



Supplier Quality Requirements Manual

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Revision Record Sheet

ISSUE	DATE	DESCRIPTION	APPROVAL
1	7/1/2013	Initial submittal	AJD
2	9/16/2013	Updated FAI/PPAP process Para 4.1; added appendix A defining ISIR and PPAP requirements IAW APQP	AJD/KC
3	3/7/2014	Addition of "Special Processes" requirements; Update to address data requirements, PPAP Requirements, prototype, Supplier Deviation, English communication, and record retention.	MS/GL
4	11/10/14	Added a Supplier Deviation form and improved clarification of Supplier Deviation and Change Notification; Added requirement related to Certificate of Analysis (C of A); Detailed "First Article Inspection Report" requirements for prototype materials and Production Part Approval Process for production materials; Changed ISIR to FAIR; Clarified C of C requirement; Clarified manufacturer's material certificate	KH/MC/MS
5	1/5/16	Updated Supplier QMS requirements; pre-Award meeting to be required for new suppliers; clarified section 4.1 PPAP; section 4.2 changed from notification to authorization for changes; section 4.5 changed to add form number and use form on Shaw website; updated section 11 to the new supplier scorecard system and referenced the certified supplier program; added section 13 RoHS / Reach	KH/MC/MS
6	8/31/17	Added reference to the Shaw Exchange and added bid submission or acceptance of PO as acceptance of SQRM in section 1.2; added documentation requirements in section 14; modified supplier certification criteria in section 11; removed signature page; updated Shaw logo	KH/MC/SS
7	3/10/2025	Rewrite	SW
8	11/13/2025	Add EAR/ITAR	SW

Contents

1. Introduction	4
1.1 Purpose:.....	4
1.2 Scope:	4
1.3 Responsibility:.....	4
1.3.1 Compliance To Contractual Requirements:.....	5
1.4 Supplier Accountability.....	5
2. Nonconformance Management	6
2.1 Corrective Action.....	6
3. Cost of Poor Quality (COPQ).....	6
3.2 Return Material Authorization (RMA):.....	6
3.3 Common COPQ Chargeback Rules.....	6
3.3.2 COPQ Key Process Steps.....	7
3.4 COPQ Charges.....	8
3.4.1 COPQ Charge Rates	9
4. Quality Management System (QMS) Requirements	11
5. Characteristics	11
6. Pre-Award Meeting	13
7. Engineering Prototype Sample Submission	11
8. First Article Inspection.....	11
9. Approval Process for Production Parts.....	12
9.1 PPAP (Production Part Approval Process).....	13
9.2 Proposed Design and/or Process Change	14
9.3 Verification of Purchased Product	18
9.4 Annual Validation	18
9.5 Supplier Deviation.....	18

9.6 Special Processes	18
10. Tooling, Gaging & Measuring Equipment Control	19
11. Identification, Handling, Labeling, Cleaning, Preservation, Packaging and Packing.....	20
12. Original Manufacturer’s Material Certificate:	20
13. Source Inspection:	20
14. Product Quality Assurance	21
15. Sub Supplier Control.....	22
16. Supplier Scorecard	22
17. Conflict Minerals (Dodd-Frank Act).....	23
18. RoHS / Reach	24
19. EAR/ITAR Compliance Controls.....	24
20. Documentation, Records, and Product Sample Retention.....	24
21. Order of Precedence.....	25
Appendix A: PPAP Requirement Matrix	26
Appendix B: PPAP Placard.....	28
Appendix C: Part Submission Warrant (PSW).....	29
Appendix D: Interim PPAP Form.....	30
Appendix E: Supplier Product Deviation Request.....	31

1. Introduction

1.1 Purpose:

The purpose of this Supplier Quality Requirements Manual (SQRM) is to specify Shaw Development LLC Quality system requirements to our suppliers and sub suppliers. Shaw Development LLC recognizes that communication and understanding of goals and expectations are key elements to a successful operation.

1.2 Scope:

This SQRM applies to all intercompany and external Suppliers of production materials as well as direct Outsourcing Suppliers/Subcontractors referenced herein as "suppliers". By acceptance of a purchase order from Shaw Development or submitting a bid on the Shaw Exchange (eRFQ platform), unless otherwise negotiated in a separate document or a Basic Ordering Agreement, supplier agrees to comply with all requirements set forth in this manual. This manual describes the quality system requirements for current and prospective suppliers. This manual is under the control of Shaw Development LLC Supplier Quality Group, which is responsible for supplier evaluations and surveillance, by assessing their conformance to the system and process requirements of this manual.

1.3 Responsibility:

Suppliers are responsible for complying with the Supplier Quality Requirements Manual. Failure to meet the requirements may result in a financial recovery and/or the loss of existing and/or future Shaw Development LLC business. Shaw Development has taken on a responsibility to our customers to provide quality products while considering influences on Climate Change. Although not currently enforced, we challenge our suppliers to consider the impact on the environment when selecting manufacturing and packaging materials, processes, techniques, and transportation.

1.3.1 Compliance To Contractual Requirements:

Upon accepting a Shaw Development LLC contract, the Supplier is responsible for compliance to all contract (e.g., engineering drawing, specification, purchase order) requirements. All documents, drawings, and specifications, regardless of origin, are applicable to the Supplier when specified in the contract or documents referenced in the contract and are required to be used at all levels of the supply chain. Unless otherwise specified in the contract, the document revision in effect on the date of issue of the contract applies to the contract. Neither audit, surveillance, inspection or tests made by Shaw Development LLC, representatives of Shaw Development LLC or its customer(s), at Supplier's facilities, at any sub-tier facilities, or upon receipt at Shaw Development LLC, relieves the Supplier of the responsibility to furnish acceptable products or services that conform to all contract requirements; nor does it preclude subsequent rejection by Shaw Development LLC or its customers.

1.4 Supplier Accountability:

Shaw Development LLC processes are focused on delivering defect-free products and we expect the same commitment from our suppliers and sub suppliers. You should provide sufficient qualified resources to support the manufacturing process, and customers to deliver quality products. If nonconforming material is identified prior to dispatch, robust processes for managing the risk of shipping defective products and implementing corrective actions should be used. Where defective products are found at a Shaw Development LLC facility or customer, we expect the supplier of material to lead investigation, containment, and corrective action. Further details are contained in subsequent sections of this manual. As a result of poor quality, we also expect suppliers to be accountable for managing any additional impacts that may result from the identification of defective products. Whilst not exhaustive this can include additional stock, increased inspection, rework, emergency freight, actions from sub suppliers, financial recovery etc.

NOTE: All documented communications from the Supplier to Shaw Development LLC must be in the English Language.

2 Nonconformance Management:

Shaw Development LLC has deployed Lean methodology across our businesses and expects that suppliers will join us on this journey. The Shaw Development LLC lean model places Built in Quality (BiQ) as the first pivotal step in the process and emphasizes the value defect-free manufacturing provides the business and our customers. As a customer, our expectations cascade through the BiQ model to focus on stopping defects before reaching the next customer. We have deployed quality gates, Pre-Delivery Inspection (PDI), Inbound Quality Audit (IQA), In Process Validation (IPV), and Pre-Delivery Audit (PDA) intentionally within our businesses to capture defects and pass them back to the area where they were created. These key activities are core to the process of ongoing gap analysis and improvement. The intent of these activities is to ensure measurement, monitoring and key manufacturing processes are continuously improved to meet the needs of our customers.

