



SUPPLIER QUALITY MANUAL

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Supplier Quality Manual

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1.0 – Introduction and Overview

ASYST QUALITY POLICY

The Employees of Asyst Technologies, LLC are dedicated to providing products and services that meet or exceed our customers' requirements. We recognize that our products and services are vital to our customers' success therefore; we will measure our performance and commit ourselves to the unending goal of improving our Core Processes and the Quality Management System. It is every employee's responsibility to take an active role in Defect Prevention, Continuous Improvement, and Customer Satisfaction.

ASYST Technologies, LLC has developed this Supplier Quality Manual in order to communicate expectations and requirements to ensure optimal performance throughout the supply chain. This Supplier Quality Manual and associated development activities are intended to ensure compliance using Section 1 of ISO/TS-16949 as the fundamental quality system requirement.

ASYST is committed to helping suppliers continually improve their processes and systems with the ultimate goal of zero defects. In order to do this, Asyst shall provide suppliers with up-to-date data, information, and feedback they need to effectively develop, implement, and maintain a robust quality plan.

The supplier must accept ultimate responsibility for the quality of their products and services. ASYST Technologies, LLC will support the supplier's efforts but will not be responsible for implementation of cost and quality improvement programs such as scrap reduction, SPC, Lean Manufacturing, etc. This manual shall provide the basis for establishing and maintaining a mutually beneficial relationship between Asyst and its suppliers.

2.0 – Supplier Assessments

2.1 General Requirements

- 2.1.1 Asyst Purchasing and Quality are responsible for evaluating and selecting suppliers that will be used to supply product and services. Before approving a supplier, or ordering products or services, the supplier is evaluated on their ability to meet subcontract and quality system requirements.
- 2.1.2 Asyst and its customers reserve the right to verify that purchased product conforms to specified requirements at the supplier's facilities. Such verification will not be used by Asyst as evidence of effective control by the supplier.
- 2.1.3 Suppliers shall ensure that all purchased materials used in part manufacture satisfy current governmental, regulatory and safety constraints on restricted, toxic and hazardous materials; (refer to Section 3.4.5 for more information on restricted & reportable substances) as well as environmental, electrical and electromagnetic considerations applicable to the country of manufacture and sale.
- 2.1.4 Suppliers must maintain quality, delivery and any other performance levels to maintain approved or preferred status.
- 2.1.5 Suppliers must permanently mark all Asyst owned or Asyst customer owned tooling with the Asyst Tool Number and Asyst Part Number. Digital photos of the completed tooling showing these markings should be submitted to the Asyst Materials Manager.

2.2 Supplier Assessments**2.2.1 Supplier Self-Assessment**

Quality Critical suppliers are required to complete a Supplier Assessment. Asyst shall evaluate the supplier's responses and determine if an on-site audit is warranted.

2.2.2 On-Site Audit

An on-site audit may be necessary to fully evaluate a supplier's capabilities. Circumstances that may prompt an on-site audit include:

- 2.2.2.1 A new supplier of key components or materials.

2.2.2.2 A new supplier with incomplete or inadequate responses on the “Supplier Quality Survey”.

2.2.2.3 An existing supplier with poor performance.

2.2.2.4 An existing supplier being asked to quote more complex product.

2.3 Supplier Status

After the assessment has been completed, Asyst Purchasing and Quality shall designate the supplier’s status as approved, preferred, or probationary. Status is defined as follows:

2.3.1 Approved Supplier: A supplier who has met minimum qualification criteria and has been approved to supply a required item. ASYST Technologies, LLC inspection and/or testing may be required prior to use.

2.3.2 Preferred Supplier: An approved supplier who has demonstrated excellent quality, delivery and cost performance. A Preferred Supplier is given first opportunity to quote new business and may qualify for reduced audit and/or inspection frequencies.

2.3.3 Probationary Supplier: An approved supplier who has demonstrated less than adequate quality, delivery or cost performance. A Probationary Supplier may not be given the opportunity to quote new business. Also, the supplier may be required to present corrective actions taken and/or propose an improvement plan for those areas where performance is less than adequate. Probationary suppliers may require increased audit and/or inspection frequencies.

