Supplier Quality Manual

DECORATIVE PAINT INC

APPROVAL SIGNATURES

Title	Contact Information	Approval Signature / Date
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Decorative Paint, Incorporated Quality Policy

Decorative Paint, Incorporated (DPII) is committed to customer satisfaction

- Defect free products
- On time delivery
- Competitive pricing
- Promoting clean work environment and community relations

DPII is dedicated to the above through the practice of associate empowerment to seek continual improvement of processes, plant, environment and community relations.

DPII is committed to delivering the highest quality products to our customers through continual improvement activities and effective team problem solving. This commitment to quality will result in financial stability and improved employee morale, while also providing greater value to our customers and greater returns for all our stakeholders.

2.0 SUPPLIER ASSESSMENTS

2.1 Supplier Requirements

2.1.1 DPII Purchasing and Quality are responsible for evaluating and selecting suppliers who will be used to supply product and services. Supplier surveys, visits, evaluation will determine:

2.1.1.a Volume of automotive business (absolute and as a percentage of total business)

2.1.1.b Financial stability

2.1.1.c Purchased product, material or service complexity

2.1.1.d Required technology (product or process)

2.1.1.e Adequacy of available resources (e.g., people, infrastructure)

2.1.1.f Design and development capabilities (including project management)

2.1.1.g Manufacturing capability

2.1.1.h Change management process

2.1.1.i Business continuity planning (e.g., disaster preparedness, contingency planning)

2.1.1.j Logistics (Materials) process

2.1.1.k Customer service

2.1.2 DPII and our customers reserve the right to verify that purchased product conforms to specified requirements at the supplier's facilities. This verification will not be used 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 DPII owned or DPII customer owned tooling with DPII Tool Number and Part Number. Digital photos of the completed tooling showing these markings should be submitted to the DPII Purchasing Agent.

2.2 Supplier Assessments

2.2.1 Supplier Self-Assessment

Quality Critical suppliers are required to periodically complete a Supplier Assessment. DPII shall evaluate the supplier's response 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 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, DPII Purchasing and Quality shall designate the supplier's status as approved 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. DPII inspection and/or testing may be required prior to use.

2.3.2 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.

3.0 PRODUCTION PART APPROVAL PROCESS

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 DPII 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 DPII. Please refer to the AIAG (Automotive Industry Action Group) PPAP manual for PPAP requirements.

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 and/or process control plan).

3.2.4 Any change in the supplier 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 (e.g., new sub-supplier).

3.2.6 Any change in the sub-suppliers process, tooling or engineering design that may affect form, fit or function of the suppliers' product.

3.2.7 Any change in the status of a component and/or material from inactive to active of an inactive period of 12 months or longer.

3.3 When PPAP Submission if 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 product supplied to DPII.

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 issues).

3.3.4 Any changes in process resulting in lower RPN's (Risk Priority Numbers) on the suppliers 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 DPII customer name, supplier name, part number, and Project Engineer name. Quality shall document specific requirements for PPAP for each part on a PPAP checklist, and Purchasing will send it to the supplier. The supplier must assemble all items on the checklist and submit the PPAP package to DPII for evaluation. All data contained within the PPAP package must show evidence of being in full compliance with all specifications.

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, when applicable. 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 started on a single part drawing (e.g., when a DPII 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 100 parts (unless otherwise noted on the PPAP checklist). Critical (CC) or significant characteristics (SC) require a Gage Repeatability and Reproducibility (GR&R) study 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 if between 10-30% (depends on the characteristic), but a corrective action plan should be initiated to reduce the GR&R result to less than 10%, unless waived by DPII's Quality Manager or designee. 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.

3.4.3 Materials and Performance Test Data

The supplier if 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, e.g., a sub-supplier or a third-party laboratory or test facility. The contracted source must be an accredited facility (i.e., A2LA or ISO 17025). The supplier is responsible for maintaining and submitting certification 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 DPII.

3.4.4 APQP (Advanced Product Quality Planning) Documentation

The supplier is responsible for creating and submitting APQP documents to DPII as requested. APQP 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. A more detailed explanation and examples of forms can be found in the AIAG manual “Potential Failure Mode and Effects Analysis”.

3.4.4.2 Process Control Plan

A process control plan is a written description of the system 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 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 that individual steps in the process. A more detailed explanation and examples of forms can be found in the AIAG manual "Advanced Product Quality Planning and Control Plan".

3.4.5 International Material Data System – IMDS

The International Materials 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 (MSDs) which are entered by Tier 1 suppliers and released to specific OEM's. IMDS allow Tier 1 suppliers to receive MSDs from their suppliers, who also provide the data directly through the IMDS, and so on throughout the supply chain.

DPII 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 data website at www.mdsystem.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. The AAR only applies to parts with color, grain, or surface requirements, unless otherwise specified by DPII's customer.

3.4.7 PPAP Checklist

The Supplier PPAP checklist is used by DPII 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. DPII 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 had been granted full production approval and can begin shipping parts to DPII.

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 action plan documentation).
- 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 DPII requirements as stated on the PPAP checklist.
- Parts do not meet print specification (dimensional and/or test failures with NO corrective action 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 parts. The package must be clearly identified/labeled as "PPAP Samples and Documentation".

3.5.7 The Supplier must make every effort to ship PPAP parts and documentation in the same package they arrived in, when applicable. When this is not feasible, due to the potential for damage to the documentation, the supplier may ship 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 DPII Quality Manager or designee.

3.6 Shipment of Initial Production

No shipment of parts will be accepted by Decorative Paint, Incorporated 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 DPII will order parts for sample purposes. These 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."