2.1 Corrective Action:

If nonconforming material is identified within a Shaw Development LLC facility, the following core expectations are required to be performed by our suppliers:

- Corrective Action Report (CAR) – Containment - is expected within 1 business day or earlier depending upon the severity of the nonconformance or impact and risk to our operations, product, or customer. The initial communication of a nonconformance will be communicated by the facility Supplier Quality Engineer (SQE)/Quality Engineer (QE)/quality Manager (QM) or equivalent. If unable to support within initial containment actions a third-party inspection provider can be used, or Cost of Poor Quality (COPQ) will be captured if Shaw Development LLC labor is required.
- Interim Containment Action (ICA) – STOP Gate - is required to be completed once a CAR has been initiated and will usually be in the 1 to 2 business days following initial defect communication. Aligned with our BiQ principles, the priority is to stop the flow of further defects and implement a gate or inspection point to prevent further flow of defects. This gate can be at the supplier's discretion, however following a nonconformance it is normal for increased Inbound Quality Audit (IQA) frequencies to be implemented within Shaw Development LLC and repeat defects will be identified as poor implementation of stop gates.

Your Shaw Development LLC supplier quality/quality contact may, at this point, instruct that a third party be installed or your own representative 100% inspect the product prior to release at the Shaw Development LLC receiving facility or at the third part facility at the suppliers cost.

- Permanent Corrective Action (PCA) – Resolution – is the identification of the root cause/causes of a nonconformance and the action plan for process correction. Shaw Development LLC expects suppliers to follow a documented 8D process or equivalent and maintain records for all reported nonconformances. A corrective action plan is required within a minimum of 14 calendar days following the initial nonconformance report. The Shaw Development LLC quality representative (SDE, SQE, QE, buyer etc.) will validate the actions taken once implemented.

Any delays in meeting the timeliness requirements for CAR, ICA and PCA should be discussed with the receiving facility quality representative. ICA and PCA completion may extend beyond the timelines where significant change is required, however in all circumstances the timeline should be agreed and understood whilst ensuring that mitigation plans for ongoing preventative inspection continue to support defect-free supply. The standard process for requesting, communicating, and documenting supplier nonconformances and corrective actions for suppliers to Shaw Development LLC is the QT9 CAR modules. If this system is not implemented by the purchasing facility, details of the required system will be provided locally, however the basis for any Supplier Corrective action will be based on an 8D format. When considering corrective action plans you should also consider any systemic causes that could impact on other Shaw Development LLC products where similar proactive corrective actions could prevent further defects on other products. As with PCN requests, once corrective actions have been implemented any process documentation that has been updated will need to be submitted for approval by Shaw Development LLC in the form of an updated PPAP.

3. Cost of Poor Quality (COPQ):

3.1 The COPQ program is designed to recover costs incurred by Shaw Development LLC because of supplier delivering nonconformances. The process is intended to drive consistency globally when comparing supplier performance and impact to Shaw Development LLC. COPQ recovery is not intended to be punitive or for profit, but to recover the hourly cost value incurred by Shaw Development LLC due to disruption caused by poor Supplier Quality. We would actively encourage a collaborative approach when determining recoveries through COPQ and regular communication on nonconformances, containment and corrective action with Shaw Development LLC is advised.

3.2 Return Material Authorization:

When a nonconforming product requires return to supplier or scrap on site a Shaw Development LLC representative will request a Return Material Authorization (RMA). This authorization must be provided to the Shaw Development LLC representative within 2 business days, with supplier shipping account number, method of shipping and any additional shipping instructions. If RMA is not received in 2 business days, the parts will automatically be returned to the address on file with Shaw Development LLC and COPQ recovery will be initiated, see chargeback 10.

3.3 Common COPQ chargeback Rules:

3.3.1 All chargebacks will be communicated by the Shaw Development buyer via email to the contact on file with Shaw Development LLC. Your confirmation and acknowledgment is expected within 2 business days. Standard COPQ Chargeback Types - When a disposition is made for supplier caused by nonconforming material, the supplier should be charged for one or more of the following nine chargeback types as applicable. Other types of charges for suppliers caused by nonconforming material should be discontinued. More than one type may be charged on a single rejection.

Type:

1 Rejection Created - Some sites may call them a Material Rejection and Disposition Report/Nonconformance Management (NCM). - Charge is applied for each NCM. - All supplier caused NCMs, regardless of part value, will be assessed the charge.

2 Parts Shipped Without Production Part Approval Process (PPAP) Approval - This is for a new part or the first-time delivery of a part and must have had a PPAP requested. - This is a charge for the time involved in follow-up of requirements and/or additional inspections. - If third party inspections this will include invoice amount plus 10% (the cost of overseeing operations, logistics, cost of supplies, time to generate P.O., and payment by Shaw Development LLC personnel).

3 Investigation Charges - Initial investigation charges are included in the Rejection Created Charge listed as Type 1 above. Additional time will be recorded here.

4 Sort, Rework, Retest, and/or contain by Shaw Development LLC - This is a charge for the time to sort, rework, and/or retest done to the nonconforming items.

5 Sort, Rework, Retest, and/or Contain By 3rd Party with Actual Invoice to CAT From 3rd Party - This is a charge for sort, rework, and/or retest done to the nonconforming items by a 3rd party. - The charge will be the Invoice amount plus 10% (the cost of overseeing operations, logistics, cost of supplies, time to generate P.O. and payment by Shaw Development LLC personnel).

6 Cost of Value Added to Supplied Parts or Parts Other Than Supplier Parts That Have Damage Due to the Nonconforming Part - This is a charge for the variable costs of the value added through operations and lost due to the nonconforming item.

7 Line Disruption - When line is disrupted regardless of where the problem is found (line, receiving inspection, etc.). - The line disruption charge is based on the time, the number of people affected, and the regional rate, as shown in the calculation: (regional rate) X (# of people affected by the disruption) X (amount of time). - The people affected are those within the receiving facility who cannot perform work at their usual station due to a line disruption due to the defective part.

8 Prime Product Repair and Retest Labor - This is a charge for the time involved to repair and/or retest a Shaw Development LLC product or component that has been affected by nonconforming material.

9 Past Due Corrective Action Request/Quality Control Inspection Report (CAR) Responses - This is a charge for the time involved in follow-up of unanswered corrective action.

10 No RMA received within 2 business days of request.

3.3.2 Key Process Steps

3.3.2.1 The process begins when a disposition is made for supplier caused nonconforming material. Care should be taken to make sure that the nonconformity was supplier caused and documented in the rejection before recording the charges for recovery from the supplier.

3.3.2.2 The area that experienced the loss should notify the personnel making the chargeback entry with their request. The requested area frequently will be the production or supplier quality areas performing the rework, retest, inspection, etc., activities. The personnel making the chargeback entries will frequently be the supplier quality group or the buyer; however, this may vary between facilities. The recovered funds should go to the business unit that experienced the loss.

3.3.2.3 The chargeback Type 6 for value added but lost due to the nonconforming part should have the value based on Planning or Operations identifying the operations that have been completed but have been lost or must be redone due to the nonconforming part and determining the salvage ability of collateral material contained within the fabrication (if applicable). Accounting should calculate the variable costs for these completed operations from the Cost Information System (CIS) & for collateral scrap material (if applicable). This information should be notified to the personnel making the chargeback entry.

3.3.2.4 A Procurement representative (site) must approve the supplier chargebacks. This may be accomplished by having a Procurement Representative (or Procurement as part of a Material Review Team) make the disposition.

3.3.2.5 A Procurement Representative (or Procurement as part of a Material Review Team) must decide whether to reverse a charge if a supplier requests reconsideration of a chargeback. The supplier may request reconsideration of any charges by submitting a written request to the Procurement Supplier Quality Representative (site) or Buyer (site), within sixty (60) days of such charges, setting forth the reasons and details supporting such reconsideration. The Procurement Representative will inform the supplier of Shaw Development LLC's decision on such reconsideration.