3.1 General Requirements for PPAP

- 3.1.1 The purpose of a PPAP (Production Part Approval Process) submission is to ensure that all part requirements are understood by the supplier and that the supplier's process has the potential to produce compliant product consistently. All suppliers are responsible for preparing and submitting a PPAP package to Asyst prior to shipping production-intent product.
- 3.1.2 Suppliers are also responsible for implementing and managing a sub-supplier part approval process that is recognized by Asyst. Please refer to the AIAG (Automotive Industry Action Group) PPAP reference manual for suggested methods to use.

3.2 When PPAP Submission Is Required

A PPAP submission **SHALL BE** required for the following circumstances:

- 3.2.1 Initial production of a new or revised component and/or material.
- 3.2.2 Correction of any discrepancy on a previous submission (resubmission of an Interim or rejected PPAP).
- 3.2.3 Any change in process, tooling or engineering design that may affect form, fit or function of the product (resulting in change to process control plan).
- 3.2.4 Any change in the supplier's manufacturing location or movement of any or all of the production processes used to manufacture the component.
- 3.2.5 Any change in sub-supplier (new sub-supplier).
- 3.2.6 Any change in the sub-supplier's process, tooling or engineering design that may affect form, fit or function of the supplier's product.
- 3.2.7 Any change in the status of a component and/or material from inactive to active if the inactive period was longer than 12 months.

3.3 When PPAP Submission Is NOT Required

A PPAP submission **IS NOT** required for the following circumstances:

- 3.3.1 Any changes to component-level drawings, manufactured internally or manufactured by sub-suppliers, that do not impact the design record for the product supplied to Asyst.

3.0 – Production Part Approval Process (PPAP)

- 3.3.2 Tool movement within the same facility (used in equivalent equipment, no change in process flow, no disassembly of tool) or equipment movement within the same facility (same equipment, no change in process flow).
- 3.3.3 Identical gage replacement (calibration and/or maintenance issue).
- 3.3.4 Any changes in process resulting in lower RPN's (Risk Priority Numbers) on the supplier's PFMEA (Process Failure Mode & Effects Analysis) that do not alter the process flow.

3.4 PPAP Submission Requirements

- 3.4.1 Purchasing shall notify Quality when a new/revised product is being ordered and also provide the Asyst customer name, supplier name, part number, and Project Engineer name. Quality shall document specific requirements for PPAP for each part on a PPAP Checklist, Form #743-09, and Purchasing will send it to the supplier. A new checklist shall be documented and forwarded to the supplier for all new/revised products that require a PPAP submission. The supplier must assemble all items on the checklist and submit the PPAP package to Asyst for evaluation. All data contained within the PPAP package must show evidence of being in full compliance with all specifications, or be accompanied by an approved SREA Form #743-10 (Supplier Request for Engineering Authorization).

3.4.2 Dimensional Layout Data

The supplier is responsible for conducting and reporting a dimensional layout of all representative cavities of a component as part of the PPAP package. Unless otherwise noted on the PPAP checklist, only one part per cavity needs to be measured. The supplier must submit actual layout parts and a copy of the print with ballooned dimensions linked to the dimensional layout results on the report. When multiple revision levels are stated on a single part drawing (for example, when an Asyst drawing is placed inside of a customer's standard drawing border), the revision level in the outermost border shall be used and recorded on all applicable APQP/PPAP documentation.

- 3.4.2.1 For those characteristics identified as critical or significant, the supplier is responsible for conducting a capability study on no less than 300 parts (unless otherwise noted on the PPAP checklist). Critical or significant characteristics require a minimum Cpk of a 1.67 (1.33 for mature processes). In addition, a Gage Repeatability and Reproducibility (GR&R) study is required for any tools or equipment used to measure the critical or significant characteristics. A gage is acceptable if total variation present in the measurement system is less than 10%. A gage may be acceptable if variation is between 10-30% (depends on the characteristic) but corrective action plan should be initiated to reduce variation present. The gage is unacceptable if total variation exceeds 30%.
- 3.4.2.2 If any dimension does not meet specification, or capability study results are less than the required 1.67 Cpk, the supplier must submit a corrective action plan for correcting the discrepancy which may include completion of an SREA as described in Section 3.4.1.

