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# **EMCORE GENERAL SUPPLIER QUALITY CLAUSES**

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## Scope:

The requirements in this document are applicable to all purchase orders and specifications that make reference to it. EMCORE Purchase Orders may reference a separate Supplier Policy which takes precedence over a specific clause within this document.

#### Purpose:

This document is intended to serve as an up-to-date collection of commonly applied technical and quality requirements.

## **Referenced Documents:**

ISO 10012	Calibration	Obtain from commercial sources	
ANSI/NCSL Z540	Calibration	Obtain from commercial sources	
ISO/IEC 90003	Software Engineering	Obtain from commercial sources	
ANSI/ESD-S20.20	Electrostatic Discharge Control	http://www.esda.org	
IPC-A-610	Acceptability of Electronic Assy	Obtain from commercial sources	
IPC/WHMA-A-620	Cable and Wire Harness Assy	Obtain from commercial sources	
NAS-412	FOD prevention	Obtain from commercial sources	
QWI 8-2-4-5	C=0 Sampling Plan	Obtain from EMCORE Industries	
SAE AS5553	Counterfeit Electronic Parts;	Obtain from commercial sources	
	Avoidance, Detection, Mitigation, and Disposition		

## **1. General Requirements**

Unless specifically waived via purchase order notes, the requirements detailed in this document apply to all purchase orders that reference this document as a requirement.

The Supplier shall maintain a quality system approved by EMCORE as described in Section 2. The Supplier's quality system shall ensure that only items meeting all requirements of the Purchase Order and its referenced drawings and specifications are submitted to EMCORE. By virtue of submittal, the Supplier certifies that all such requirements have been met or that EMCORE has accepted all nonconformances in writing.

- 1.1 Neither surveillance, inspection, and/or tests made by EMCORE or EMCORE representatives at either the Supplier's or Buyer's facility nor the Supplier's compliance with all applicable Product Assurance Requirements shall relieve the Supplier of the responsibility to furnish items which conform to the requirements of the Purchase Order.
- 1.2 Unless otherwise specified, drawings, specifications, standards, and document listings shall be the issue currently in effect on the date of the Purchase Order.
- 1.3 All parts/components used in the manufacture of end items due under this purchase order must be new. Use of refurbished or repaired parts is strictly prohibited.
- 1.4 The Supplier shall flow down to sub-tier suppliers the applicable requirements in all purchasing documents.
- 1.5 During performance of this order, the Supplier shall provide right of access to all Supplier's facilities, as well as all Subcontractor facilities to:
  - EMCORE Industries and its customers
  - Authorized government representatives
  - Regulatory body representatives

for the review, verification, and analysis of the Supplier's Quality Management System and manufacturing processes.

- 1.6 At a minimum, the Supplier shall include the EMCORE purchase order, part number (including Revision Letter), and serial number(s), where applicable, on all submitted documentation. All submitted documentation, including signatures and stamps, must be legible.
- 1.7 Cleaning and Packaging: All items delivered to EMCORE must be adequately preserved, packaged, and handled in order to prevent damage and/or deterioration during shipment. Unless otherwise stated in the Purchase Order, Specification, or Drawing, cleaning and packaging shall be in accordance with "best commercial practices."
- 1.8 When a quality problem exists or is suspected, EMCORE will issue a Supplier Corrective Action Request (SCAR). The Supplier's response to any SCARs shall be timely and must include the root cause of the problem, the statement of the action taken to preclude a recurrence, and the affectivity of the action.

If the supplier becomes aware of a potential or actual non-conformance to EMCORE's specifications and standards prior to delivery and/or subsequent to delivery of product under this contract, the supplier shall provide prompt notification to EMCORE.

Nonconforming items which the Supplier wishes to submit to EMCORE for consideration shall be documented and submitted to the responsible EMCORE Quality Representative.

#### **NONCONFORMING ITEMS SHALL NOT BE SHIPPED UNLESS SPECIFICALLY AUTHORIZED IN WRITING BY THE EMCORE QUALITY REPRESENTATIVE**. Any acceptance of a nonconforming item shall **not** be considered a precedent for future actions. Copies of all EMCORE nonconformance forms (approved waiver or deviation) shall accompany the shipment of nonconforming items.