3.3.2.6 There must be a notification/commercial negotiation before certain chargebacks are made. When chargeback Types 6, 7, or 8 are used, supplier quality needs to refer these

chargebacks to the Procurement (site) Buyer for notification/negotiation with the supplier. The Buyer may escalate the process to the Category Manager or Purchasing Manager. Commercial negotiation means that the Buyer exercises discretion in the amount of the chargebacks (as a result of discussion and feedback from the supplier and the Shaw Development LLC supplier quality personnel) based on the specific circumstances.

3.3.2.7 The process steps to record the charges and the interaction with Accounting to recover the losses will vary between sites that have different systems. Shaw Development LLC uses Nonconformance Management (NCM) systems.

3.4 Charge

Charge table		
Charge Type No	Charge Type	Charge
1	Rejection Created - Some sites may call them Material Rejection and Disposition Report/Nonconformance Management (NCM)	Fixed Fee 2 Hours
2	Parts Shipped w/o Production Part Approval Process (PPAP) Approval or Approved Deviation.	Time Spent*Hour Rate + Fixed Fee of 2 additional hours
3	Investigation Charges	Time Spent*Hour Rate + Fixed Fee of 2 additional hours
4	Sort, Rework, Retest, &/or contained by Shaw Development LLC	Time Spent*Hour Rate + Fixed Fee of 2 additional hours
5	Sort, Rework, Retest &/or contained by 3rd Party with Actual Invoice to Shaw Development LLC from 3rd Party	3 rd Party Invoice + 10%
6	Cost of Value Added to Supplied Parts or Parts Other than Supplier Parts that have Damage Due to the Nonconforming Part	Value Added + Fixed Fee of 2 additional hours
7	Line Disruption	# People Affected*Line Down Time *Hour Rate
8	Prime Product Repair and Retest Labor	Time Spent*Hour Rate + Fixed Fee of 2 additional hours
9	Past Due Corrective Action Request/Quality Control Inspection Report (CAR) Responses	Escalating Fixed Fee: 2 Hours*Hour Rate at 60 Days Past Due 3 Hours*Hour Rate at 90 Days Past Due
10	No RMA received in 2 business days	Fixed Fee 2 Hours + Shipping Cost

3.4.1 Charge Rates

3.4.1.1 The charge rates should be the actual amount plus 10% for those where a 3rd party invoices Shaw Development LLC directly. The 10% is for the cost of overseeing operations, logistics, cost of supplies, time to generate the P.O., and payment by Shaw Development LLC personnel.

3.4.1.2 The charge rate to recover hourly losses should be based on the Shaw Development LLC charge rate.

3.4.2 Shaw Development LLC Charge Rates

3.4.2.1 These rates have been developed based on Shaw Development LLC Accounting's plant normal cost actuals. These values should be used for all hourly charges.

3.4.2.2 Shaw Development LLC rates have been converted to local currency rates. These rates are to be recalculated annually.

3.4.3 Example Charges - The regional rate to be used is based on the receiving facility's location. The examples below show how a facility in a region with a regional rate of \$45/hr could calculate certain supplier chargebacks after determination of a supplier caused nonconformance.

3.4.4 Example 1 - A nonconforming part has disrupted the production line that prohibits 30 people from working at their normal station. The COPQ charges that would apply are:

3.4.4.1 The rejection would be written and a 2-hour charge for rejection Type 1 would apply. The calculation would be $(\$45/\text{hr}) * (2 \text{ hours}) = \90

3.4.4.2 The line disruption charge Type 7 would apply. The calculation would be $(\$45/\text{hr}) * (30 \text{ people}) = \$1,350/\text{hr}$ or $\$22.50/\text{minute}$. If the line was stopped for 45 minutes, the calculation would be $(\$1,350/\text{hr}$ or $\$22.50/\text{minute}) * (45 \text{ minutes}) = \$1,012.50$. **3.4.4.3** The total COPQ charges would be $\$90 + \$1,012.50 = \$1,102.50$.

3.4.4.3 Although the cost of the nonconforming part is not one of the COPQ charges, the rejection of the material to be scrapped or returned to the supplier causes its cost to be charged to the supplier also.

3.4.4.4 If the line disruption affected part delivery to another Shaw Development LLC facility and that facility had a line disruption, the charge to the supplier is limited to the facility that received the supplier's part and does not include the second Shaw Development LLC facility's disruption charges as shown in the following example.

3.4.5 Example 2 - A nonconforming part has been reworked for 3 hours by a Shaw Development LLC production person. The COPQ charges that would apply are:

3.4.5.1 The rejection would be written and a 2-hour charge for charge Type 1 would apply. The calculation would be $(\$45/\text{hr}) * (2 \text{ hours}) = \90 . 5.3.5.2 The rework costs for charge Type 4 would apply. The calculation would be $(\$45/\text{hr}) * (1 \text{ person}) * (3 \text{ hours}) = \135 . 5.3.5.3 The total COPQ charges would be $\$90 + \$135 = \$225$.

3.4.6 Example 3 - A casting has been machined through one operation. The second machining operation is performed and discovers a flaw in the casting that makes the part unusable. The COPQ charges that would apply are: 5.3.6.1 The rejection would be written and a 2-hour charge for charge Type 1 would apply. The calculation would be $(\$45/\text{hr}) * (2 \text{ hours}) = \90 .

3.4.6.1 The variable costs for the Operation 1 and Operation 2 for charge Type 6 would apply. The calculation would be: In the MRP it shows Operation 1 had Variable Labor = $\$317.11$ + Variable Machine = $\$626.49$ which makes the Variable Operation Total = $\$943.60$. In the MRP it shows Operation 2 had Variable Labor = $\$123.22$ + Variable Machine = $\$222.05$ which makes the Variable Operation Total = $\$345.27$. The charge Type 6 would be $\$943.60 + \$345.27 = \$1288.87$. 5.3.6.3 The total COPQ charges would be $\$90 + \$1288.87 = \$1,378.87$.

3.4.6.2 Although the cost of the nonconforming part is not one of the COPQ charges, the rejection of the material to be scrapped or returned to the supplier causes its cost to be charged to the supplier also.

3.4.7 Example 4 - A supplier is placed on an increased/tightened inspection plan as a result of Shaw Development LLC receiving nonconforming material. The following applies if one or more pieces are found nonconforming in the received lot or for a maximum of three lots used to validate the supplier corrective action is effective:

3.4.7.1 Step 1 – If a nonconformity is found, the rejection would be written and a 2-hour charge for charge Type 1 would apply. The calculation would be $(\$45/\text{hr}) * (2 \text{ hours}) = \90

3.4.7.2 Step 2a - If Shaw Development LLC sorts the lot, the charge Type 4 would apply. If 2 people sorted the lot for 2 hours, the calculation would be $(\$45/\text{hr}) * (2 \text{ person}) * (2 \text{ hours}) = \180 .

3.4.7.3 Step 2b - If a third party sorts the lot, the charge Type 5 would apply. If the third-party sorting was invoiced at $\$300$ (the bill rate to Shaw Development LLC multiplied by the time spent could be used if not separately invoiced) plus 10% should be charged.

3.4.7.4 If Shaw Development LLC did the sorting (2a step), the total COPQ charges would be $\$90 + \$320 = \$410$.

3.4.7.5 If a third party did the sorting (2b step), the total COPQ charges would be $\$90 + \$300(\text{invoice}) + \$30(10\%) = \420 .

3.4.7.6 Although the cost of the nonconforming part is not one of the COPQ charges, the rejection of the material to be scrapped or returned to the supplier causes its cost to be charged to the supplier also.

3.4.7.7 If no nonconformity is found then charge Type 4 would apply for the time taken to conduct the increased sample size inspection.