3.4.3 Material and Performance Test Data

The supplier is responsible for conducting and submitting results of all material and performance testing as specified on the print. If the supplier is not capable of performing all tests, they can contract the service with a qualified source such as the sub-supplier or a third-party laboratory or test facility. The contracted source must be an accredited facility (A2LA, or ISO 17025). The supplier is responsible for maintaining and submitting certificates of compliance and updated test results when applicable prior to the expiration date. Material test results and certificates of compliance should be renewed and submitted annually to Asyst.

3.4.4 APQP (Advanced Product Quality Planning) Documentation

The supplier is responsible for creating and submitting APQP documents to Asyst. Advanced Product Quality Planning is a structured method of defining and establishing the steps necessary to assure that a product satisfies the customer. The supplier must have a documented process to ensure all elements of the APQP process are completed properly and on time.

Elements of the APQP process include the following documents:

3.4.4.1 PFMEA (Process Failure Mode & Effects Analysis)

A PFMEA should be conducted during product quality planning and prior to production. It is a disciplined review and analysis of a new and/or revised process and is conducted to anticipate, resolve, or monitor potential process problems for new and/or revised products. A PFMEA is a living document and needs to be reviewed and updated as new failure modes are discovered. Be advised that failure modes with a Risk Priority Number (RPN) over 60 will require corrective action to reduce the RPN. An interim approval may be granted until the RPN can be reduced. A more detailed explanation and examples of forms can be found in the AIAG reference manual *“Potential Failure Mode and Effects Analysis”*.

3.4.4.2 Process Control Plan

A process control plan is a written description of the systems for controlling parts and processes. The process control plan is a living document and must be updated to reflect the addition/deletion of controls based on experience gained by producing parts. A more detailed explanation and examples of forms can be found in the AIAG reference manual, *“Advanced Product Quality Planning and Control Plan”*.

3.4.4.3 Process Flow Diagram

A process flow diagram is a schematic representation of the current or proposed process flow. It should be used to analyze sources of variation on machines, materials, methods and manpower from the beginning to the end of a manufacturing or assembly process. The flow diagram helps to analyze the total process rather than individual steps in the process. A more detailed explanation and examples of forms can be found in the AIAG reference manual, *“Advanced Product Quality Planning and Control Plan”*.

3.4.5 International Material Data System – IMDS

The International Material Data System (IMDS) is a database created by the automobile industry to collect and report material composition data for components in a finished vehicle. IMDS enables vehicle manufacturers to meet national and international standards and laws, most notably the European End-of-Life Vehicles Directive.

IMDS collects material data via the internet on Material Data Sheets (MDSs) which are entered by Tier I suppliers and released to specific OEMs. IMDS allows Tier I suppliers to receive MDSs from their suppliers, who also provide the data directly through the IMDS, and so on throughout the supply chain.

ASYST Technologies, LLC requires suppliers to submit IMDS data as part of every PPAP submission unless otherwise noted on the PPAP Checklist. PPAP submissions will not be approved until IMDS data is received and accepted as adequate by Quality.

It is strongly recommended that suppliers access the IMDS website at www.mdssystem.com to learn more about the system, access help files, and to obtain information regarding training in using the system.

3.4.6 Appearance Approval Report

The supplier must submit a separate Appearance Approval Report (AAR) for each part if the product/part has appearance requirements on the design record. The AAR only applies to parts with color, grain, or surface requirements.

3.4.7 PPAP Checklist

The Supplier PPAP checklist, Form 743-09 is used by Asyst to communicate submission requirements to suppliers. Suppliers should use this checklist to ensure a complete PPAP package is assembled prior to shipping documentation and parts. The PPAP checklist **MUST BE INCLUDED** in the package as well. Upon receipt, Asyst will evaluate the package and determine if approval can be granted. The PPAP checklist will then be updated with “Full Production Approval”, “Interim Production Approval” or “Rejected Submission”. A copy of the PPAP checklist with the appropriate approval or rejection signatures will be sent back to the supplier for their records.