The supplier will be notified of all non-conforming product discovered at EMCORE. The supplier, at its cost and as directed by EMCORE Quality, must rework nonconforming parts, replace the non-conforming parts with new parts, or perform any other additional work necessary to bring the nonconforming parts into full compliance with all EMCORE requirements. EMCORE may at its discretion rework or sort any non-conforming products to prevent interruption of the production line. In this case, the supplier may be charged for the rework or sort activity.

- 1.9 Record Retention: Unless otherwise specified, all records related to the manufacture of delivered products shall be maintained for a minimum of five years after purchase order completion. Copies of these records shall be submitted to EMCORE upon request.
- 1.10 Obsolescence Management: Once an order is accepted by the supplier, procurement of all parts to support production is the sole responsibility of the supplier. If an item is determined to be obsolete or unavailable to support open orders, the supplier will promptly notify EMCORE. Subsequently, the supplier will submit an Engineering Change Notice providing an alternate and interchangeable part which can be used in place of the obsolete part. If no alternate parts can be identified, EMCORE reserves the right to terminate the contract at no cost or obligation.

The supplier shall monitor the life-cycle status and availability of parts and/or materials throughout the duration of the contract. Parts/material determined to be near end of life or at risk of being unavailable for future production, repair, and or sustainment efforts shall be reported to the buyer within seven working days of obtaining this designation. The notice shall include the OEM's notice of End of Life if it has been provided to the supplier.

## 2. Quality System

Unless specifically waived via purchase order notes, the Supplier must meet minimum Quality System requirements. It is preferable that the Supplier maintains ISO 9001certification; if such certification is not held, the items furnished under the Purchase Order shall be controlled in accordance with a documented quality system approved by EMCORE. The Supplier's quality system shall be subject to audit by EMCORE Industries, its customers, and authorized representatives of the government and regulatory bodies on a non-interference basis. The Supplier's Quality Assurance measures shall meet or exceed the following requirements:

## 2.1 Receiving inspection

The Supplier shall have a system for ensuring the quality of incoming parts/materials, as well as the segregation and disposition of discrepant items. This system, at the Supplier's discretion, may include sample and/or source inspection at the point of manufacture.

## 2.2 In-process inspection

The Supplier shall complete in-process inspections during the manufacturing process. The requirements of the inspection shall be documented in the supplier's work instructions or product travelers. Inspection shall be completed by qualified personnel, as defined below.

#### 2.3 Training of personnel, equipment, procedures, etc.

All personnel performing work that will be delivered to EMCORE shall be adequately trained to ensure their skills and competency levels will result in products which meet all purchase order requirements. It is preferred that the Supplier have a certification process in place to document completion of the required training.

#### 2.4 Calibration/Maintenance of test equipment

Supplier shall maintain a documented calibration system for the calibration and maintenance of tools, jigs, ovens, and all other equipment used in Screening/ESS operations, Inspection, and Test. The Supplier's calibration system shall be compliant to industry requirements in accordance with the Supplier's QMS, including without limitation ISO 17025, ISO 10012-1, and ANSI Z540.

#### 2.5 Workmanship standards

The Supplier shall implement workmanship standards consistent with industry standards.

#### 2.6 Material review board

The Supplier shall have a system for reviewing discrepancies and establishing the disposition and corrective action for them.

#### 2.7 Supplier control

The Supplier's Quality System shall be sufficient to ensure all relevant flow-down requirements from EMCORE's purchase orders are imposed on all sub-tier suppliers.

#### 2.8 Handling/storage of deliverable hardware

The Supplier shall have a system for the proper handling, storage, and shipment of deliverable hardware.

## 2.9 Segregation of discrepant hardware

The Supplier shall maintain a documented system to ensure nonconforming products (discrepant and/or scrap) are immediately identified and segregated from the normal flow of deliverable hardware.

#### 2.10 Inspection approvals

All inspections shall be certified by the authorized person's signature.

#### 2.11 Final inspection

Final inspection will be performed by the Supplier's quality department and will consist of a verification that the deliverable product meets or exceeds all requirements in accordance with applicable purchasing documents (purchase orders, drawings, etc.).

#### 2.12 Surveillance

Regardless of Source Inspection requirements, EMCORE Industries, its customers, and authorized representatives of the government and regulatory bodies reserve the right to audit and to perform inspections at the Supplier's facility to verify compliance to the purchase order and specifications. Notification will be coordinated with the Supplier's quality department in advance.

#### 2.13 Returned products

If items are returned to the Supplier for warranty rebuild, the Supplier shall comply with the requirements specified in the original purchase order and shall have a system to support a failure report which describes necessary rework and retest.

