

## CP 102

# SUPPLIER QUALITY AGREEMENT

Central Purchasing Specification

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## SUPPLIER QUALITY AGREEMENT

**SPEC. #:** CP 102  
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## PURPOSE/SCOPE:

The document informs suppliers and subcontractors of Viasystems supplier approval and disapproval process, what standards suppliers are responsible to meet, and how Viasystems monitors and controls supplier performance.

## DEFINITIONS:

**Approved Supplier List** - A list of suppliers who have been given approval status (by Viasystems and/or our customer) to supply specific materials or services to Viasystems.

**Corrective Action** – An action to eliminate the cause of nonconformity or other undesirable situation.

**Critical Materials and Services** – Those materials and services falling under the category of “Key Suppliers” below.

**DMR** – Discrepant Material Report. This is where nonconforming material is documented when it does not meet Viasystems quality standards. It is separated from inventory stock until a resolution is made with the supplier.

**Key Suppliers** – Approved Suppliers who provide products and services that can have a critical impact on the quality of our products. They are listed under the following classifications:

A1-ADHESIVE	A4-OSP	B1-PHOTO TOOL
A1-FOIL	A6-ASSEMBLY	B1-PRESS MATL
A1-LAMINATE	B1-ALUMINIUM	B1-SILKSCR
A1-PREPREG	B1-BACKUP	B1-WASTE CHEM
A2-CORE	B1-CHEMICAL	C1-DRILL
A2-GOLD	B1-INK AND MASK	C1-ROUTER
A2-SUB PART	B1-METAL	
A3-COMP	B1-PHOTO RESIST	

**Non-Key Suppliers** – Approved Suppliers who provide materials and services to Viasystems that do not pose significant risk to the quality of our product. These products are listed under the following categories:

C1-CAPITAL	C1-LAB	C1-SPARE
C1-CHARGE	C1-MFG SPLY	C1-SUPPLY
C1-FILTER	C1-OFFICE SPLY	C1-TOOL
C1-FIXTURE	C1-PACKING	
C1-IT	C1-SERVICE	

**Viasystems Specifications** – Quality specifications determined by Viasystems regarding specific materials and services. These are written as RFPs and/or notes on purchase orders.

## 1.0 **SECTION 1 SUPPLIER APPROVAL PROCESS**

- 1.1 ***ISO-9000 and AS9100 Certified Suppliers -***  
are recognized by Viasystems as having validation of a quality system.
- 1.2 ***Non-ISO Certified Suppliers -***  
are required to have controls over their production, records and documentation. A list of minimum requirements follows:
  - (a) **Configuration Control** – a system which maintains control over the interrelated functional and physical characteristics of a product – from the time the initial purchase order is received until the product is delivered to Viasystems.
  - (b) **Process Documentation** – Supplier processes that can affect product quality must be documented and followed. This documentation must also be available for auditing.
  - (c) **Process Routing** – A process flow must be determined for processing work.. The routing must be documented and followed. Travelers are a typical method.

- (d) Process Control / Monitoring** – Processes that affect the quality of the products must be controlled. There must also be a monitoring system that measures and records key aspects of the processes. (e.g. pressures, temperatures, pH, concentrations, time, speed) These measurements must be kept as quality records and be available for review.
- (e) Identification and Traceability** – Products and materials produced for Viasystems must have lot information provided and traceability of all the component materials used in its construction. If Viasystems discovers a root cause of a quality issue to be from a material purchased by a supplier that was used in their manufacturing process, the supplier needs to be able to identify all the lots of material or parts that they shipped to Viasystems that used the indicated material. The supplier must also be able to find and contain all such affected material on their site.
- (f) Internal Audits** – Suppliers need to have a schedule that covers all of their processes for internal audits. Processes need to be reviewed for effectiveness and up to date manufacturing and inspection methods. Operations must also be audited for their conformance to the processes. Documentation of these audits must be kept as quality records.
- (g) Continuous Improvement** – Suppliers must incorporate continuous improvement tools to control processes and prevent defects.
- (h) First Article Inspection** – A system needs to be in place to do a complete measurement of the first part of a new product. Whatever specifications the part or material are required to meet must be measured. A report is put together with the measurement and analysis information into a First Article Report, which is submitted to Viasystems for approval. An approved First Article Report demonstrates that the Supplier's production process is capable of producing an article compliant to all design requirements.
- (i) Control of Non-Conforming Product** – A system to separate defective materials and segregate them so they are not accidentally used.