4. Quality Management System (QMS) Requirements

All current and potential Suppliers to Shaw Development LLC must be able to demonstrate with objective evidence that they have implemented and maintained an effective Quality Management System. Registration to the latest revision of ISO 9001, TS 16949, or a comparable international standard is a requirement. Registration, or lack of, will impact selection of suppliers during quote evaluations. The effectiveness of the supplier QMS shall be assessed by Shaw Development LLC supplier quality engineering. A Supplier Self-Assessment Survey and/or On-Site Audit will be completed prior to the approval of a purchasing agreement. Certain suppliers may be considered without registration based on proprietary processes, materials, technologies, etc. on a case-by-case basis with the approval of quality, purchasing, and engineering. (Note: Approved suppliers to Shaw Development prior to 7/1/2013 will be exempt from the registration requirement, although Shaw will expect the supplier to strive toward achieving registration.)

When requested, the Supplier must also be able to demonstrate compliance to national and/or international standards and regulations for health, safety, and environmental impact relative to its business.

5. Characteristics

Legacy drawings may have Critical characteristics identified:

Those having direct bearing on a Safety or Regulatory fit/form/function: Feature must be marked with a notched rectangle with the letters 'CC' . The symbol is to be located in the 'Symbols' directory in Windchill/ProE.

Key characteristics:

Those having direct or significant impact on customer satisfaction on Fit/form/function: Features must be marked with an oval with the letters 'KEY' inside . The symbol is to be located in the 'Symbols' directory in Windchill/ProE.

Suppliers are to develop SPC processes to control Key Characteristics. These controls are to be documented in the Control Plan submitted in the PPAP package. Cpk is to be equal to, or greater than 1.33 Cpk.

6. Pre-Award Meeting

A pre-award meeting for new suppliers offering new or existing customer products or services will be conducted prior to the commencement of supply. Technical, quality, manufacturing, engineering, purchasing, delivery, and business issues shall be reviewed during this meeting to provide the supplier with a thorough understanding of Shaw Development LLC requirements. Shaw Development LLC may, at its discretion, hold a similar meeting for existing suppliers who are being awarded new or existing parts and services.

7. Engineering Prototype Sample Submission:

Note: see Appendix A for clarification

During the development and validation phases of the launch, the Supplier may be requested to work with a Shaw Development LLC New Product Development (NPD) team to resolve production and manufacturing issues prior to production launch.

Prototype samples ordered to a prototype level design record must be submitted with a First Article Inspection Report "FAIR" and numbered "ballooned" print coordinating FAIR dimensional results to the design record. A FAIR is a 1-piece layout to all dimensional, material and performance requirements. The actual layout part sample the data was generated from is to be shipped to Shaw Development LLC and identified as such using the placard found in Appendix B.

Engineering prototype parts with documentation (including supporting data) of specification conformance shall be submitted to Quality for approval prior to Engineering validation testing. All prototype samples must meet the design intent.

8. First Article Inspection

Note: see Appendix A for clarification

As a minimum, a First Article Inspection (FAI) is required to initially qualify a part/process for Supplier approval, unless the PPAP process (below) is used instead. Furthermore, a new FAI may be requested if there is an extended gap of time since last production. The FAI requires that all features and characteristics on the design specification and control plan be inspected and verified prior to production. Actual measured values shall be recorded as opposed to general statements of conformance or other notations simply indicating acceptance. For First Article Inspection guidance, see AIAG PPAP Manual (Appendix C, D, & E)

9. Approval Process for Production Parts

Note: see Appendix A for clarification

9.1 PPAP (Production Part Approval Process)

Shaw Development LLC expects every supplier of production material to submit a Level 3 PPAP. Any exception to this requirement needs to be received in writing from a Shaw Development Quality Representative. PPAP levels and their requirements are defined in Appendix A.

PPAP production runs are to follow AIAG definition. The production run shall be from one hour to eight 8 hours of production, and with the specific production quantity to total a minimum of 300 consecutive parts, using production equipment and operators unless otherwise agreed upon by the authorized Shaw Development LLC Quality representative.

The PPAP is to include a full 1-piece layout to all dimensional, material and performance requirements, **per cavity**. As applicable, all key characteristics, or a characteristic critical to form, fit, or function as identified by Shaw, must be accompanied by process capability studies unless otherwise agreed upon by Shaw Quality.

The study is to be conducted on a minimum of 30 pieces, from a random sample **per cavity** pulled from the PPAP production run. **Any change from this policy must be approved by the Shaw Development LLC**

Quality representative prior to the supplier's PPAP run. Key characteristics and those identified by Shaw as critical to form, fit, or function, must demonstrate a Ppk of > 1.33, with an ongoing Cpk of >1.33, and supported by a Gage Repeatability and Reproducibility (GR&R) study indicating a gage error of less than 10% and an overall GR&R of less than 20%. Any deviation from this requirement must be signed off by a Shaw Development Quality Representative. Supporting documents, data, and samples, as specified by Shaw Development's Supplier Quality team, **"for the PPAP level requested"** is to be submitted to Shaw Development Quality prior to PPAP Shipment, and in hard copy form accompanying samples.

- In the case of multiple cavities, a layout is to be submitted for each cavity and Cpk study samples should be taken from each cavity.
- The actual part sample(s) the layout data was generated from is to be numbered to match the inspection report.
- The inspection report/s, along with a numbered drawing, are to be shipped to Shaw Development LLC.
- The PPAP submission is to be identified using the placard found in Appendix B and Appendix C PSW (F-ENG-1025 PSW) or Appendix D (F-QUA-1411 Interim Approval).

When requested by Shaw Development LLC an IMDS number is to be provided on the Part Submission Warrant (PSW).

Written approval by Shaw Development LLC is required prior to authorization for production. Approval will come in the form of a signed F-QUA-1411, Interim Approval form.

Samples which are not approved will require resubmission by the Supplier to Shaw Development LLC. (Note: Conditional or interim approval may be given. This will give the supplier authorization to produce parts while addressing items in the PPAP submission which were not accepted or missing. This will be done at the discretion of the Shaw Quality Representative. Increased inspections or special checks may be required during this time.)

Key Note: Once PPAP approval is granted there can be no changes to the process or product without Shaw Development re-approving the production part. Changes to the part such as a print change, process change, or change within the supply base may require a new FAIR or PPAP. Changes must follow the guidelines described under "Proposed Design and/or Process Change."

PPAP Approval Requirement

Shaw Development will need to approve the PPAP package prior to first production shipment unless prior authorization has been given by a designated Shaw Development representative. Any parts produced in excess of the PPAP sample run will be the responsibility of the supplier unless prior approval from Shaw development has been given.

9.2 Proposed Design and/or Process Change

Change Notification: Shaw Development LLC considers all the elements making up the process for all parts, to be critical. The Supplier cannot make changes without Shaw Development LLC approval. Once the process or part change request has been approved by Shaw, the Supplier may proceed with the change. **Change request submission is coordinated with the Shaw Development Buyer.** Failure to

comply with these requirements will render the supplier fully responsible for absorption of all costs resulting in failures attributable to the change.

All proposed design and/or process changes must be authorized in writing by Shaw Development LLC. The Supplier shall not make any changes in part design, material, or manufacturing processes without prior approval from Shaw Development LLC. This includes changes to the supply base. See below *tables 1 and 2* for definition(s) of changes requiring notification and /or approval.

Customer Authorization

Suppliers to Shaw Development MUST request approval before making changes to a specification or process for supplied products. Authorization to proceed with a change does not negate the need for a PPAP submission. Shaw Development will notify suppliers if a PPAP submission is required and what level PPAP will be required. Those submissions are to follow AIAG guidelines.