## 2.14 Configuration management

The Supplier shall have an established configuration management system capable of meeting the following requirements:

- A documented system that defines the configuration management policy and is an integral part of the overall design and manufacturing operations.
- Established positive control over the design of the baselines and ensures that all delivered materials reflect the design maturity to which they comply.
- Ensures that all design changes are captured in the design documentation, and the incorporation of changes is traceable to the hardware/software items delivered, in process or on order.
- Ensures that design documentation used in the fabrication, test, and inspection of materials and services is current and available to personnel performing the fabrication, test, inspection, or service.
- Provides a method of assigning and controlling the serialization of materials as required by design.
- Provides a method to notify EMCORE of any design or process changes that affect the baseline and provide for review and approval by EMCORE prior to design change incorporation.

The Supplier shall notify EMCORE within two working days of any ISO, AS, or NADCAP certification revocation or suspension. Notice of certification upgrade is also encouraged.

# 3. Directed Source Control

For EMCORE-controlled parts, component and assembly drawings are clearly identified when source control is a requirement. Assemblies that do not require source control may include components or sub-assemblies that *do* require source control. It is the responsibility of the Supplier to identify and manage source control requirements for all assemblies, sub-assemblies, and components.

Source-controlled parts must be manufactured only by those suppliers specified in the Purchase Order, drawings, specifications, or applicable Qualified Products List (QPL). Certifications that accompany the shipment shall provide traceability to the approved directed sources.

# 4. Configuration Control and Certificate of Conformance

No significant changes affecting the design, manufacturing process, or location shall be made without the prior written authorization of EMCORE. Significant changes include, but are not limited to: changes that affect performance, integration, system compatibility, size, function, functional performance, testing requirements, material, and materials used.

The supplier shall provide a Certificate of Conformance that certifies all materials and processes supplied are in accordance with the EMCORE Purchase Order requirements. The Certificate shall indicate at a minimum:

- 1. The sellers name and address
- 2. If the item is purchased by a supplier, the Original Equipment Manufacturers name
- 3. The EMCORE Purchase Order Number
- 4. Part Number of the item, description, drawing revision including Change Notices and Waivers
- 5. Quantity shipped
- 6. Serial Numbers, Date Codes or Batch numbers as applicable
- 7. Statement of Compliance to all drawings and Purchase Order requirements
- 8. Signature and date of the suppliers authorized agent

The certification shall be included in the box with their respective parts.

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# 5. Statistical process control

SPC techniques (including control limits and control charts) shall be used when appropriate. Control limits shall be established statistically or by other methods which are based upon the documented history of the process capability.

# 6. Work instructions

All work affecting the quality of Supplier's product(s) shall be prescribed in clear and complete documented instructions. The Supplier's manufacturing, inspection, and test planning shall include the sequence of operations to be performed, including all inspection, test, and process control points. Upon request, the Supplier shall submit a copy of the Supplier's planning and/or associated work instructions to EMCORE two weeks prior to starting fabrication. All such planning shall be made available to EMCORE representatives for review at the Supplier's facility. In the event that the organizational processes do not rely on documented procedures, evidence of effective training shall be presented upon request. This evidence shall consist of training certifications that state the requirements to be completed in order to demonstrate competency at the position. This will also be accompanied by a training certification document that shows objective evidence that specific personnel have been trained at an applicable position.

## 7. Electronic requirements

## 7.1 Electrostatic discharge control

If the Supplier is providing items that are ESD sensitive (electrical and electronic parts, assemblies, and equipment), the Supplier shall maintain a documented Electrostatic Discharge Control Program which meets the requirements of ANSI/ESD-S20.20. The Supplier shall tailor the ESD Control Program as necessary; ESD programs are subject to random audits by EMCORE. ESD-sensitive parts and assemblies shall be packaged for delivery using appropriate ESD protective materials and packaging, and shall be clearly identified as ESD sensitive per ANSI/ESD-S20.20.

# 7.2 Printed wiring board

Workmanship shall comply with the requirements of IPC-A-610 Class 2 as a minimum. When applicable, Class 3 may be required and will be called out on the drawing or purchase order.

## 7.4 Automated Test Equipment Software

Automated test equipment software shall be under configuration control per the Supplier's internal documentation.

## 7.5 Date/Lot code traceability

Date/Lot Code traceability to the Manufacturer's Certificate of Conformance is required with each shipment.