3.4.7.1 Full Production Approval Status

The supplier has been granted full production approval and can begin shipping parts to Asyst.

3.4.7.2 Interim Production Approval Status

The supplier may be granted an interim approval for the following reasons:

- Incomplete or incorrect PPAP package (missing and/or erroneous documentation)
- Parts do not meet print requirements (dimensional and/or test failures identified and a corrective/preventive action plan documented)
- Material and/or performance testing not yet completed (long term environmental testing such as salt spray or corrosion testing)

3.4.7.3 Rejected Submission Status

The PPAP package may be rejected for the following reasons:

- Incorrect documentation does not match Asyst requirements as stated on the PPAP checklist.
- Parts do not meet print specifications (dimensional and/or test failures with NO corrective/preventive action plan documented)
- Material and/or performance test failures.

3.5 Shipment of PPAP Package

The PPAP parts and documentation must be packaged with sufficient care and planning in order to prevent damage to the contents. The package must be clearly identified/labeled as “PPAP Samples and Documentation”.

3.5.7 The supplier must make every effort to ship sample parts and documentation in the same package. When this is not feasible, due to the potential for damage to the documentation, the supplier may ship the sample parts in a separate container. Parts may also be shipped in a smaller container within a larger shipment of parts. The label or identification should be affixed to the specific container holding the sample parts.

3.5.8 In all cases, the supplier must ship PPAP sample parts and documentation to the attention of the Asyst Materials Manager.

3.6 Shipment of Initial Production

No shipment of parts will be accepted by Asyst until the PPAP package has been approved. In situations where the initial production order is shipped at the same time as the PPAP package, the parts shall be placed in a hold location until a decision is made regarding the submission. There may also be occasions where Asyst will order parts for sample purposes. These parts must be labeled as samples. In all cases, the supplier must label all cartons in the first shipment of new or revised parts with a bright-colored label stating “1st Shipment of New Parts” or “1st Shipment of Revised Parts”.

3.7 Supplier Request for Engineering Authorization

The Supplier Request for Engineering Authorization (SREA), Form 743-10, is a form that can be used to request a change in material, component or product specifications. Every attempt should be made by the supplier to correct any discrepancies prior to requesting a change through the submission of an SREA. In some instances when the supplier is unable to gain approval in time for production demands, this process can be used to gain interim approval.

3.7.1 The supplier must complete the top portion of the SREA Form and submit it to the Asyst Materials Manager for evaluation. A copy is shown on the next page.

3.7.2 Asyst will review and approve or reject the request and notify the supplier in writing of the decision.



Supplier Quality Manual



Supplier Request for Engineering Authorization (SREA)

SUPPLIER TO COMPLETE THIS SECTION:		DATE:
SUPPLIER NAME AND ADDRESS:		
SUPPLIER CONTACT NAME, TITLE, PHONE, FAX:		
ASYST PART NAME and PART NUMBER OF COMPONENT(S):		ASYST PURCHASING CONTACT:
		CONTROL ITEM AFFECTED <input type="checkbox"/> YES <input type="checkbox"/> NO
		CRITICAL ITEM <input type="checkbox"/> YES <input type="checkbox"/> NO
CHANGE:	<input type="checkbox"/> PERMANENT CHANGE	<input type="checkbox"/> TEMPORARY PERMIT
	<input type="checkbox"/> DESIGN	<input type="checkbox"/> MATERIAL
	<input type="checkbox"/> PROCESS	<input type="checkbox"/> DESCRIPTION
	<input type="checkbox"/> OTHER	
QTY: _____ TIME PERIOD: _____		
COPY FOR REFERENCE ONLY		
EFFECT OF CHANGE:		
CONTACT ASYST FOR LATEST REVISION OF SREA FORM		
INTERCHANGEABILITY AFFECTED:	TOOLING / FACILITY CHANGES REQUIRED:	
ASSEMBLY <input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
COMPONENTS <input type="checkbox"/> YES <input type="checkbox"/> NO	IF YES, COST EFFECT \$	
TIME TO INCORPORATE CHANGE AFTER APPROVAL:	PIECE COST AFFECTED: <input type="checkbox"/> YES <input type="checkbox"/> NO	
	IF YES, COST EFFECT \$	
WILL INCORPORATION OF CHANGE AFFECT SHIPPING SCHEDULE?	SIGNATURE: _____	
<input type="checkbox"/> YES <input type="checkbox"/> NO	(SUPPLIER REPRESENTATIVE)	