4.0 Packaging and Labeling Requirements

4.1 General Label Requirements

4.11 All suppliers' shipping container / box labels must include Part Number, Quantity, and Date of Manufacture of the product shipped. Labels must be attached to the top right corner on the front of the box. **If parts are shipped for an Engineering Change a special label must be attached identifying the change so they are not mixed with regular production. Reusable skids and boxes must be in good condition-no broken boards or collapsed boxes. DPI reserves the right to reject or discard damaged or broken skids or boxes.**

4.1.2 DPII does not use bar code readers.

5.0 Suspect and/or Nonconforming Material

5.1 Suspect and/or Nonconforming Material Found at Suppliers Location

5.1.1 The supplier must have a written procedure for handling suspect and/or nonconforming materials found at their location. Immediate containment actions must be implemented to ensure no defective product is shipped to DPII. 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 DPII of any shipments in transit that may be affected. Advance notification of suspect and/or defective product will enable DPII to deny the shipment and this eliminates the need to issue a rejection which would negatively affect the suppliers 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 Decorative Paint, Incorporated

5.2.1 DPII shall initiate a Material Rejection Report (MRR) & in some cases Corrective Action Report (CAR) and notify the supplier when nonconforming material is detected.

5.2.2 An initial written response to the CAR is required within 24 hours. The CAR must be used to respond and it MUST include containment actions to prevent additional defective product being shipped to DPII.

5.2.3 Replacement stock is required in all cases unless specifically directed otherwise by DPII Purchasing.

5.2.4 A sort at DPII may be required if replacement stock is not available or production needs parts. On-site sorting needs will be communicated by DPII. If DPII employees sort supplier products, the supplier shall be billed at an appropriate rate per hour. The supplier may contract a local sorting facility to perform the sort at DPII 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 DPII 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, verified, & approved by DPII Quality Manager or designee.

5.2.6 Corrective action implementation and elimination of the root causes of the defects is required. The supplier MUST contact the DPII Quality Department to obtain approval for root cause analysis with permanent corrective action.

5.2.7 The supplier shall be held responsible for all costs incurred in sorting, reworking or other corrective action steps taken to address the issue.

5.3 Corrective Action

5.3.1 General Requirements

Suppliers are required to use disciplined problem-solving methods to investigate and eliminate the root causes of defective product. DPII strongly recommends the use of a problem 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 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

DPII cannot emphasize enough the critical importance of planning, implementing, and verifying effective containment actions for preventing the shipment of defective product to DPII. 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 DPII to be a permanent solution to the 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. DPII 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
Question #	Question	Response
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 the 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

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 problems for the customer without causing undesirable side effects (for example, changing to high-impact plastic resin without verifying the shrink rate effects 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
- Designated 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 operation systems, modifying procedures and/or work instruction, monitoring process or SPC data, and evaluating similar processes and/or products.

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

6.0 Supplier Performance Expectations

6.1 General Requirements

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

6.2 On-Time Delivery

6.1.2 DPII 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 requirements.

6.2.2 Suppliers will be responsible for all costs incurred by DPII 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, notification must be sent to DPII by the supplier indicating the reasons for the delay and the target date for supplying the product.

6.3 Quality and Compliance

6.3.1 DPII 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 may be required to submit a corrective action plan for each problem, in addition, DPII may require

that the supplier engage in an outside source to provide a Level II Containment and Shipping if they fail to prevent additional defective product from reaching DPII.

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

6.3.3 Suppliers consistently failing to provide defect-free product that complies with all specification 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 DPII 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 suppliers will not be eligible for additional business until the supplier is removed from probation and their status changed back to "Approved".

6.5 Annual Performance Reporting

6.5.1 The DPII Purchasing Representative and Quality Representative are responsible for evaluating and reporting supplier performance on an annual 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 Responses to Rejections) 2. 100% On-Time (PPAP Submissions)
Incidents of Premium Freight	Zero Dollar Value Per Incident of Premium Freight

Failure to adhere to the expected performance level will result in being placed on new business hold and suspension from the preferred supplier list. The supplier must submit Corrective actions for any items below the expected performance levels and be compliant (no repeat issues) for 60 days to be taken off of new business hold.

6.6 Supplier Improvement and Development

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

- Training on Quality System (ISO / IATF) elements with a goal to certification to ISO 9001
- Conducting a Second Party Audit on the suppliers quality system to ISO and/or IATF standards
- Training or assistance on Advanced Product Quality Planning (APQP)
- Training on problem-solving methods

7.0 General Considerations

7.1 Cost Recovery Process

7.1.1 The Supplier shall be held financially responsible for all costs incurred as a result of a nonconforming product and/or late shipment to DPII.

7.1.2 The DPII Quality Manager or designee shall document all associated costs on a detailed MRR and send it to the DPII Controller. The Controller will forward to the supplier. Associated costs include, but 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 defects was discovered.
- Premium Transportation Costs: Inbound and Outbound
- Outside Services: Third Party Sorting, Travel Costs
- Customer Costs: Costs Incurred by DPII Customers

7.1.3 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 DPII 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.

7.2 Annual Review of the DPII Supplier Quality Manual

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

Acknowledgement of Receipt of DPII's Supplier Quality Manual

I confirm that I have received this edition of the document:

Decorative Paint, Incorporated

SUPPLIER QUALITY MANUAL

I assure that this document will be circulated to all departments concerned with the application of this guide within my company.

The supplier commits itself to ensuring the application of the development stages as well as the use of the documents detailed within this guide.

COMPANY: .....

Printed name: .....

Function: .....

Telephone: .....

Fax: .....

E-mail: .....

Date: .....

Signature: .....

This document should be completed and returned, via fax, postal, or e-mail, to your usual Quality Representative or Purchasing Representative.