## 7.6 Plastic encapsulated devices

Prior to manufacturing/assembly, the supplier shall provide evidence that procedures exist for the handling of plastic encapsulated devices (PED). At a *minimum*, the procedure shall describe precautions taken to ensure the integrity of the PED will *not* be degraded because of moisture, contamination, or ESD.

## 8. Cable and Wire Harness Assemblies

Workmanship shall comply with the requirements of IPC/WHMA-A-620 Class 2 as a minimum. Class 3 workmanship may be specified on the drawing and would supersede the instructions in the EMCORE General Quality Clauses.

All shrink tubing that is used to provide strain relief to the connector and cable interface will require adhesive in the tube that covers 360 degrees of the inner tubing and cable/connector assembly. The tubing shall have sufficient length to provide thorough coverage of both the connector and the cable. Evidence of glue protrusion shall be present to verify the 360 degree requirement. The adhesive must be thoroughly cured and when the shrink tube area is exposed to a radius the tube must not pull away from the cable or connector.

Cables shall be coiled in a diameter not to exceed 10 inches unless otherwise noted within the text of the purchase order.

## 9. Special Processes

Special processes are processes where the resulting output cannot be verified by EMCORE prior to installation into an upper-level assembly, or delivery. Special processes are to be carried out under controlled conditions and performed in accordance with applicable specifications to achieve planned results. Examples of controlled conditions include, but are not limited to, training, and the use of controlled fixtures and procedures. In some instances, one unit per batch may be destructively tested to verify the integrity of an entire batch. All specific destructive testing requirements will be defined in a separately flowed-down requirement.

## 10. Computer Software Quality Assurance Plan

If applicable, the Supplier shall develop, implement, and maintain a Software Quality Assurance program plan that conforms to ISO/IEC 90003. The program plan shall apply to, but is not limited to, non-deliverable software used in the Supplier's manufacturing, inspection, and/or test operations.

#### **11. Marking Requirements and Serial Numbers**

The Supplier shall identify all deliverable items with the appropriate EMCORE Part Number and Revision level noted on the purchase order. The packing slip that accompanies each shipment will contain the part number, revision, and nomenclature, or other design description required by the Purchase Order.

For all parts requiring serialization, serial numbers shall not be duplicated; each serial number shall provide full traceability to all material, fabrication, assembly, inspection, and test documentation.

Certain parts require a EMCORE-assigned serial number or a serial number in a specific format. In those instances, the serial number will be included in the text of the purchase order and must be utilized by the Seller.

## **12. Counterfeit Parts Prevention**

For the purposes of this clause, the term "Work" shall mean each part or other item, whether separate or incorporated into another assembly, required for delivery under the Purchase Order. The term "Counterfeit Work" means Work that has been identified, marked, altered, or otherwise represented in a manner that: (i) misrepresents the Work as having been designed and/or produced pursuant to a process, system, or method specified in the Purchase Order or under an industry standard; (ii) misrepresents the identity of the manufacturer or authorized source; (iii) misrepresents that the Work is new and/or conceals that the Work contains or incorporates a part or material that has been found to be defective, scrapped, damaged, reworked, or repaired; or (iv) misrepresents that the Work meets a required specification or performance standard, including the Work's design life limit.

Seller shall ensure that Counterfeit Work is not delivered to EMCORE. Seller shall only purchase products to be delivered as Work or incorporated into Work directly from the Original Component Manufacturer (OCM)/Original Equipment Manufacturer (OEM), or through an OCM/OEM-authorized distributor supply chain. Work shall not be acquired from independent distributors, brokers, or other sources unless approved in advance in writing by EMCORE. In order to gain approval, Seller must at a minimum provide either documents that provide full supply chain traceability back to the OEM/OCM or their verification plan (including sample testing) which will establish the parts as new unused and authentic parts. Seller shall immediately notify EMCORE and submit all necessary facts and information if Seller becomes aware or suspects that it delivered Counterfeit Work to EMCORE under the Purchase Order.

Seller shall maintain a method of traceability that ensures tracking of all Work back to the manufacturer for all items delivered under the purchase order. Seller shall at a minimum include in this documentation date codes, lot codes, serialization, or other batch identification when available.

If EMCORE or EMCORE's customer reasonably suspects that the Work delivered by Seller contains or incorporates Counterfeit Work, then such Work will be determined to be Counterfeit Work and EMCORE shall remove and Seller shall immediately replace such Work in accordance with the terms below.