ASYST TECHNOLOGIES, LLC, PRODUCT ENGINEERING TO COMPLETE:			
<input type="checkbox"/> APPROVED	<input type="checkbox"/> REJECTED	BY: _____	DATE: _____
IF APPROVED, DATE ECN INITIATED: _____		SAMPLE OF CHANGED COMPONENT REQUIRED? <input type="checkbox"/> YES <input type="checkbox"/> NO	
REASON FOR REJECTION OR QUALIFYING CONDITIONS OF ACCEPTANCE:			
CONCURRED BY:			
PURCHASING: _____	Date: _____	QA: _____	Date: _____
COST, DELIVERY			
MFG. ENG.: _____	Date: _____	MFG.: _____	Date: _____
INTERCHANGEABILITY		INTERCHANGEABILITY	

*This approval is granted upon the understanding that it is advisory in nature and in no manner changes the Seller's original responsibility for insuring that all characteristics, designated in the applicable engineering specifications and / or inherent in samples as originally tested and approved, are maintained. Seller accepts full responsibility for the changes or types of changes listed above, and should such changes result in less satisfactory performance than experienced with the originally approved item, Seller will fully reimburse the buyer for all expenses incurred to correct the deficiency.

4.1 General Label Requirements

4.1.1 All suppliers, unless waived by Asyst, are required to use bar-coded labels when shipping to Asyst. Labels must be attached to the top right corner on the front of the box. Label elements must include the following information:

Item #	Label Element	Data Description
1	Asyst PO #	Human readable and barcode with optional “K” data identifier in front of PO #
2	Asyst Item #	Human readable and barcode with optional “P” data identifier in front of item #
3	Lot # (if applicable)	Human readable and barcode with optional “L” data identifier in front of lot #
4	Quantity	Human readable and barcode with optional “Q” data identifier in front of quantity
5	REVISION LEVEL	Revision level that matches product (letter, number, etc.). Please reference Section 3.4.2 for more information.
6	Other Information	As specified by ASYST Technologies, LLC

4.1.2 Suppliers must also adhere to the following:

Note #	Details
1	The suggested label stock is 4.0” wide X 6.0” deep or equivalent.
2	Barcode symbology should be Code 3 of 9.
3	Data identifiers are alphanumeric characters that are imbedded in barcodes to identify the type of data contained in the bar code (e.g. part number vs. lot number vs. quantity). Generally, data identifiers are excluded from the human readable portion of the label. Data identifiers are specific to bar code symbology and/or industry standards (for example, AIAG for the Automotive Industry).
4	AIAG or other format can be used; however, the label element list above in Section 3.7.1 should be considered as minimum requirements in addition to other Asyst label requirements. <u>Note: a sample label should be sent to the Asyst Materials Manager for review and approval prior to the first shipment.</u>
5	Packaging Requirements: Parts should be in corrugated containers. Containers should be taped, NO STAPLES ALLOWED. Containers should also protect parts while in transit. Containers must not exceed 35lbs.

5.1 Suspect and/or Nonconforming Material Found at Supplier's Location

- 5.1.1 The supplier must have a written procedure for handling suspect and/or nonconforming material found at their location. Immediate containment actions must be implemented to ensure no defective product is shipped to Asyst. All lots and/or shipments that may contain defective product must be quarantined until product can be certified as defect-free.
- 5.1.2 The supplier is required to notify Asyst of any shipments in transit that may be affected. Advance notification of suspect and/or defective product will enable Asyst to deny the shipment and thus eliminate the need to issue a rejection which would negatively affect the supplier's PPM.
- 5.1.3 The supplier shall be held responsible for all costs incurred in sorting, reworking, or other corrective action steps taken due to supplier quality spills.