- (j) **Inspection Records** – Inspections and measurements are required to prove adherence to specifications. These inspections and measurements must be documented and kept in a form that is retrievable within 48 hours.
- (k) **Sampling Inspection** - In cases where it is not practical or economically feasible to inspect all outgoing material 100%, suppliers should refer to the American Society for Quality (ASQ) for sampling methods and sample sizes.
- (l) **Certification of Compliance as an Alternative to Inspection Records** - Certification as a means to prove materials conformance to specifications involves receipt of a certificate from the supplier stating that certain tests and inspections have been implemented at the supplier's location. If a supplier is considered reliable and has established a good past history, certification may be used as evidence of product quality in place of outgoing inspection. Because some customers such as Military and Commercial Aviation have requirements to control all incoming material with statistical sampling, suppliers who use certification for proof of conformance may still be required to perform inspections.
- (m) **Corrective Action / Preventive Action** – When responding to a quality failure issue, suppliers need to take both corrective and preventative actions. Examples of corrective actions are: rework defective product, person who violated process is coached by a mentor, faulty equipment is repaired. Examples of preventive actions are: process parameters are changed to improve product, new training is written and used for annual recertifications, new items are added to the equipment maintenance schedule.
- (n) **Training** – Supplier's are responsible to ensure their employees are capable of performing the duties necessary to produce quality product and create adequate records thereof. Any function that requires special knowledge or skills also requires training for the employees. And records must be retained to verify training efforts and employee competency.
- (o) **Calibration Control** – Measuring devices used to verify product conformance must be calibrated and traceable to national standards. A sticker indicating the calibration date and expiration date is required.

- 1.3 ***Supplier Quality Audit Checklist*** –  
The Supplier Quality Audit Checklist (self-assessment) may be sent to the supplier as part of the Viasystems qualification process.

Suppliers shall complete all the information and return to the Viasystems individual(s) who sent the assessment.

- 1.4 ***On-site Audit*** –  
Viasystems, its customers, and regulatory authorities shall be granted the right of access to all supplier and sub-tier supplier facilities and all quality records involved in fulfilling Viasystems purchase orders. There is more information regarding on-site audits in Section 3, Supplier Status & Maintenance.

- 1.5 ***Supplier Qualification*** –  
Viasystems Purchasing must agree with either Engineering or Quality to qualify a supplier who provides critical materials and services. Suppliers who provide materials and services that are not critical to Viasystems product quality (see Non-Key Suppliers in definition section) may be qualified by Purchasing without the approval of Engineering or Quality. A qualified supplier will be added to the Viasystems Approved Supplier List with a scope of approval.

- 1.6 ***Supplier Re-qualification*** –  
Viasystems Engineering and/or Quality must agree with Viasystems Purchasing to requalify a supplier who provides critical materials and services. The supplier may be required to provide a Corrective Action Report and/or QIP that address the reasons they were disqualified.

## **2.0 SECTION 2 SPECIFICATIONS, STANDARDS & MATERIAL CERTIFICATIONS**

- 2.1 ***IPC Material Specifications*** –  
Suppliers who provide laminates, prepregs, foil, or plating metal services must ensure the quality of their materials meet the quality levels defined by the appropriate IPC Material Specifications (e.g. IPC-4101, IPC-4103, IPC-4552).

- 2.2 ***Viasystems RFPs*** –  
Viasystems has a number of material specifications we have developed that are in addition to the IPC Materials Specifications. Viasystems will

provide these specifications to suppliers and refer to them in our Purchase Orders.

### 2.3 ***Process Control*** –

Key suppliers must inform Viasystems before making changes to any of the following:

- How the material is manufactured
- Location of manufacturing
- Process or equipment of manufacturing
- Suppliers of raw materials
- Test methods used to confirm specification compliance

### 2.4 ***Material Certificates of Conformance*** –

Suppliers who provide critical materials (that become part of our Viasystems products) must provide Viasystems with Material Certificates of Conformance (C of C's) for each distinct lot of material provided. C of C's need to accompany every shipment to Viasystems.

