplier's operation and systems shall be provided to assist VerTechs Enterprises, Inc. as needed.

# 18. Authority of VerTechs Enterprises, Inc. Representative

VerTechs Enterprises, Inc. representatives shall be entitled to:

- 18.1. Conduct surveys, periodic over-checks, technical surveillance or assessments on supplier's quality systems, products and services including Engineering, Manufacturing and Inspection systems, material, controls and supporting facilities.
- 18.2. Verify all manufacturing inspection gigs, gauges and fixtures manufactured or held by the supplier for suitability of purpose.
- 18.3. Require corrective actions if defects are revealed in the supplier's products or systems.
- 18.4. Have access to documentation and records.

#### 19. Quality Records

- 19.1. The supplier shall establish procedures for identifying, collecting, indexing filing, storing, maintaining and dispositioning of quality records,
- 19.2. Quality records shall be maintained to demonstrate achievement of the required quality and the effective operation of the quality system. Pertinent subcontractor quality records shall be an element of these data. These records shall be retained for the period specified by the VerTechs Enterprises, Inc. purchase order.
- 19.3. All quality records shall be legible and identifiable to the product involved. Quality Records shall be stored and maintained in such a way that they are readily retrievable in facilities that provide a suitable environment to minimize deterioration or damage arid to prevent loss. Retention times of quality records shall be recorded. Quality records shall be made available for evaluation by VerTechs Enterprises, Inc. or representative upon request.
- 19.4. Upon request, the supplier shall transfer all records of product delivered against a VerTechs Enterprises, Inc. purchase order to VerTechs Enterprises, Inc. in the event that SQR 9001 approval is withdrawn.