5.2 Nonconforming Material Found at Asyst

- 5.2.1 Asyst shall initiate a **Product Hold & Rejection Notice (Form 830-04)** and notify the supplier when nonconforming material is detected.
- 5.2.2 An initial written response to the **rejection is required** within 24 hours. **The rejection notice may be used to respond and it MUST** include containment actions to prevent additional defective product from being shipped to Asyst.
- 5.2.3 Replacement stock is required in all cases unless specifically directed otherwise by Asyst Purchasing.
- 5.2.4 A sort at Asyst may be required if replacement stock is not available or production needs parts. On-site sorting needs will be communicated by Asyst. If Asyst employees sort supplier product, the supplier shall be billed at an appropriate rate per hour. The supplier may contract a local sorting facility to perform the sort at Asyst at their own cost or they may be charged back for the service as part of the Cost Recovery Process detailed in Section 7.
- 5.2.5 ALL shipments to Asyst of the defective part number MUST be inspected and labeled as "Certified" (containing no defects). Certification labels are required until permanent corrective action is implemented and verified.
- 5.2.6 Corrective action implementation and elimination of the root causes of the defects is required within 15 days. The supplier MUST contact the Asyst Quality Department when resolution will take longer than 15 days.
- 5.2.7 The supplier shall be held responsible for all costs incurred in sorting, reworking, or other corrective action steps taken due to supplier quality spills.

5.3 Corrective and Preventive Action

5.3.1 General Requirements

Suppliers are required to use a disciplined problem-solving method to investigate and eliminate the root causes of defective product. Asyst strongly recommends the use of a process similar to the *Ford Eight Discipline Method* (8D) when addressing the problem. At a minimum, the written supplier corrective action report must include the following information:

5.3.1.1 Assemble a Cross-Functional Team to Investigate

Provide the names and functions of team members associated with the corrective action effort. A cross-functional team including personnel with solid product and process knowledge is recommended to ensure effective long-term resolution.

5.3.1.2 Describe/Define the Problem

Describe the problem symptoms as experienced by the customer. Determine the extent of the problem and its effects in technical and quantifiable terms. Include the *Five "W's" and Two "H's"* (who, what, where, when, why, how and how many) of the problem.

5.3.1.3 Plan, Implement and Verify Immediate Containment Actions

Asyst cannot emphasize enough the critical importance of planning, implementing, and verifying effective containment actions for preventing the shipment of defective product to Asyst. These actions must be immediate and should only be in place until permanent corrective actions are implemented and verified. The supplier should note that containment actions will not be considered by Asyst to be a permanent solution to any problem. Common containment actions include:

- 100% Inspection to sort out defects
- Increased measurements of key characteristics (above the normal frequency shown on the process control plan)
- Manual processing when automated equipment is suspected to be part of the problem
- Labeling cartons as "100% Certified" until permanent corrective action is implemented and verified.

5.3.1.4 Define and Verify Root Cause(s) of the Problem

Identify all potential causes which could explain why the problem occurred. Isolate and verify the root cause(s) by testing each potential cause against the problem description and test data. Asyst recommends that the supplier use root cause analysis tools such as a “Cause and Effect Diagram” (Fish Bone) and/or the “Five Why” approach (asking why at least 5 times until you can no longer reasonably ask why). An example of the “Five Why” approach is shown below:

Question #	Question	Response
1	Why did the machine stop?	Because the fuse blew due to an overload.
2	Why was there an overload?	Because the bearing lubrication was inadequate.
3	Why was the bearing lubrication inadequate?	Because the lubrication pump was not working properly.
4	Why wasn't the lubrication pump working properly?	Because the pump axle was worn out.
5	Why was the pump axle worn out?	Because sludge got into the axle.
6	Why did sludge get into the axle?	Because there is no filter on the lubrication pump to keep sludge out.