- (a) Validity** – Measurements and analysis must be done to assure all materials sent to Viasystems conform with IPC Materials Specifications and Viasystems RFPs. Measurement methods and schedules are listed in the IPC document tables.
- (b) Retention** – Suppliers will maintain a copy of the material C of C's for a minimum of 7 years or as stated in the purchase order.
- (c) Availability** – Suppliers will be able and provide copies of C of C's within 48 hours after a request for them is made by Viasystems, a Viasystems customer, or a regulatory agency.
- (d) Certificate Requirements** - All Certificates of Compliance must have the following items:
- A **signature** of either a technical or quality representative of the company
  - A **legible printed or typed name** of the individual
  - The **job title** of that individual and
  - The **date the certification was signed**.

In order to sign an inspection certificate or a certificate of compliance, the credentials of the signatory must be such that he/she holds a technical or quality position within that company and is competent to certify that the

product delivered is compliant to all drawings, standards, specifications and purchase order requirements outlined on the certificate.

If a supplier uses a subcontractor or purchases raw material from another supplier, the supplier is responsible to flow down these same requirements to their vendors and subcontractors.

2.5 ***Counterfeit Parts Policy*** –

Viasystems only accepts raw materials that are accompanied by the lot specific material certificate of conformance from the original material manufacturer.

Viasystems does not sell or provide any electrical components other than the printed circuit boards we manufacture at our facilities.

**3.0 SECTION 3 SUPPLIER STATUS & MAINTENANCE**

3.1 ***Quality Records Retention*** –

Supplier will maintain quality records for products, equipment or services provided to Viasystems for a minimum of 7 years after the requirements of the procurement action have been fulfilled – or as stated on the purchase order.

3.2 ***Records Format & Availability*** –

Copies of quality records and documents can be saved in electronic or paper formats, but must be available to Viasystems, our customers, or regulatory authorities within 48 hours of request.

3.3 ***Self-Evaluations*** –

Suppliers may periodically be asked to complete self-evaluation forms.

3.4 ***Scorecards*** –

Some suppliers are measured periodically with scorecards. The selection of these suppliers is determined by Purchasing and Quality. The purpose of the scorecards is for Viasystems to access the supplier's performance. Scorecards can have a significant influence on procurement decisions.

**(a) Performance Categories** - Viasystems supplier scorecards are broken into 4 main categories with subgroups:

**Commercial**

- Gap to Cost Ranges / Competitiveness
- Quality
- On Time Delivery
- Payment Terms
- Supplier Financial Health
- Consignment / Supplier Owned Inventory

**Lead Time & Flexibility**

- Lead Time & Flexibility

**Technology**

- Roadmap Alignment

**Relationship**

- Strategic Initiative Engagement
- Service & Support
- Technical Data Submissions (issue, etc.)

**(b) Scoring** – Each of these categories is scored on a scale of 1 to 5. The weighting of each category and criteria for scoring is in Appendix 2.

**(c) Performance Targets and Thresholds** – Targets and thresholds will be determined and set by Purchasing on a supplier by supplier basis as deemed necessary.

3.5 ***On-site Audits & Right of Access*** –

As stated in Section 1, Viasystems, its customers, and regulatory authorities shall be granted the right of access to all supplier and sub-tier supplier facilities and records involved in fulfilling Viasystems's purchase orders. The sub-tiers must be informed by the supplier of these conditions. There needs to be a record of these notifications. (e.g. P.O.s, contracts, or conditions of purchase)

Viasystems will inform suppliers of on-site audits in advance. If the audit is performed due to nonconforming product, the supplier will separate and keep such product for the inspection of the coming auditor(s). Upon audit completion, conforming product can be shipped according to customary methods according to current Purchase Orders with Viasystems.

3.6 ***Third Party Auditors*** –

Viasystems may determine that qualified third party auditors are required due to business conditions or staffing availability. These auditors will be

acting on behalf of Viasystems. They will require the same access granted to Viasystems employees (e.g. SQA Services).

3.7 ***Supplier Monitoring*** –

All suppliers are reviewed on an ongoing basis. Quality discrepancies result in issuance of SCARs and are recorded in the supplier's file. Ongoing approved status of suppliers constitutes the record of suppliers' conformance to Viasystems requirements.