When requested by EMCORE, Seller shall provide OCM/OEM documentation that (i) authenticates traceability of the affected items to the applicable OCM/OEM and (ii) certifies that the Work is genuine Work. In the event that Work delivered under the Purchase Order constitutes or includes Counterfeit Work, as determined in EMCORE's reasonable discretion, EMCORE shall, at Seller's sole expense, remove such Counterfeit Work from any other article, component, goods, or assemblies and notify Seller. The Seller may contest EMCORE's determination that such Work is or includes Counterfeit Work by (i) providing EMCORE written notice contesting that determination within five (5) business days after receiving EMCORE's notice, (ii) having the Counterfeit Work tested by an independent and qualified laboratory within thirty (30) days of receiving EMCORE's notice (such testing facility to be reasonably approved by EMCORE), and (iii) providing EMCORE with all test results or analysis within the same thirty (30) period. All such testing and related actions shall be at Seller's sole cost. EMCORE will determine at its sole but reasonable discretion whether such test results or analysis provides sufficient information to conclude that Seller did not deliver Counterfeit Work.

Unless otherwise agreed by EMCORE, Counterfeit Work will not be returned to Seller and will be stored by EMCORE until destroyed or otherwise disposed of by EMCORE or its authorized representative. The Parties acknowledge and agree that any Work determined to be Counterfeit Work hereunder will be agreed to have no value and that EMCORE, at its sole discretion, will be entitled to either a reimbursement for any amounts paid thereof or an immediate replacement of such Counterfeit Work with genuine Work. Notwithstanding any other provision in the Purchase Order, Seller shall be liable for all costs (including without limitation any claims, damages, fees, expenses, and other amounts of any kind) directly or indirectly incurred by EMCORE relating to the removal and replacement of the Counterfeit Work and, to the extent applicable, any testing, replacement, substitution, or other actions necessary to remediate the Counterfeit Work. The remedies contained in this paragraph are in addition to any remedies EMCORE may have at law, equity, or under other provisions of the Purchase Order.

This clause applies in addition to any other quality assurance provision, specification, statement of work, or other provision included and/or referenced in the Purchase Order. To the extent such other provisions conflict with this clause, this clause shall take precedence.

To the extent necessary for Seller to comply with the requirements of this clause, Seller shall include the requirements of this clause or equivalent provisions in Seller's subcontracts.

During all periods relevant to Seller's performance of this Purchase Order, Seller shall establish and maintain a Counterfeit Parts Prevention and Control Plan using industry-standard SAE AS5553 as a guideline.

## 13. Lot traceability

Materials used shall be traceable to records of acceptance and identified by applicable lot number, date code, material type, specification, applicable change letter or number, heat number, etc. Parts fabricated by the Supplier shall be identifiable to the "lot" of the material used. Traceability records shall be available for review upon request. All certifications are to reflect this traceability.

## 14. Heat/batch identification

When appropriate, all parts and/or material shall be identified by and traceable to a heat number, heat code, heat lot number, melt number, or batch control number. Where stamping of individual parts is not practical due to size or shape, the identification shall be stamped on the smallest unit packaged by the Supplier. This identification shall also be recorded on certifications and shipping documents for the material.

# 15. Control of EMCORE furnished material/tools/gauges

Material supplied by EMCORE to be used in Supplier's delivered product shall be to the following:

- Inspect upon receipt; immediately notify EMCORE of any shipping damage or discrepancies
- Material traceability shall be maintained throughout the manufacturing process, ensuring that items manufactured by the Supplier are identifiable to the material lot number provided by EMCORE.

The Supplier shall perform the following when EMCORE furnishes tools/gages:

- Upon receipt, inspect for damage in transit. Ensure completeness, presence of operating instructions, and a valid calibration status as applicable.
- Provide adequate protection to preclude damage or deterioration during use, handling, and storage.
- Provide periodic calibration of gaging per EMCORE instructions, or request EMCORE to perform calibration at least 30 days prior to the expiration date shown by the calibration status. When deficiencies occur, notify the EMCORE buyer *immediately*.
- Support EMCORE periodic audits of EMCORE-furnished tools/gages.