By asking “why” at least five times (six in the example above) the supplier is able to get to the root cause of the problem.

5.3.1.5 Plan, Implement and Verify Permanent Corrective Actions

Once the root cause of the problem has been identified the supplier then needs to plan, implement and verify corrective actions to permanently eliminate the cause of the problem. The supplier must also verify that the selected actions will resolve the problem for the customer without causing undesirable side effects (for example, changing to high-impact plastic resin without verifying the shrink rate effect on the parts).

Some examples of effective verification methods include:

- Short and long-term capability studies on key characteristics
- Statistical process control (SPC) charting and analysis
- Designed experiments
- Destructive Testing (internal or external)

Verification should take place prior to implementation whenever possible.

5.3.1.6 Plan and Implement Preventive Actions

The supplier should plan and implement actions intended to prevent recurrence of the problem. Prevention methods include modifying management or operations systems, modifying procedures and/or work instructions, monitoring process or SPC data, and evaluating similar processes and/or products.

Suppliers are required to submit a written initial response to all **rejection notices** issued by Asyst. The supplier is also responsible for submitting a written plan detailing their permanent corrective actions within 15 days of receipt of a **rejection notice**. If more time is needed, the supplier must contact the Asyst Quality Department prior to the original due date.

6.1 General Requirements

6.1.1 Supplier performance will be evaluated by Asyst on a regular basis. Suppliers not meeting the minimum performance expectations may be required to present a detailed plan to Asyst outlining actions that will be taken to correct any deficiencies. Supplier performance expectations have been defined by Asyst for on-time delivery, quality, and responsiveness to key issues.

6.2 On-Time Delivery

6.2.1 Asyst suppliers are required to achieve 100% on-time delivery (defined as minus four days early plus zero days late). Suppliers delivering less than 100% on-time **may** be required to submit a corrective action plan to improve and meet the requirement.

6.2.2 Suppliers will be responsible for all costs incurred by Asyst as a result of late shipments.

6.2.3 Suppliers consistently failing to meet the 100% delivery requirement may have their status changed to “Probationary”. The supplier **may** not be eligible for additional business until the supplier is removed from probation and their status changed back to “Approved”.

6.2.4 If the supplier is unable to ship product as scheduled, an e-mail should be sent to Asyst by the supplier indicating the reason for the delay and the target date for supplying the product.

6.3 Quality and Compliance

6.3.1 Asyst suppliers are required to provide product that is defect-free and complies with all specifications. Suppliers delivering product that is defective or does not meet all specifications will be required to submit a corrective action plan for each problem. In addition, Asyst may require that the supplier engage an outside source to provide Level II Containment and Shipping if they fail to prevent additional defective product from reaching Asyst.

6.3.2 Suppliers will be responsible for all costs incurred by Asyst as a result of a quality spill or the supplier's failure to meet specifications.

6.3.3 Suppliers consistently failing to provide defect-free product that complies with all specifications may have their status changed to “Probationary”. The supplier will not be eligible for additional business until the supplier is removed from probation and their status changed back to “Approved”.

6.4 Responsiveness

- 6.4.1 Asyst suppliers are required to provide timely responses to key issues including **rejection notices** and PPAP submissions.
- 6.4.2 Suppliers that consistently fail to provide timely responses may have their status changed to “Probationary”. The supplier will not be eligible for additional business until the supplier is removed from probation and their status changed back to “Approved”.

6.5 Quarterly Performance Reporting

- 6.5.1 The Asyst Materials Manager and Quality Manager are responsible for evaluating and reporting supplier performance on a quarterly basis. The performance evaluation shall include the following metrics:

Performance Element	Expected Performance Level
On-Time Delivery	100% On-Time (-4 / +0 Days Late)
Quality and Compliance	Zero PPM (# of Rejects / # of Parts Received X 1,000,000)
Responsiveness to Key Issues	1. 100% On-Time (Initial 24 Hour Response to Rejections) 2. 100% On-Time (PPAP Submissions)
Incidents of Premium Freight	Zero Dollar Value Per Incident of Premium Freight

- 6.5.1 Periodic performance ratings will only be provided to quality critical suppliers (defined as those supplying components and/or materials). The report shall be documented and sent to the supplier on Form #743-07, Supplier Performance Report.