4.0 **SECTION 4 SUPPLIER QUALITY CONCERNS**

4.1 ***Supplier Notification to Viasystems of Discrepant Materials*** –

When a supplier becomes aware they have shipped nonconforming materials or will miss a delivery because of nonconforming material, they must notify Viasystems within 24 hours.

#### 4.2 **Quality Control Measures –**

Depending of the risk to Viasystems, product quality, and the availability of replacement suppliers/sub-contractors, Viasystems will determine the level of response required for non-conforming product. Below are examples of control mechanisms Viasystems may utilize:

- (a) **Supplier Corrective Action Request (SCAR)** – a formally issued complaint regarding supplier’s quality (see Appendix 5).
- (b) **Rejection of Material** - Viasystems Quality or Engineering department representatives may reject incoming materials or services that do not meet the specifications we have provided to our suppliers. Third party inspectors may also reject supplier products or services based on quality that doesn’t meet the specifications provided to our suppliers.
- (c) **Outgoing Inspection Levels** may be increased. For example, if a supplier is having a high rate of nonconforming escapes and they are using a 4% AQL Sampling Level, Viasystems may request they move to a 1% AQL Sampling Level, thus increasing the number of samples inspected per each lot of material..
- (d) **Third Party Inspections** may be required. At Viasystems’s discretion, quality verification may be required by a qualified third party or by Viasystems’s Quality or Engineering services. Third party inspections will be at the expense of the supplier. If Viasystems performs the additional inspection services, the supplier will most likely be invoiced for these services.
- (e) **Corrective Action** –When a Corrective Action request is issued, the supplier is expected to do the following actions:
  - Contain the defective material and report it to the Viasystems Supplier Quality Representative within 48 hours from the date of notification.
  - Provide the corrective action plan and expected completion date within 2 weeks from the date of notification – or as stated in the request.
  - Complete the action plan and verify its effectiveness, then inform the Viasystems Supplier Representative when done.

- (f) **8D - or Equivalent Problem Solving Methodology** – the supplier is required to use a team oriented approach to discover the root cause of a problem and develop a solution (See Appendix 1). The timeframe for completion is 3 weeks, unless specified otherwise on the SCAR Form.
- (g) **Performance Improvement Plan (PIP)** – the supplier is required to develop a Performance Improvement Plan. A PIP includes:
- Identify and Rank Weaknesses in Process
  - Choose Target Areas for Improvement
  - Make Improvement Plans
  - Set Goals / Ownership / Timelines
  - Make Measurement & Control Plans
  - Verify Effectiveness
- (h) **Supplier Waiver Request** – Suppliers may request a waiver from Viasystems for nonconforming materials. The waiver request must be approved by Viasystems Site Quality Leader before any nonconforming material is shipped to Viasystems. If approved, instructions for identifying the nonconforming product and shipping instructions will be given on the Supplier Waiver Request for Nonconforming Product form (see Appendix 4).
- (i) **Rework & Repair** - When rework and/or repair is required in order to meet the product and/or material specifications – it is ONLY permitted after the supplier has submitted a rework plan and the plan is approved by Viasystems.
- (j) **Escalation procedure for late SCAR responses from suppliers:**
- A. **When a SCAR is due – Viasystems SQE will call and email the supplier rep and get a committed response date.**
  - B. **1 week late – Viasystems SQE will contact the supplier’s Quality Manager to inform of the status and get a committed response date.**
  - C. **2 weeks late – Viasystems SQE will inform Viasystems Quality Manager and Purchasing Director and ask for assistance communicating with the supplier.**

4.3 ***Disqualification –***

Viasystems Purchasing must agree with either Engineering or Quality to disqualify a supplier for quality issues. A disqualified supplier will be removed from the Approved Supplier List.

4.4 ***Supplier Chargeback Process –***

The following steps are an outline of steps Viasystems may take to recover costs we incur due to nonconforming materials from our suppliers. It is solely at Viasystems's discretion whether or not we will pursue these actions. Alternative chargeback steps will be taken if prearrangements are made with Viasystems.

