



sparton  
DEFENSE AND SECURITY

# SUPPLIER QUALITY PROGRAM

## *Procurement Standard*

Revision: E

*Notice:* This standard is subject to periodic review and may be revised at any time; users are cautioned to obtain the latest revision.

## **1.0 Purpose:**

Establish clear expectations of the quality standards for any Supplier that provides products and/or services to Sparton DLS.

## **2.0 Scope:**

This Standard defines Sparton's Supplier qualification requirements for any Supplier that provides material and/or services which are used in a Sparton manufactured product.

## **3.0 Supplier Responsibility:**

**3.1** Suppliers are responsible for conforming to the latest version of the appropriate industry specifications identified on the Sparton P.O.

## **4.0 Definitions:**

**4.1 Purchase Order:** Document used to order material or services under specific delivery conditions, specifications and quantities.

**4.2 Drawings and Specifications:** Detailed document that provides description or assessment of requirements, dimensions, materials, etc...

**4.3 Certificate of Compliance:** Document used to state that all applicable Purchase Order, Drawings and, specification requirements have been met.

**4.4 Non-Conformance:** A failure / defect between supplied products and/or services verses drawings and specifications.

**4.5 Deviation / Waiver:** Document used to request acceptance to a non-conformance.

**4.6 Disposition:** Final settlement of a non-conformance, Rework, Use As Is, Repair.

**4.7 Rework:** A disposition in which it is feasible to correct the non-conformance to meet the original quality or contractual requirements. Where a repetitive problem is identified, a documented instruction shall be created to perform the rework.

**4.8 Use As Is:** A disposition that does not involve safety, performance, interchangeability or reliability. Such material can be treated as good material.

**4.9 Repair:** A planned process that returns the material to a predetermined condition, but does not fully meet the original quality or contractual requirements.

## **5.0 Requirements:**

### **5.1 Quality Management System (QMS):**

Sparton's expectation is that its Suppliers publish, implement and maintain a QMS that is consistent or equivalent to ISO 9001 latest version. In addition, the Supplier's QMS should incorporate any Quality requirements by Sparton. In the case where a formal QMS is not in place, due to the size or lack of complexity of the ordered activities, a survey or audit may be performed to evaluate the operations of the Supplier.

#### **5.1.1 Quality Manual:**

When requested by Sparton, the Supplier shall submit their Quality Manual that defines the scope of their QMS. The Quality Manual should also include any details of, and justification for, any exclusions, as well as reference to the documented procedures established and process interaction involved with the manufacture of the material ordered by Sparton.

#### **5.1.2 Procedures and Records:**

The Supplier shall upon reasonable request make available all procedures and records, related to their QMS, for review. Such documents shall be established and maintained to provide evidence of conformance to Sparton's requirements.

#### **5.1.3 Control:**

The Supplier shall ensure that adequate controls are established and maintained throughout the life cycle of Sparton's requirements, and that principles of continuous quality improvements are applied to all processes.

**5.1.3.1** A Sparton expectation of Suppliers is that all lots of products received have zero non-conformances to its requirements. The use of a statistically sound sampling plan is required,

NOTE: C=0 / Zero Acceptance Number Sampling Plans is preferred.

**5.1.3.2** Sparton shall measure the effectiveness of the Supplier's quality program by the product receipt history of conformance to requirements within its incoming inspection and manufacturing processes.

#### **5.1.4 On Site Audits and Inspections:**

Sparton upon reasonable request, via on-site facility audits, or teleconference review the effectiveness of the Supplier's defined QMS working practices, procedures and associated quality records. Sparton may perform on-site source inspection for any of its products supplied as a condition of purchase if so stated in the purchase order terms and conditions.

NOTE: In the event that such audits and/or inspections are necessary, reasonable notice will be given to the Supplier.

#### **5.1.5 Planning (Custom Parts only):**

Once Sparton has established all necessary product requirements, which includes but not limited to drawings, specifications, manufacturing process information, the Supplier shall establish an ongoing control plan that identifies the product realization methods.

**5.1.5.1** The control plan may be in the form of a narrative or flow chart with the minimum requirements as follows;

- Sparton part number, description and revision
- Operation / process name or description
- Key characteristic to be controlled
- Inspection stages and evaluation method, i.e., micrometer, caliper, reference to a procedure
- The frequency, sample size and analysis methods
- Reaction plan required if an out-of control condition occurs

## **5.2 Design and Document Control:**

All documentation or property that has been supplied by the Supplier to support the delivery of product material or services is deemed to be the property of Sparton and ~~is deemed~~ and will be considered proprietary and confidential between Sparton and the Supplier. This may include but not limited to, Engineering Drawings, Bills of Material, Electronic Files, Software, Assembly / Testing Procedures, Test Fixtures and Specifications.

**5.2.1** Any changes the Supplier requires, to above documents, must be submitted in writing to Sparton for review and written approval prior to changes taking place.

## **5.3 Conflicting Documents:**

If any conflict exists between Sparton's requirements, purchase order, documentation, drawings, etc... the following order of precedence shall apply:

- Purchase Order.
- Documents referenced on the Purchase Order.
- Sparton's end user (customer) specification/drawings.
- Sparton's specifications/drawings.
- The end item specification such as IPC specifications, when invoked by the customer.

**5.3.1** If conflict still persists, Supplier shall submit in writing to Sparton, before processing the purchase order, for resolution and approvals.

## **5.4 Process Changes:**

The Supplier shall notify Sparton in writing for approvals prior to implementation of any changes that directly affect the supplied material or service. This includes but not limited to, QMS, processing, materials, fixtures/tooling, measurement /test equipment, calibration, services and relocation of Supplier facility.