6.6 Supplier Improvement and Development

Asyst is committed to helping suppliers maintain and improve their overall systems. The Asyst Quality Manager shall provide assistance to suppliers when needed to ensure effective quality system development and continuous process improvement. Other supplier development or improvement initiatives may include, but are not limited to:

- Training on Quality System (ISO/TS-16949) elements
- Conducting a Second-Party Audit on the supplier’s quality system
- Training or assistance on Advanced Product Quality Planning (APQP)
- Training on problem-solving methods

7.1 General Considerations

7.1.1 Cost Recovery Process

7.1.1.1 The supplier shall be held financially responsible for all costs incurred as a result of a nonconforming product and/or late shipments to Asyst.

7.1.1.2 The Asyst Quality Manager shall document all associated costs on a detailed Cost Recovery Worksheet (Form #743-11) and send it to the supplier. Associated costs include, but are not limited to:

- Labor Costs: Total cost to sort, rework, repair, etc.
- Production Overtime Premium: Total cost.
- Scrap Cost: For parts and/or assemblies up to the point in the process where the defect was discovered.
- Premium Transportation Costs: Inbound and Outbound
- Outside Services: Third Party Sorting, Travel Costs
- Customer Costs: Costs Incurred by Asyst Customers

7.1.1.3 If the supplier believes that they should not be responsible for part or all of the costs assigned, they have five working days to notify Asyst and request a review with applicable personnel. After five working days, or after a discussion where costs are reviewed and assigned to the supplier, a debit memo will be issued for the amount shown on the final version of the worksheet.

7.1.2 Annual Review of the Supplier Quality Manual

The Asyst Quality Manager and Materials Manager are responsible for reviewing the Supplier Quality Manual on a periodic basis and making any appropriate revisions. The supplier is encouraged to provide feedback to Asyst regarding the content of the manual for the purpose of continuous improvement and to ensure an effective working document.

8.1 Revision History

Revision Level	Effective Date	Revision Detail	Revised By
0	10/15/04	Original TS Supplier Manual Released	Cheryl Ferguson Quality Manager
1	1/18/05	<ol style="list-style-type: none"> Added requirement for tooling identification in Section 2.1 (General Requirements). Added President to Approval Signature Box Added note to Section 3.6 regarding initial shipment of new or revised parts. 	Cheryl Ferguson Quality Manager & Heather Schulz Materials Manager
2	1/2/06	<ol style="list-style-type: none"> Added Pat Brown to Approval Signature Box (New Operations Manager). Underlined several comments to highlight importance. Added reference copy of the Supplier Request for Engineering Approval (SREA) form to manual on page 14. 	Cheryl Ferguson Quality Manager
3	5/12/06	<ol style="list-style-type: none"> Added note to Section 3.4.2 regarding revision levels. Added note to Section 4.1.1 and 4.1.2 to clarify requirements for labels (revision level and sample requirement). Revised comment in Section 5.2.4 regarding sorting charges. 	Cheryl Ferguson Quality Manager & Heather Schulz Materials Manager
4	9/27/06	<ol style="list-style-type: none"> Revised Sections 5.2, 5.3.1, 6.4.1, and 6.5.1 due to new form name. Changed supplier rejection notice from DMR to Product Hold & Rejection Notice to match wording used internally at Asyst. 	Cheryl Ferguson Quality Manager
5	9/16/11	<ol style="list-style-type: none"> Changed President contact information, removed Operations Manager, and changed Quality Manager contact information Removed purchase order line requirement on labels in Section 4.1 Changed to e-mail as form of notification for late shipments in Section 6.2.4 Changed to periodic from quarterly in Section 6.5.1 Removed year from TS standard in Section 6.6 	Heather Schulz Materials/Quality Manager