Submission to Shaw Development

Supplier shall obtain PPAP approval prior to the first production shipment in the following situations (see table 2). Conditional or interim approval may be granted to authorize limited production shipments when there are outstanding PPAP requirements.

The supplier shall review and update, as necessary, all applicable items in the suppliers PPAP file to reflect the production process, regardless of whether or not Shaw Development LLC has requested a formal submission. {THIS MEANS ALL 18 SECTIONS OF PPAP} The PPAP file shall contain the name of the responsible Shaw Development contact for product approval activity "person granting the waiver and the date".

Table 1 - Planned Changes Requiring Authorization Prior to Implementation and PPAP		
Rule	Requirement	Clarification or Examples
1	Use of other construction or material than was used in the previously approved part or product.	For example, other construction as documented on a deviation or included as a note on the design record (print) and not covered by an engineering change.
2	Production from new or modified tools (except for perishable tools), dies molds patterns, etc., including additional or replacement tooling.	This requirement only applies to tools, which due to their unique form or function can be expected to influence the integrity of the final product. It is not meant to describe standard tools (new or repaired), such as standard measuring devices, drivers (manual or power), etc.
3	Production following refurbishment or rearrangement of existing tooling or equipment.	Refurbishment means the reconstruction and/or modification of a tool or machine or to increase the capacity, performance, or change its existing function. This is not meant to be confused with normal maintenance or parts, etc., for which no change in performance is to be expected and post repair verification methods have been established. Rearrangement is defined as activity which changes

		<p>the sequence of product/process flow from that documented in the process flow diagram (including the addition of a new process).</p> <p>Minor adjustments of production equipment may be required to meet safety requirements such as, installation of protective covers, elimination of potential electro static discharge risks, etc. These changes can be made without customer approval unless the process flow is changed as a result of this adjustment.</p>
4	Production from tooling and equipment transferred to a different plant location, or from an additional plant location.	Production process tooling and/or equipment transferred between buildings or facilities in one or more locations.
5	Change of supplier for parts, non-equivalent materials, or services (e.g.: heat-treating, painting, plating) that have the potential to affect customer fit/form/function, durability, or performance requirements.	Suppliers are responsible for approval of subcontracted material and services that do not affect customer fit/form/function, durability performance.
6	Product produced after the tooling has been inactive for volume production for 12 months or more.	For product that has been produced after tooling has been inactive for 12 months or more: Notification is required when the part has had no active purchase order and existing tooling has been inactive for volume production for 12 months or more. The only exception is when the part has low volume, e.g., service or specialty vehicles, However, a customer may specify certain PPAP requirements for service parts.
7	Product and process changes related to components of the production product manufactured internally or manufactured by suppliers that have the potential to impact safety, fit/form/function, performance, durability, and/or appearance of the salable product. Additionally, the supplier shall concur with any request by a subcontractor before submission to the customer.	<p>Any change that has the potential to affect customer requirements for safety, fit/form/function performance, durability, and/or appearance requires notification to the customer.</p> <p>NOTE: The safety, fit/form/function performance, durability, and/or appearance requirements should be part of a customer specification as agreed on during reviews.</p>

8	<p>For bulk materials only: New source of raw materials with special characteristics from new or existing subcontractor.</p> <p>Change in product appearance attributes where there is not appearance specification.</p> <p>Revised parameters in the same process (outside pFMEA parameters of the approved product, includes packaging).</p>	<p>These changes would normally be expected to have an effect on the performance of the product.</p>
9	<p>Change in test/inspection method - new technique (no effect on appearance criteria).</p>	<p>For change in test method, supplier should have evidence that the new method provides results equivalent to the old method. (GRR results).</p>
10	<p>A new part of product (i.e., a specific part, material, or color not previously supplied to the specific customer).</p>	<p>Submission is required for a new product (initial release) or a previously approved product which has a new or revised (e.g., suffix) product/part number assigned to it. A new part/product or material added to a family may use appropriate PPAP documentation from a previously fully approved PPAP part within the same product family if approved by customer.</p>
11	<p>Correction of a discrepancy on a previously submitted part.</p>	<p>Submission is required to correct any discrepancies on a previously submitted part.</p> <p>A "discrepancy" can be related to:</p> <ul style="list-style-type: none"> a) The product performance against the customer requirement b) Dimensional or capability issues c) Subcontractor Issues d) Full approval of a part replacing an interim approval e) Testing, including material, performance, engineering validation issues
12	<p>Engineering change to design records (prints), specifications, or materials for production product/part numbers(s).</p>	<p>Submission is required on any engineering change to production product/part design records, specifications, or materials.</p>

Change requests are to be requested using the Product or Process Change Notification form (F-ENG-1032) which can be found on the supplier page of Shawdev.com.

- Changes will require a new PPAP submittal to Shaw Development LLC. PPAP submission level will be determined by Shaw Quality.

FAILURE TO COMPLY WILL RESULT IN REJECTION OF MATERIAL, PARTS AND ASSEMBLIES RECEIVED.

9.3 Verification of Purchased Product

The supplier shall allow Shaw Development LLC, all reasonable access to verify, product and subcontracted product conformance to specified requirements, at supplier's premises. Whenever this element is required, Shaw Development LLC shall specify both the arrangements and method of performing the inspections.

9.4 Annual Validation

Annual validation may be required and may include full-dimensional layouts, capability studies, material testing and performance testing.

9.5 Supplier Deviation

All products must meet all specification requirements.

Supplier Deviation: In the event of the need for a deviation, the Supplier would need to request a one-time deviation related to product quality. Suppliers are to submit a request for deviation to the Shaw Development LLC buyer. Supplier Product Deviation Request form, (F-QUA-017) Appendix E. which can be found on the supplier page of Shawdev.com, must be approved by Shaw Development LLC prior to product shipment. Directions for form submission are found at the bottom of the form. A copy of the "approved" deviation must be attached to/or placed in shipping carton for all product shipped under the deviation. Any shipments that do not meet production specifications, and which have not received prior approval through the product deviation process, will be subject to rejection. Any rejected shipment, regardless of the end disposition by Shaw, may be applied to a supplier quality rating detailed in Section 11.

9.6 Special Processes

Special Processes are those processes and services that have the potential to directly influence the quality of products manufactured by or for Shaw Development and whose conformance to contract requirements cannot be fully determined upon receiving inspection. These processes may require specialized testing/analysis, a demonstration of operator or equipment capability or proficiency, and may require special controls for monitoring of characteristics.

Examples of Special Processes include the following:

- Chemical processing
- Coatings
- Composites
- Thermal processing (including heat treatment, brazing)
- Materials Testing Laboratory Services
- Non-Destructive Testing
- Welding

When Special Processes are part of the Supplier's manufacturing process, or the Supplier outsources special processes for Shaw Development, these processes must be validated to the current industry (i.e., ASTM) standards for those processes prior to supplying a product to Shaw Development.

After validating a special process, a Certificate of Analysis (C of A) for the special process characteristics must accompany the Inspection / Test data, FAI, and/or PPAP documentation submitted to Shaw Development. All Certificates of Analysis must be from a testing laboratory that has been certified to ISO 17025 (General Requirements for the Competence of Testing and Calibration Laboratories) by an accredited 3rd party certification body or the supplier must include their Lab Scope (description of gages, calibration, Work Instructions etc....).

