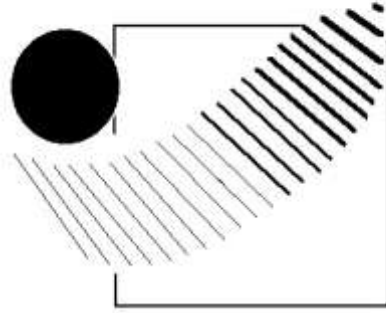


EXCELSIOR, INC.



EXCELSIOR, INC. PROCUREMENT QUALITY ASSURANCE

SUPPLIER QUALITY REQUIREMENTS

Document Number: PQA 001
Revision: 10/21/2009
Prepared by: Frank Teleso

APPROVED BY:

A handwritten signature in black ink that reads "John D. Bailey".

John D. Bailey
Director of Aerospace

1.0 SCOPE

This document defines the quality system requirements to be met by suppliers intending to provide goods or services to Excelsior, Inc.

Excelsior, Inc. and its customers, including government/regulatory agencies, shall have the right of entry into a supplier's facility or that of their subcontractors, access to quality records, quality system documentation, and the right to verify product and conduct audits.

2.0 APPLICABILITY

The requirements specified herein shall apply when referenced on the Excelsior, Inc. purchase order. Additional requirements per ASQR-01 are invoked, including any specific requirements listed in the note section on the associated engineering drawing, when the Excelsior, Inc. purchase order contains the statement "*UTC member end use*".

3.0 REQUIREMENTS

3.1 MANAGEMENT RESPONSIBILITIES

The supplier's management with executive responsibility shall define and document its policy and its commitment to quality. The quality policy shall be relevant to the supplier's organizational goals and the expectations and needs of the customers.

3.2 QUALITY SYSTEM

The supplier shall establish, document, and maintain a quality system compliant to PQA-001 as a means of ensuring that product conforms to specified requirements.

3.3 CONTRACT REVIEW

The supplier shall establish and maintain documented procedures for contract review and for the coordination of these activities.

3.4 DOCUMENT AND DATA CONTROL

The supplier shall establish and maintain documented procedures to control all documents and data that relate to the requirements of this standard, including (to the extent applicable) any documents of external origin such as standards and customer drawings. Documents that contain proprietary information shall be safeguarded by those efforts used, by the supplier, in the protection of its own proprietary information to prevent its disclosure to or use by third parties.

Excelsior, Inc. requires traceability of all products purchased. Rubber products require a batch/lot number and cure date, all other products require a minimum of lot numbers, and, if applicable, date of manufacture. Documentation records are to be maintained by the supplier for a minimum of:

- 10 years for all products except aftermarket and off-the-shelf/ Industry parts
- 7 years for catalog off-the-shelf product and industry standard products

A Certificate of Conformance with positive traceability is required with all product shipped to Excelsior, Inc. Product will not be accepted, unless this requirement has been met.

3.5 PURCHASED OUT

The supplier shall establish and maintain documented procedures to ensure that product conforms to specified requirements.

Suppliers may provide source-controlled and specification-controlled materials and hardware from sources defined by the Excelsior, Inc. purchase order.

3.6 PRODUCT IDENTIFICATION AND TRACEABILITY

Where appropriate, the supplier shall establish and maintain documented procedures for identifying the product by suitable means from receipt and during all stages of production and delivery.

Where, and to the extent that, traceability is a specified requirement, the supplier shall establish and maintain documented procedures for unique identification of individual product or batches. This identification shall be recorded.

3.6.1 SYNTHETIC RUBBER

Each order must have a certification of conformance containing compound number, compound cure date, batch/lot number, and, if applicable, the manufacturer's identification number; this documentation must be supplied with each shipment to Excelsior, Inc.

3.6.2 AGE- AND TEMPERATURE-SENSITIVE MATERIALS

Material supplied will be to the applicable standards or specifications specified on the purchase order. Each order must have a C of C containing the compound number, lot and/or date codes, and date of manufacture, and, if applicable, the manufacturer's identification number. Compound cure date and batch number must be certified to the applicable document and supplied with each shipment to Excelsior, Inc. The certification shall specify special notations (e.g. "Keep frozen until ready to use", "Store at 40 degrees F", "Expedite upon receipt", etc.) as applicable.

3.7 PROCESS CONTROL

The supplier shall identify and plan the production, installation, and servicing processes which directly affect quality, and shall ensure that these processes are carried out under controlled conditions. The supplier shall notify the organization of changes in product and/or process definition, and, where required, obtain organization approval.