# **16. First Article Inspection**

First Article Inspection is defined as a verification of two key elements:

- Conformance to all engineering requirements
- Demonstration of stable, repeatable processes

The following Items shall not require FAI, unless otherwise directed by the Buyer:

- Standard hardware and electronic piece parts
- Commercial Off-the-Shelf ("COTS") items
- Metallic (plate, bar, rod, etc.) and non-metallic (paints, sealants, adhesives, etc.) raw materials
- Engineering models, design/concept prototypes, etc.
- Items that have been returned by EMCORE for repair
- Items procured to EMCORE's part number where EMCORE has not developed drawings and/or specifications controlling the item's physical and functional requirements

A First Article Inspection (FAI) is required in the following cases:

- For a new part prior to the first production run
- A new revision of an existing part
- When the process is new or the process has changed
- Production facilities have moved
- The product has not been manufactured in a 12-month period

The requirement for an FAI may be modified or waived by the EMCORE Quality Representative and will be documented through a modification to the purchase order completed by the EMCORE buyer. FAI documents shall be submitted in supplier format and shall provide evidence that all engineering, design, and specification requirements are understood, accounted for, verified, and recorded. The completed FAI shall be submitted to EMCORE for approval prior to any shipment of hardware. FAI acceptance does not constitute EMCORE acceptance of the full lot.

## 17. Test specimens

When appropriate, the Supplier shall furnish test specimens to EMCORE as required by the drawings/specifications applicable to the purchase order. Specimens shall be identified with the Purchase Order number, melt number, heat treat number, batch number, and alloy identification as applicable. Unless otherwise specified, the following criteria shall apply:

- **Castings:** Three test bars produced from the same heat lot and made from the same melt of supplied castings.
- **Forgings:** Three test bars produced from the same heat of material as forgings supplied. Test bars *must* have the same percentage of reduction as the forged items supplied.
- Nonmetallic Materials: As required by applicable drawings/specifications/purchase order.

## 18. Shelf Life

For all items supplied that are adversely affected by time, the cure or manufacturing dates, assembly dates, expiration dates, temperature limits, compound number, and manufacturing identification will be recorded on the product label in addition to the certifications and shipping documents as appropriate. Items received with less than 80% shelf life remaining shall be cause for rejection unless otherwise specified by the Purchase Order. Temperature-sensitive materials shall be maintained within the limits prescribed in the applicable document during storage and shipment. Material that must be maintained at less than 40°F require special temperature labels to be attached to the exterior of each package. The label shall reflect the words "Temperature Sensitive Material" and the maximum and minimum material storage temperature allowed.

## 19. Material requiring special handling

As required, the Supplier shall label or clearly mark one end and one side of each shipping container or package with the notation "Caution" and the special handling or environmental requirements for the item.

## 20. Sampling Plans

Unless otherwise specified in applicable drawings/specifications, all sampling plans shall be per EMCORE procedure QWI 8-2-4-5 with AQLs as follows:

Characteristics Classification (Maximum) AQL

- Critical......100% inspection required (no sampling)
- Major.....1.0
- Minor.....4.0

# 21. Test/Inspection Reports

For machined parts, in addition to any data as requested per the Purchase Order, an inspection, CMM, or similar report shall be provided that contains the dimensional attributes of the sample measured along with the part specifications. Each report shall include the purchase order number, part number, revision, and serial number if applicable.

For Circuit Board assemblies, in addition to any data as requested per the Purchase Order, a Certificate of Compliance stating that the PCBs comply with the applicable IPC workmanship class as stipulated by the drawing or Purchase Order shall be required.

For cable assemblies, records of tests and inspections shall be provided as a deliverable and will be required for the acceptance of the product. The data can be for individual cables if serialization is required or signoffs for the testing of each parameter for the batch will be acceptable.

# 22. Drop ship

Without written authorization from the buyer, the Supplier shall not drop ship (shipment to other than EMCORE's facility) items due under the purchase order.

# 23. Cost Reduction Initiatives

Cost reduction proposals initiated and developed by the Supplier for changing the drawings, designs, specifications, or other requirements of this Purchase Order/Contract are encouraged. The supplier shall provide written notice, in the Supplier's format, in sufficient detail (including cost and schedule impact analysis) to enable EMCORE to understand the total impact of the change. Within 30 days after receipt of such a change proposal, EMCORE will advise the Supplier of its consent to, its rejection of, or the status of EMCORE's consideration of such change. The decision of EMCORE as to the acceptance of any such proposal under this Purchase Order shall be final and shall not be subject to the disputes Clause, if any, of this Purchase Order.