At a minimum, the C of A (Certificate of Analysis) must contain the following information:

- Title: Certificate of Analysis
- Name/Address/Phone Number of the testing facility / laboratory
- Laboratory accreditation information including registration number and expiration date
- Name/Address/Phone Number of the manufacturer
- Product ID and description
- Description of testing performed
- Test references/specifications
- Test Results
- Acceptance criteria
- Names and signature of personnel performing the testing
- Name and signature of person approving the test and associated results
- Date testing was performed

Note: Once a process has successfully been validated, the certificate of analysis from the supplier will be kept on file at Shaw Development for 12 months. Annual validation of all special processes is required and can be achieved by submitting current samples of the product or service to an accredited 3rd party laboratory. Once annual validation is achieved, this information must be referenced for all shipments to Shaw Development during that validation period. Clarification on any "Annual Validation" requirements can be acquired by contacting Shaw Developments Quality and/or Purchasing Representative.

10. Tooling, Gaging & Measuring Equipment Control

All Shaw Development LLC supplied tooling becomes the responsibility of the supplier while in their possession. The equipment must be maintained in a reasonable condition and subjected to an appropriate calibration process where applicable. The Supplier shall maintain all tooling and fixtures to the latest engineering revision at all times.

The supplier shall notify Shaw Development LLC in the event of any calibration failures that may affect any products previously supplied. Products affected shall be identified by serial number or batch reference.

All tooling, drawings, data, and documentation owned by Shaw Development LLC shall remain the property of Shaw Development LLC and shall be clearly marked that they are the property of Shaw Development LLC.

Shaw Development LLC reserves all rights of inspection or removal of all tooling and fixtures at any time, at no cost to Shaw Development LLC (except for freight charges).

All Shaw Development LLC supplied tooling must be returned when requested by Shaw Development LLC.

11. Identification, Handling, Labeling, Cleaning, Preservation, Packaging and Packing

The Supplier shall accomplish identification, handling, labeling, cleaning, preservation, packaging, and packing in accordance with the applicable drawings, specifications and instructions as referenced on the purchase order.

12. Original Manufacturer's Material Certificate:

Compliance results of physical &/or mechanical specifications of materials are documented on the original Manufacturer's Material Certificate, as directed by a design record. Certificate documents are provided to Shaw Development LLC on all 1st Article shipments.

Suppliers must retain original Manufacturer's Material Certificate information for all other products shipped. This certificate must be available upon request within 2 business days. This requirement applies to all industry recognized specifications such as, but not limited to:

- ASME
- ASTM
- JIS
- MIL
- SAE

Supplier shall supply Certificate of Conformance (C of C) will ALL shipments to Shaw Development LLC, it must contain the following:

- Part Number
- PO Number
- Quantity
- Date
- Raw material or coating specified on the drawing.
- Actual raw material or coating used.
- Any special processes or specifications called out on the drawing.

A packing slip with standard C of C included is acceptable. The supplier must retain all material and process certifications and must be able to provide them within 2 business days upon request. This applies to all non-catalog items.

13. Source Inspection:

At the discretion of Shaw Development LLC, the items covered by the purchase order are subject to Shaw Development LLC Source Inspection and/or tests prior to shipment from Supplier's plant.

14. Product Quality Assurance

Shaw Development LLC expects its Suppliers to be aggressive with continuous improvement efforts to their processes to achieve zero defects. This plan must include education and training in problem solving techniques, employee involvement, and cost of quality, with implementation target dates, assigned responsibility and regularly scheduled Quality Management Reviews. Process capabilities and special characteristics must be demonstrated to ensure that the initial process capability Ppk is >1.33 unless otherwise specified on the Purchase Order.

The Supplier shall prepare documented process monitoring and operator instructions for all employees having responsibilities for the operation of a process to maintain a production Cpk of >1.33 for all critical characteristics. For any characteristic that does not meet the above criteria, a corrective action plan must be submitted for approval.

Items not meeting the capability criteria will be on a containment plan until a Cpk of >1.33 is demonstrated. The Supplier shall comply with all specifications required by the drawing and engineering specifications. These requirements cover the MINIMUM inspection necessary to assure compliance with established requirements.

All functional characteristics shall be inspected by the Supplier using one (1) or more of the following:

- Sampling plan
- One hundred percent (100%) inspection (Prefer to have Poka-Yoke), for all critical and key features with process Cpk of <1.33 .
- Implementation of a Statistical Process Control program.

Sampling procedures, inspection records, examinations, and/or test reports must be complete and available to Shaw Development LLC Quality department as required. The Supplier is responsible for conducting inspections and tests at a frequency in accordance with applicable test methods or procedures, drawing requirements, and engineering specifications.

Unless otherwise specified, the Supplier may utilize its facilities, or those of any certified laboratory to conduct such tests. Unless otherwise specified, the Supplier shall provide and maintain gages and other measuring and testing equipment considered necessary for conformance to the applicable tolerances. The inspection gages, devices, etc. shall be calibrated periodically in accordance with suitable calibrating equipment. Shaw Development LLC reserves the right to conduct inspections by its staff or third-party agent's systems, as well as conduct follow-up audits, at the Supplier's facility, at no increase in cost or delays to Shaw Development LLC. Access to the Supplier's facility or facilities shall be granted to Shaw Development LLC representatives to investigate production facilities and any information pertinent to the Supplier's product sold to Shaw Development LLC. Reasonable notification shall be given prior to an audit being conducted. An inventory management system shall be established to continuously optimize inventory turns, stock rotation (FIFO) and minimize inventory levels. The Supplier will maintain such inventory levels as required to buffer any quality, capacity or delivery concerns that may reasonably arise. Revision or drawing changes pertinent to materials, parts, and assemblies currently in production must reflect the change at the established effective date of incorporation.

Shaw Development LLC reserves the right to recover costs associated with a supplier failing to meet a drawing requirement or specification. This includes, but is not limited to:

- Sorting of non-conforming material by Shaw personnel or a third party
- Rework of non-conforming components or assemblies that is a direct result of the non-conforming condition.
- Expedited freight costs.
- Customer charges incurred as a direct result of the non-conforming condition.
- Outside testing if needed to determine the source of the non-conformance
- Lost production time

15. Sub Supplier Control

Shaw Development LLC Suppliers are required to control and develop their supply base. Sub Suppliers that provide products with key characteristics must implement appropriate control methods for their process. The Supplier must review sub-Supplier controls and continuous improvement efforts on a periodic basis to ensure conformance to the drawing specifications, and Quality System performance. If you require assistance in the control of sub-Suppliers, a Shaw Development LLC Purchasing representative should be contacted.

Key Note: Once PPAP approval is granted there can be no changes to the process or product without Shaw Development re-approving the production part. Changes to the part such as a print change, process change, or change within the supply base require a new FAIR or PPAP. Changes must follow the guidelines described under "Proposed Design and/or Process Change."

16. Supplier Scorecard

Performance of the "A" level (80% of the Shaw spend) suppliers will be measured and results published on a quarterly basis at a minimum. Each of those suppliers will be rated in the following metrics. Each metric will be individually scored as described below and tallied to an overall supplier score from 0 to 50 points:

Quality: The Quality Rating is calculated from a rolling 3-month PPM. Suppliers will receive a score from 0 to 20 points based on PPM, PPAP submissions, FAIR submissions, and SCAR responses. PPM scoring goals will be established annually by Shaw Development LLC and reported to the supply chain.

On-Time Delivery: The On-Time Delivery Rating is calculated from a 3-month rolling average of the PO units delivered and the PO units scheduled for delivery. Suppliers will receive a score from 0 to 20 points based on performance. On-Time is defined as PO Scheduled Delivery Date. The On-Time Rating is calculated as $(\text{Total Deliveries}) - (\text{Total early} + \text{total late}) / (\text{Total Deliveries})$.

- On time delivery is no more than 2 days early, and no more than 1 day after the scheduled due date.