- (a) Nonconforming supplier parts are identified through Viasystems receiving inspection, on-line rejects, customer returns, alerts or supplier recalls.
- (b) Suppliers will be notified of nonconforming products through the SCAR process or request for failure analysis.
- (c) An account is initiated by accounting to collect all costs incurred by Viasystems as a result of the nonconforming product.

Costs incurred may include but are not limited to the following items plus any associated costs:

- Rework by Viasystems's Costs
  - Return for Rework Costs
  - Replacement of Material Costs
  - Recall of Material Costs
  - Customers Charges for Removal/Return/Replacement
  - Delivery Penalties from Viasystems's Customer
  - Travel Expense
  - Source Inspection Costs as a Result of Nonconformance
  - Containment Costs
  - Additional Inspection Costs at Viasystems
- (d) A letter is sent to the supplier summarizing the costs incurred and Viasystems's intent to recover such costs.
  - (e) A detailed report of the costs is available for review and verification by the supplier.
  - (f) For minor issues the charge will be a \$250.00 flat rate to cover administrative costs.

(g) The supplier has 5 working days to respond for questions or review.

**Note:** The preferred method of cost recovery is debit of the suppliers account, unless an alternative agreement is reached through review with supplier. The charge back will be initiated after the 10 working days or completion of the review process.

4.5 ***Supplier Responsibility –***

It is the supplier's responsibility to provide parts/processes that conform to all specifications and reliability requirements and accept liability for all escapes caused by their quality discrepancies.

4.6 ***Viasystems Responsibility –***

It is Viasystems responsibility to notify the supplier of all nonconforming materials in a timely manner and to provide an accurate and fair system to collect data for costs incurred. Viasystems also agrees to hold the defective materials for supplier review.

**Appendix 1: 8D Sample**

<b>Supplier:</b>	<b>Requested By:</b>
<b>Supplier P/N:</b>	<b>Request Date:</b>
<b>Viasystems P/N:</b>	<b>Issue Date:</b>
<b>Process Name:</b>	<b>Issued To:</b>
<b>Author/Rev date:</b>	<b>Due Date:</b>

  

<b>1) Use Team Approach (Core Team Members)</b>																
Establish the Team. Assemble a cross-functional team (with an effective team leader) that has the knowledge, time, authority and skill to solve the problem and implement corrective actions. And set the structure, goals, roles, procedures and relationships to establish an effective team.																
<b>2) Problem Description:</b>																
Describe the Problem. Define the problem in measurable terms. Specify the internal or external customer problem by describing it in specific, quantifiable terms: Who, What, When, Where, Why, How, How many. Consider both the defect itself and how it escaped detection/capture.																
<b>3) Implement and Verify Short-Term Containment Actions:</b>																
Implement and Verify Interim Containment Actions. Temporary Fixes. Define and implement those intermediate actions that will protect any customer from the problem until permanent corrective action is implemented. Verify the effectiveness of the containment actions with data.																
<b>4) Root Cause Analysis and Identification:</b>																
Identify and Verify Root Causes. Identify all potential causes that could explain why the problem occurred. Cause and Effect Diagram. Test each potential cause against the problem description and data. Identify alternative corrective actions to eliminate root cause. Note that two parallel types of root causes exist: a Root Cause of Event (the system that allowed for the event to occur), and a Root Cause of Escape / Escape Point (the system that allowed for the event to escape without detection).																
<b>5) Proposed Corrective/ Preventive Action and Test Plan:</b>																
Choose and Verify Corrective Actions. Confirm that the selected corrective actions will resolve the problem for the customer and will not cause undesirable side effects. Define contingency actions, if necessary, based on the potential severity of the side effects.																
<b>6) Implement Permanent Corrective Actions and Verify the Effects:</b>																
Implement and Validate Permanent Corrective Actions. Choose ongoing controls to insure the root cause is eliminated. Once in production, monitor the long-term effects and implement additional controls and contingency actions as necessary.																
<b>7) Verification of Corrective/Preventive Actions:</b>																
Prevent Recurrence. Identify and implement steps that need to be taken to prevent the same or a similar problem from occurring in the future: modify specifications, update training, review workflow, and improve management systems, operating systems, practices and procedures.																
<b>Verified by:</b>																
<b>Date:</b>																
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Acceptance	By	Date	Comments													
Containment Plan																
Corrective Action Plan																
Verification Completed																
<b>8) Recognize the Contributions of the Team:</b>																
Congratulate the Team. Recognize the collective efforts of your team. Publicize your achievement. Share your knowledge and learning throughout the organization.																