## **5.5 First Article:**

### **5.5.1 Approvals:**

When indicated on the PO, Supplier shall submit a first piece sample(s) for review, for verification and approvals by Sparton. To be a valid FAI piece the Supplier must produce the sample(s) from production tooling. Under special circumstances, prototype samples are permissible. Unless otherwise specified and when applicable, a minimum of three pieces produced from each tool, fixture, cavity or impression shall be submitted.

NOTE: samples shall not waive Supplier's obligation to make deliveries in conformance with the requirements, applicable drawings and specifications.

**5.5.1.1** Any changes to process tooling or equipment alteration beyond normal maintenance will require Supplier to resubmit of another first piece sample.

**5.5.1.2** All products submitted as a first piece sample, Supplier shall notate as such either on the shipping document, container or bag.

### **5.5.2 Reports:**

First Article Inspection Report (FAIR) shall be provided to Sparton demonstrating compliance with the requirements of the PO and referenced documents along with a description of measuring equipment used for each measurement taken.

**5.5.2.1** The FAIR shall be submitted with the first shipment to Sparton for inspection and acceptance. Upon first article acceptance, subsequent shipments will be authorized.

## **5.6 Material Deliveries:**

### **5.6.1 Identification and Packaging:**

Supplier shall deliver all material in accordance with the Sparton Freight Guide.

### **5.6.2 Traceability:**

Supplier shall be able to provide full traceability on all material delivered and shall be able to trace all raw materials back to the original manufacturer, as well through to the Supplier's inspection and production records.

### **5.6.3 Certificates of Compliance (C of C):**

Each shipment of product shall be accompanied by a C of C which includes but is not limited to;

- Date of Issue
- Part Number, Description and Revision
- Traceability Number, Serial Number, Batch or Lot Number, Date Code, etc...
- PO Number and Quantity
- Approved Deviations / Waivers

NOTE: The C of C shall be signed by the authorized Supplier Quality Representative.

### **5.7 Non-Conformance:**

#### **5.7.1 General:**

Sparton may reject any product, individual item or complete lot shipment, delivered that does not conform to established requirements and specifications. Notification will be sent to the Supplier of the rejection, rejected items may be returned to the Supplier and/or 100% inspected or reworked at Supplier's expense.

#### **5.7.2 Control:**

Supplier shall have a comprehensive system for the recording and analysis of all non-conformances (workmanship defects, component failures etc.) occurring during inspection, manufacturing and test of product to be delivered.

#### **5.7.3 Notification:**

Supplier shall notify Sparton, via the Procurement Buyer, immediately of any potential non-conformances, or latent defects that may be present in the sub-systems and which become apparent subsequent to Sparton accepting delivery.

#### **5.7.4 Segregation:**

Supplier shall define and implement procedures for segregation, control and disposition of non-conforming material, including all associated status identification and quarantine arrangements.

#### **5.7.5 Disposition:**

The Supplier has only the authority to rework any non-conformances identified against the product being delivered.

**5.7.5.1** Sparton reserves the right to approve any disposition that is determined to be "Use As Is" or "Repair". The Supplier shall submit a deviation / waiver for any such product for approvals by Sparton prior to delivery.

NOTE: If material has been identified to be scrapped, it shall be rendered unusable.

#### **5.7.6 Warranties:**

As outlined in the established Terms and Condition and/or Purchase Order. Sparton's acceptance of any product or services shall not be deemed a waiver of any warranties.

### **6.0 Corrective Action Request:**

In the event Sparton identifies non-conforming product, which may be found during the incoming inspection, manufacturing, final inspection processes and/or within the field or laboratory, a formal corrective action request (CAPA) may be issued to the Supplier.

## **6.1 Response:**

Sparton's expectations are that the Supplier shall submit an initial response within ten working days and a formal written corrective action plan response within thirty working days of issue.

The response shall include:

- Results of Supplier's investigation including root cause of non-conformance or defect
- Corrective action steps taken to resolve the non-conformance or defect
- Date corrective actions steps became effective, and
- Status and quantity of all products affected by the non-conformance, including in transit and/or inventory stock/warehouse, etc...

## **6.2 Approvals:**

All submitted corrective action responses are subject to verification and approval by Sparton which shall include monitoring of all future shipments of product to ensure that corrective action taken has produced the intended results.

## **7.0 Records:**

### **7.1 Inspection:**

Supplier shall identify and undertake inspection of deliverables during product processing, for conformance to Sparton's requirements such as the PO, Drawings, Test Specifications Workmanship Standards, etc..

#### **7.1.1 Raw material certification and verification:**

Supplier shall maintain documentation records that certify the raw material used and testing performed on products.

### **7.2 Retention:**

Unless otherwise specified on the PO, all quality records for Sparton material ordered shall be retained for a minimum of two years after final delivery to Sparton. This includes but is not limited to, inspection and traceability records.

NOTE: Records shall be available whenever requested by Sparton.

**7.2.1** In the event Supplier does not have the means to maintain and/or store records for an extended period of time then Supplier will communicate this limitation to Sparton and such records per mutual agreement may be shipped to Sparton for retention.

## Release Control

	Name	Title	Signature	Date
<b>Originator:</b>	Michael Karwinski	Sr Supplier Quality Eng	<i>Michael Karwinski</i>	06/07/2011
<b>Verified By:</b>	Anthony Cafarchio	Director of Quality	<i>Tony Cafarchio</i>	06/17/11
<b>Approved:</b>	Ron Sheldon	Director of Quality	<i>Ron Sheldon</i>	06/21/11