Purchasing – 10 points max. The supplier will be given a score from 0 to 2.5 points in each of the following categories:

- a) Total cost performance
- b) Cost reduction effort
- c) Engineering support
- d) Cooperation, service, and support

Suppliers will then receive an overall score and be rated as follows:

Supplier Ratings	
Preferred	40.0 – 50.0
Qualified	30.0 – 39.9
Probation	0.0 – 29.9

Suppliers who are rated as probation for more than 3 consecutive months will be expected to develop a supplier improvement plan. Suppliers who fail to improve may be looked at for de-sourcing activities and will be placed on new business hold.

Suppliers may also be considered for the Shaw Development Certified Supplier Program based on meeting the following requirements.

Category	Requirement for Certification
Supplier Rating	Preferred Status for at least 3 consecutive months
Supplier Quality Performance	No supplier related incoming inspection returns in the past 12 months
Delivery Rating	> 98.5% for the previous 12 months
Certification	ISO 9001 / TS 16949 / or equivalent registration and a Shaw Supplier Qualification Survey (F-SCM-053) on file for all non-COTS part suppliers
Length of Service	> 12 months as an approved supplier to Shaw
Meets target lead times	< 10 days for repeat orders

Certification will be done according to our program guidelines.

17. Conflict Minerals (Dodd-Frank Act - Section 1502)

The definition of “conflict minerals” refers to gold, tin, tantalum, and tungsten, the derivatives of cassiterite, columbite-tantalite, and wolframite, regardless of where they are sourced, processed, or sold. The U.S. Secretary of State may designate other minerals in the future. We support these requirements to further the humanitarian goal of ending violent conflict in the Democratic Republic of the Congo (DRC) and in surrounding countries, which has been partially financed by the exploitation and trade of “conflict minerals.”

Shaw Development LLC will not knowingly procure specified metals that originate from facilities in the “Conflict Region” that are not certified as “conflict free.”

Shaw Development LLC asks that their suppliers undertake reasonable due diligence with their supply chains to assure that specified metals are being sourced only from mines and smelters outside the “Conflict Region” or mines and smelters which have been certified by an independent third party as “conflict free” if sourced within the “Conflict Region”.

If Shaw Development LLC discovers the use of these minerals produced in facilities that are considered to be “non-conflict free,” in any material, parts, or components we procure, we will take appropriate actions to transition product to be “conflict free.”

18. RoHS / Reach

Shaw Development LLC requires our suppliers to manufacture products that meet the EU directive. (Lead free, RoHS - Restriction of Hazardous Substances, WEEE - Waste Electrical and Electronic Equipment)

Suppliers will be required to comply with Reach requirements as dictated by Shaw Development.

19. EAR/ITAR Compliance controls

Shaw Development LLC requires our suppliers to adhere to EAR/ITAR compliance control when flowed down in the Request for Quote or Purchase Order.

If you are not familiar with these requirements, please contact Shaw Development LLC.

Note:

EAR - Export Administration Regulations - Set of rules from the U.S. government that governs the export and re-export of certain commodities, software, and technology. It includes items that have both commercial and military uses (dual-use items), such as high-performance computers, chemicals, and GPS systems. Its purpose is to protect national security and U.S. foreign policy interests.

ITAR - International Traffic in Arms Regulations - U.S. government rules controlling the export and import of defense-related items, services, and technology. These regulations aim to protect national security by preventing sensitive military equipment and data listed on the United States Munitions List (USML) from falling into unauthorized foreign hands.

20. Documentation, Records, and Product Sample Retention

Suppliers must have a method of allowing for the safe and accessible storage of all records including procedures, documentation, data, and samples pertinent to Shaw Development LLC products and processes. At a minimum, Shaw Development LLC requires the following:

- **Certificates** - Seller agrees to provide Free Trade Agreement (FTA) or similar; Buy America; Conflict Mineral; International Material Data Sheets (IMDS); Registration, Evaluation and Authorization of Chemicals (REACH); and Restriction on Hazardous Substances (ROHS) as required by purchaser. The purchaser will request certificates from the seller on an as needed basis. If the status of a certificate changes at any time, the seller will issue a new certificate immediately.

All such supporting information and documentation shall be retained by the seller for a minimum of five (5) years and be subject to audit by purchaser upon reasonable notice. Seller shall include the substance of this section in all subcontracts awarded by the seller for work under any purchase orders.

- **Production part approvals, tooling records, Purchase Orders, and amendments** – records shall be maintained for the length of time that the part (or family of parts) is active for production and service requirements plus one calendar year.

- **Quality** - performance records (e.g., control charts, inspection, and test results) shall be retained for one calendar year after they were created.

Note: These requirements do not supersede any regulatory requirements.

If a supplier stops production to Shaw Development LLC, upon conclusion of the business relationship, that supplier will forward the above-mentioned documentation to Shaw Development LLC, otherwise the supplier remains responsible for the maintenance of above-mentioned documentation for the stated period of time.

21. Order of Precedence

The contents of this SQRM are in addition to and an elaboration of the terms and conditions contained in the Shaw Development LLC purchase order and other binding legal agreements entered into between the parties relating to the supplier relationship (Supplier Contract(s)). To the extent that a conflict or ambiguity may arise between the terms and conditions of the Supplier Contract(s) and the contents of this SQRM the order of precedence shall be:

A) The Supplier Contract(s) and;

B) The SQRM.

The provisions of this SQRM are for the exclusive benefit of Shaw Development LLC and may be varied or modified by Shaw Development LLC, in its absolute discretion, without prior notice to any third party. This SQRM is a controlled document and the property of Shaw Development LLC. It is intended exclusively for use by Shaw Development LLC suppliers and shall be used for no other purpose or by any other party. It shall not be reproduced, electronically or otherwise, without Shaw Development LLC express prior written authority.

All rights are expressly reserved by Shaw Development LLC.

Appendix A: PPAP Requirement Matrix

(Note: Table 4.2 in the AIAG PPAP Manual lists submission and retention requirements. Mandatory and applicable requirements for a PPAP record are defined in the PPAP manual)

All AIAG manuals can be purchased at: <https://www.aiag.org/source/Orders/index.cfm>

Item	Requirement	Level 1	Level 2	Level 3	Level 4	Level 5
1	Design Record (Bubbled Drawing corresponding to lay out details)	R	S	S	*	R
2	Engineering Change Document if any, if none, a memo stating as such	R	R	R	*	R
3	Shaw Engineering Approval if required, if none, a memo stating as such	R	S	S	*	R
4	Design FMEA, (if none exists with supplier a memo stating as such)	R	S	S	*	R
5	Process Flow Diagram (AIAG format)	R	R	S	*	R
6	Process FMEA (AIAG format)	R	R	S	*	R
7	Control Plan (AIAG format)	R	R	S	*	R
8	Measurement System Analysis Studies (AIAG format)	R	R	S	*	R
9	Dimensional Report (FAIR from 1 random sample per cavity)	R	S	S	*	R
10	Material Performance Test Results (this includes finish and outside processing such as heat treat, painting, plating, passivation, etc.)	R	S	S	*	R
11	Initial Process Capability Studies (from 30-piece random sample)	R	R	S	*	R
12	Qualified Laboratory Documentation (ISO 17025 cert.) or Lab Scope (description of gages, calibration, Work Instructions etc....)	R	S	S	*	R

13	AIAG Appearance Approval Report, (if no appearance items exists, a memo stating as such)	R	S	S	*	R
14	Sample Product from Sample(s) (labeled with PPAP placard) Memo stating the day of shipment AND tracking information ***this also includes capability samples	R	S	S	*	R
15	Master Sample, (send memo stating Master Sample is retained at supplier)	R	R	R	*	R
16	Checking Aids, (Checking Aids and their validation process are to be described in memo and submitted in PPAP), if none, a memo stating as such	R	R	R	*	R
17	Records of Compliance (copy of ISO or TS certification, if not ISO or TS certified a copy of the approved Shaw Supplier Survey.	R	S	S	S	R
18	Part Submission Warrant (PSW)	S	S	S	S	R

S = Supplier shall submit to the customer and retain a copy of the records or documentation items at appropriate locations.