## Appendix 2: Scorecard System

Sub Criteria	Weight	Score (1-5)	1	2	3	4	5
<b>Gap to Cost targets / Competitiveness</b>	25%		High Gap, Not Improving		Closing gap but inconsistently, situationally competitive		At or below target / Consistent cost leader
<b>Quality</b>	10%		High DPM, lack of quality controls		Quality system in place, lacking consistency		Consistent quality which keeps DPM down below 1%
<b>OTD Delivery</b>	10%		No OTD support of mfg. operations - <90%	91% - 94%	Occasional support, requires Merix prompting, limited impact to production - 95%	96 - 98%	Meeting Stretch Goals with no impact to Merix performance - 99-100%
<b>Payment Terms</b>	5%		<45	45	60	75	>=90
<b>Supplier Financial Health</b>	5%		Poor financial condition, Significant risk	Weak financial condition, Considerable risk	Neutral financial condition, Moderate risk	Strong financial condition, Low risk	Excellent financial condition, Very low risk
<b>Consignment / Supplier Owned Inventory</b>	5%		No SOI Agreement, no alternative means in place to support intent of SOI	SOI agreement or alternative means in place to support intent of SOI, limited deployment	SOI agreement or alternative means in place to support intent of SOI	SOI Agreement, Widely in place or alternative means in place to support intent of SOI	SOI Agreement, Widely in place or alternative means in place to support intent of SOI, proactive in offering ideas for improved inventory turn performance
<b>Lead Time &amp; Flexibility</b>	10%		Lead times that do not meet Merix needs, no active plans in place to improve		Lead time agreement that does not meet Merix needs, active plans in place to improve		Lead time agreement that meet Merix needs (<1 wk), agreement to support 20% flex in 2 days
<b>Roadmap Alignment</b>	10%		Significant gaps to Merix technology roadmap requirements. Roadmap reviews not held with SCT	Gaps to Merix technology roadmap requirements. Roadmap reviews conducted with SCT	Technology to support Roadmap requirements, actively participates in Roadmap Linkage with SCT	Technology to support Roadmap requirements, actively participates in Roadmap Linkage with SCT, brings disruptive technologies to Merix first.	Technology to support Roadmap requirements, actively participates in Roadmap Linkage with SCT, brings disruptive technologies to Merix first, and supplier has significant positive impact on our product roadmap success.
<b>Strategic Initiative Engagement</b>	10%		Not Supporting	Adequate support with prompting	Supports as requested	Actively supports key initiatives, provides thoughtful inputs and constructive feedback on initiatives	Actively supports key initiatives, provides thoughtful inputs and constructive feedback on initiatives, results of initiatives demonstrated in performance
<b>Service &amp; Support</b>	5%		Limited resources assigned to Merix account, frequent churn in team. Overall service/support lags competitors.	Adequate support of Merix account	Excellent support of Merix account, but some gaps in specific functions/regions	Excellent support of Merix account across multiple functions/regions	Team supporting Merix is best in class, top talent assigned to our account. Supplier has demonstrated outstanding support for Merix
<b>Technical Data Submissions (issue, etc)</b>	5%		Many escalations of unresolved issues requests, slow response	Responds, but escalations sometimes required	Responsive to requests, cycle time and quality of submission meets Merix needs	Responsive to requests, cycle time and quality of submission best in class	Proactive in anticipating/responding to requests, cycle time and quality of submission best in class