3.8 INSPECTION AND TESTING

The supplier shall establish and maintain documented procedures for inspection and testing activities in order to verify that the specified requirements for the product are met. The required inspection and testing, and the records to be established, shall be detailed in the quality plan or documented procedures.

3.8.1 MATERIAL CONTROL

When a supplier furnishes the material for Excelsior, Inc. purchase orders, the inspection system must control the following:

1. Review material physical and/or chemical properties as applicable to assure compliance with specified requirements.
2. Maintain material certifications that define manufacturing source, batch/lot numbers, chemical and physical properties.
3. Identify material during receipt.
4. Maintain a material storage area so that certified and uncertified material cannot be mixed.
5. Ensure that material is issued only by authorized personnel.

Final verification of the product to Excelsior, Inc. purchase order, including revision level; when part revision is not specified the current revision must be used.

3.8.2 MATERIAL CERTIFICATION

All Certifications (i.e. Cert. of Conformance, Cert. of Analysis, Test Reports, etc.) shall include applicable traceability information (e.g. Material Description, Lot #, Batch #, Cure Date, DOM, etc.), and be a positive statement of compliance.

3.8.3 WORKMANSHIP

Supplier workmanship shall be of a consistently high quality level and in accordance with any detail specification applicable to marking of parts and assemblies, cleanliness of articles, or machine operations. Parts shall be free from any damage, corrosion, contamination, or defect that could make the part (or equipment) unsatisfactory for the purpose intended.

3.9 FIRST PIECE INSPECTION

A first piece inspection is required if the applicable part number has not been manufactured at your facility previously and/or if there has been a two-year lapse in production. Aerospace product shall have first piece inspection requirements compliant with AS9102; all other first piece inspection requirements are as follows:

- 3.9.1 A data sheet which lists all drawing notes, characteristics, variables data, non-conformance numbers, and evidence of compliance to each item; as well as a ballooned drawing which shows reference to variables data.
- 3.9.2 The first piece sample must be segregated, labeled and/or tagged to clearly identify it, and included with the rest of the lot.
- 3.9.3 The supplier must maintain a copy of the original first piece inspection, and make these documents available to Excelsior, Inc. on request.
- 3.9.4 The supplier shall use the (C=0) sampling inspection plan as a means of product acceptance.
- 3.9.5 The supplier shall maintain documented procedures to control, calibrate, and maintain inspection, measuring, and test equipment used by the supplier to demonstrate the conformance of the product to the specified requirements.

Where the availability of technical data pertaining to the measurement equipment is a specified requirement, such data shall be made available, when required by Excelsior or its customer, for verification that the measuring equipment is functionally adequate.

3.10 CONTROL OF INSPECTION, MEASURING, AND TEST EQUIPMENT

The supplier shall establish and maintain documented procedures to control, calibrate, and maintain inspection, measuring, and test equipment (including test software) used by the supplier to demonstrate the conformance of product to the specified requirements. Inspection, measuring, and test equipment shall be used in a manner which ensures that the measurement uncertainty is known and is consistent with the required measurement capability.

Where test software or comparative references such as test hardware are used as suitable forms of inspection, they shall be checked to prove that they are capable of verifying the acceptability of product, prior to release for use during production, installation, or servicing, 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.

Where the availability of technical data pertaining to the measurement equipment is a specified requirement, such data shall be made available, when required by the customer or customer's representative, for verification that the measuring equipment is functionally adequate.

3.10.1 NON-DELIVERABLE SOFTWARE CONTROL

This requirement shall apply to all suppliers where software is used directly in the manufacture, inspection, or test of articles bought by Excelsior, Inc.

EXAMPLE: Non-deliverable software is present in automated test systems and computer-aided inspection systems. Specific examples would be the programs which reside on numerical control (NC) tapes used to produce a part, or floppy disks used to program an inspection coordinate measuring machine (CMM).

For each non-deliverable software item, the supplier shall assure that:

1. Sufficient software documentation exists to efficiently operate and maintain the system.
2. Objective evidence exists, prior to its use, that it performs the required functions.
3. Once proven the program is placed in a restrictive-access file and placed under configurations change controls.

3.11 INSPECTION AND TEST STATUS

The inspection and test status of product shall be identified by suitable means, which indicate the conformance or nonconformance of product with regard to inspection and test performed. The identification of inspection and test status shall be maintained, as defined in the quality plan and/or documented procedures, throughout production, installation, and servicing of the product to ensure that only product which has passed the required inspections and tests (or been released under an authorized concession) is dispatched, used, or installed.