R = Supplier shall retain at appropriate locations and make available to the customer upon request.

* = Supplier shall retain at appropriate locations and submit to the customer upon request.

FAIR/PPAP Sample

The FAIR or PPAP layout samples are to be labeled corresponding to lay out details and sent to Shaw Development LLC. Hard copies of the FAIR or PPAP documentation must be organized in the order listed in the above PPAP Requirement Matrix and sent with samples. An electronic file of FAIR or PPAP documentation is to be e-mailed to the Shaw Development Purchasing contact when samples are shipped. See appendix B for PPAP Placard (THIS PLACARD MUST BE ATTACHED TO SHIPPING BOX).

Appendix B: PPAP Placard

CUT OUT AND ATTACH TO THE TOP OF THE SHIPPING CARTON

Please complete and attach this page on the outside of each package in plain view of a fork lift/material handler/operator. Put the Packing slip pocket near the label.

In the event parts are "Loose" shipped, a label should be placed on each part. This would also apply to parts laying on pallets. Label on a painted part must be wire tied or attached in a way such that the painted surface is protected from label adhesion.

FAIR / PPAP

SAMPLE PARTS

INSPECTION VERIFICATION REQUIRED

Purchased Order#:

Part Number:

Revision Level:

Supplier Name:

Supplier Number:

Supplier Inspected By:

Appendix C: Part Submission Warrant (PSW F-ENF-1025)

		<h3>Part Submission Warrant</h3>	
Part Name _____	Cust. Part Number _____		
Shown on Drawing Number _____	Org. Part Number _____		
Engineering Change Level _____	Dated _____		
Additional Engineering Changes _____	Dated _____		
Safety and/or Government Regulation <input type="checkbox"/> Yes <input type="checkbox"/> No	Purchase Order No. _____	Weight (kg) _____	
Checking Aid Number _____	Checking Aid Eng. Change Level _____	Dated _____	
ORGANIZATION MANUFACTURING INFORMATION		CUSTOMER SUBMITTAL INFORMATION	
Supplier Name & Supplier/Vendor Code _____		Customer Name/Division _____	
Street Address _____		Buyer/Buyer Code _____	
City _____	Region _____	Postal Code _____	Country _____
Application _____			
MATERIALS REPORTING			
Has customer-required Substances of Concern information been reported?		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Submitted by IMDS or other customer format: _____			
Are polymeric parts identified with appropriate ISO marking codes?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> n/a	
REASON FOR SUBMISSION (Check at least one)			
<input type="checkbox"/> Initial submission	<input type="checkbox"/> Change to Optional Construction or Material		
<input type="checkbox"/> Engineering Change(s)	<input type="checkbox"/> Sub-Supplier or Material Source Change		
<input type="checkbox"/> Tooling: Transfer, Replacement, Refurbishment, or additional	<input type="checkbox"/> Change in Part Processing		
<input type="checkbox"/> Correction of Discrepancy	<input type="checkbox"/> Parts produced at Additional Location		
<input type="checkbox"/> Tooling Inactive > than 1 year	<input type="checkbox"/> Other - please specify _____		
REQUESTED SUBMISSION LEVEL (Check one)			
<input type="checkbox"/> Level 1 - Warrant only (and for designated appearance items, an Appearance Approval Report) submitted to customer.			
<input type="checkbox"/> Level 2 - Warrant with product samples and limited supporting data submitted to customer.			
<input type="checkbox"/> Level 3 - Warrant with product samples and complete supporting data submitted to customer.			
<input type="checkbox"/> Level 4 - Warrant and other requirements as defined by customer.			
<input type="checkbox"/> Level 5 - Warrant with product samples and complete supporting data reviewed at organization's manufacturing location.			
SUBMISSION RESULTS			
The results for <input type="checkbox"/> dimensional measurements <input type="checkbox"/> material and functional tests <input type="checkbox"/> appearance criteria <input type="checkbox"/> statistical process package			
These results meet all design record requirements: <input type="checkbox"/> Yes <input type="checkbox"/> NO (If "NO" - Explanation Required)			
Mold / Cavity / Production Process _____			
DECLARATION			
I affirm that the samples represented by this warrant are representative of our parts, which were made by a process that meets all Production Part Approval Process Manual 4th Edition Requirements. I further affirm that these samples were produced at the production rate of ____/____ hours. I also certify that documented evidence of such compliance is on file and available for your review. I have noted any deviation from this declaration below.			
EXPLANATION/COMMENTS: _____			
Is each Customer Tool properly tagged and numbered? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> n/a			
Organization Authorized Signature _____		Date _____	
Print Name _____	Phone No. _____	Fax No. _____	
Title _____	E-mail _____		
FOR CUSTOMER USE ONLY (IF APPLICABLE)			
PPAP Warrant Disposition: <input type="checkbox"/> Approved <input type="checkbox"/> Rejected <input type="checkbox"/> Other _____			
Customer Signature _____		Date _____	
Print Name _____		Customer Tracking Number (optional) _____	

Appendix D: Interim PPAP Approval (F-QUA-1411)



INTERIM PPAP WORKSHEET

Part Number(s): _____ Date of Request: _____
 Requestor: _____ Project/EJOB Number: _____
 Supplier: _____

	Issues Prohibiting Full PPAP	Action Plan to Attain Full PPAP	Action Owner	Target Completion Date	Comp? Y/N
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

Approval Signatures	Date
Project Manager: _____	_____
Quality Engineer: _____	_____
Quality Manager: _____	_____
Other (If Applicable): _____	_____

Appendix E: Supplier Product Deviation Request (F-QUA-017)

Supplier Product Deviation Request



Supplier Name:		
Originated By:	Title:	Date:
Item No:	Revision:	Part Name:
Is this a temporary deviation or long term request? Temporary Request: <input type="checkbox"/> (1 Lot Only) Long Term Request: <input type="checkbox"/>		
P.O. #:	Quantity or Expiration Date:	
Serial Number(s) where deviated Part is used on (if Applicable):		
Reason for Deviation	Non-Conformance Description:	
	Rework Proposed (if any):	
	Root Cause:	
	Corrective Action to prevent recurrence:	

Supplier Product Deviation Request



Shaw Approval	ENGINEERING:	Date :	Approved	Rejected
	Name:		<input type="checkbox"/>	<input type="checkbox"/>
	Signature:		<input type="checkbox"/>	<input type="checkbox"/>
	Comments:			
	QUALITY ASSURANCE:	Date:	Approved	Rejected
	Name:		<input type="checkbox"/>	<input type="checkbox"/>
	Signature:		<input type="checkbox"/>	<input type="checkbox"/>
	Comments:			
Supplier Deviation Instructions				
<p>1) Originator must complete all sections under Supplier Product Deviation Request through Reason for Deviation Request.</p> <p>2) Supplier will submit request to Shaw Purchasing.</p> <p>3) Shaw Purchasing will forward to Shaw Engineering for a technical review and approval.</p> <p>4) If Shaw Engineering approves request it is to be forwarded to Shaw Quality for review, approval, internal communication and returned to Purchasing to be routed back to Supplier.</p> <p>5) If Shaw Engineering and/or Quality does not approve the Deviation Request it is returned to Purchasing for supplier notification.</p> <p>6) Shaw Purchasing saves or scans a copy of Deviation Request into to Deviations folder on the Shaw network.</p> <p>7) Supplier is to place a copy, in each box, of approved deviation with all product shipped under deviation status.</p>				