### Appendix 3: PIP Outline

## PERFORMANCE IMPROVEMENT PLAN

### Supplier Actions:

1. Gather/compile nonconformance data from the following sources:
  - a. Customer returns
  - b. Customer notifications
  - c. Internal nonconformance data
    - i. MRB records
    - ii. Scrap and rework data
    - iii. Interviews
  - d. Other sources
2. Assemble data in a manageable format/s. Analyze / Evaluate data as necessary to bring focus to areas with the most opportunities for improvement initiatives.
  - a. DPM (Defects Per Million) Pareto analysis by:
    - i. Part Number
    - ii. Process
    - iii. Department
    - iv. Characteristic (dimensional, technology, processing, paperwork, etc.)
    - v. Most likely cause/s
      1. Machinery
      2. Procedures/work instructions
      3. Process/process controls
      4. Training
      5. Tooling
      6. Materials/input chemistries
      7. Other causes
    - vi. Other categories
  - b. Other evaluation tools or methods
3. Establish containment plans for the major drivers of product and system deficiencies.
4. Perform 8D analyses against the top drivers to develop comprehensive and systemic improvement action plans.
  - a. Where appropriate, use Process Maps, Failure Modes and Effects Analysis (FMEA), and establish/implement through the deployment of Control Plans.
  - b. Document actions and timing, track through implementation and effectiveness validation. (Planned Milestones).
5. Report on the management review process that is being utilized by your company to drive continuous improvement actions required to reach/exceed Viasystems goals.
6. Establish the rate of improvement and timing.
7. Verify effectiveness of PIP actions.

Appendix 4: Waiver Request for Nonconforming Product

## Waiver Request for Nonconforming Product

*This section to be filled out by supplier*

Supplier: \_\_\_\_\_ Date: \_\_\_\_\_

Originator: \_\_\_\_\_

Supplier Part #: \_\_\_\_\_ Viasystems Part #: \_\_\_\_\_

PO #: \_\_\_\_\_ Quantity Defective: \_\_\_\_\_

Description of Defect:

Specification(s) Violated:

(Viasystems, Industry, etc.)

*This section for Viasystems use only*

Waiver Declined  Waiver Accepted\*

\* Waiver Log #: \_\_\_\_\_  
(only if accepted)

\* Special Instructions for identification and shipping:  
(only if accepted)

Signature: \_\_\_\_\_  
Viasystems Site Quality Leader \_\_\_\_\_ Date \_\_\_\_\_

**Appendix 5: SCAR Form**

**Viasystems SCAR Form**

**Supplier:** \_\_\_\_\_

**Date of Notification:** \_\_\_\_\_

**Supplier Contact:** \_\_\_\_\_

**SCAR #:** \_\_\_\_\_

**Statement of Problem:** \_\_\_\_\_

**Supplier Action Required:**

**Response Requirement  
(Unless otherwise specified)**

- |                                                                                |              |
|--------------------------------------------------------------------------------|--------------|
| <input type="checkbox"/> Containment of Suspect Material                       | 48 Hours     |
| <input type="checkbox"/> Closed Loop Corrective Action                         | 2 Weeks      |
| <input type="checkbox"/> 8D - or equivalent problem solving methodology        | 3 Weeks      |
| <input type="checkbox"/> Supplier to Increase AQL Sampling Level               | 24 Hours     |
| <input type="checkbox"/> 3 <sup>rd</sup> Party Inspection of Material          | As Requested |
| <input type="checkbox"/> Viasystems to perform Incoming Inspection of Material |              |
| <input type="checkbox"/> Performance Improvement Plan                          | 4 Weeks      |

**Viasystems Representative:** \_\_\_\_\_

**Phone #:** \_\_\_\_\_

**Email:** \_\_\_\_\_

**Comments:**

## Appendix 6: Supplier Corrective Actions Timetable

Merix Request	Supplier Action	Due by*
Containment of Suspect Material	Contain all suspect material and notify the SCAR issuer.	48 hours
Corrective Action	Determine the root cause of the nonconformance, eliminate the cause, and notify the SCAR issuer.	2 weeks
8D - or equivalent problem solving methodology	Perform an 8D event to find and eliminate the root cause of the nonconformance. When complete, notify the SCAR issuer.	3 weeks
Supplier to Increase AQL Sampling Level	Change sampling plan as requested and notify SCAR issuer when compliant.	24 hours
3 <sup>rd</sup> Party Inspection of Material	Merix will indicate timeframe when the request is made.	As requested
Performance Improvement Plan	Perform the process of a Performance Improvement Plan. Merix may request progress reports. When completed, notify the SCAR issuer.	4 weeks

\* Due dates may be specified on the SCAR that differ from this outline. If the supplier is unable to meet the deadlines, please notify the SCAR issuer as soon as possible.