All supplier records and Excelsior, Inc. forms are to be completed in black ink, and no erasures, cover-up tape, or white-out are permitted. In the event of an error, a single line is to be drawn through the incorrect entry and the correction written above, below, or preceding the error. The identity of the person making the correction shall be noted by initial or inspection stamp, and dated.

3.12 CONTROL OF NONCONFORMING PRODUCT

The supplier shall establish and maintain documented procedures to ensure that product that does not conform to specified requirements is prevented from unintended use or installation. This control shall provide for identification, documentation, evaluation, segregation (when practical), disposition of nonconforming product, and for notification to the functions concerned.

The supplier, when required, shall complete the Corrective Action Report and return it to Excelsior's Quality Department not later than 15 business days from date issued. If Excelsior receives no response within 30 business days from C.A.R. issue date, the supplier will be put on probationary status and will receive no new purchase orders until C.A.R. has been received and accepted.

3.13 CORRECTIVE ACTION AND PREVENTIVE ACTION

The supplier shall establish and maintain documented procedures for implementing corrective and preventive action.

Any corrective or preventive action taken to eliminate the causes of actual or potential nonconformities shall be to a degree appropriate to the magnitude of problems and commensurate with the risks encountered.

The supplier shall implement and record any changes to the documented procedures resulting from corrective and preventive action.

3.14 HANDLING, STORAGE, PACKAGING, PRESERVATION, AND DELIVERY

The supplier shall establish and maintain documented procedures for handling, storage, packaging, preservation, and delivery of product.

3.14.1 PACKING SLIPS

The following information shall be provided by the supplier on each packing slip or supplementary documents as applicable:

1. Excelsior, Inc. purchase order number
2. Part number and applicable drawing revision letter or symbol
3. Quantity (indicate when partial shipment)
4. Serial numbers (as applicable)
5. Type and quantity of samples enclosed (panels, coupons, mounts, etc.)
6. Special precautions on handling or storage of material contained in the shipment.
7. In the case of rework or replacement purchase orders, a statement regarding whether parts were reworked or replaced.

All shipments to Excelsior, Inc. are to have a Certification of Conformance containing the requirements listed in 3.8.2 above.

Excelsior, Inc. reserves the right to return any overshipments, at the supplier's expense, unless authorized in advance by the purchasing agent.

Excelsior, Inc. tracks delivery performance, which is based upon one day late and a maximum of five days early from the scheduled delivery (dock date) as noted on the purchase order; no exceptions. Any supplier that cannot meet the scheduled date will notify Excelsior in writing of the new date.

3.14.2 RoHS and WEEE Compliance

To meet the requirements of EU Directives 2002/95/EU and 2002/96/EU, Excelsior will require, if noted on the Excelsior, Inc. purchase order, all incoming products to have the following labeling and/or documentation. We require compliance as of July 1, 2006.

1. All incoming product or material must have a Certificate of Conformance that includes a statement confirming RoHS compliance.
2. Each shipping carton labeled to identify RoHS compliance.

Our basic goal is to require producers of electrical and electronic components to generally eliminate the use of these six substances from product sold in the EU after July 1, 2006.

3.15 CONTROL OF QUALITY RECORDS

The supplier shall establish and maintain documented procedures for identification, collection, indexing, access, filing, storage, maintenance, and disposition of quality records.

Quality records shall be maintained to demonstrate conformance to specified requirements and the effective operation of the quality system. Pertinent quality records from the subcontractor shall be an element of this data.

All quality records shall be legible and shall be stored and retained in such a way that they are readily retrievable, in facilities that provide a suitable environment to prevent damage or deterioration and to prevent loss. Retention times of quality records shall be established and

recorded per paragraph 3.4. Where agreed contractually, quality records shall be made available for evaluation by Excelsior or their customer's representative for an agreed period.

3.16 INTERNAL QUALITY AUDITS

The supplier shall establish and maintain documented procedures for planning and implementing internal quality audits to verify whether quality activities and related results comply with planned arrangements and to determine the effectiveness of the quality system.

3.17 TRAINING

The supplier shall establish and maintain documented procedures for identifying training needs and provide for the training of all personnel performing activities affecting quality. Personnel performing specific assigned tasks shall be qualified on the basis of appropriate education, training, and/or experience, as required. Appropriate records of training shall be maintained.

4.0 RESPONSIBILITY

All suppliers are responsible for compliance to this specification. Acceptance of an Excelsior, Inc. purchase order is acceptance to comply with this specification.