VU Manufacturing
Supplier Quality Manual

Revision 10, August 20/2020

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Supplier Acknowledgment	Company	
	Name	
	Position	
	Date	
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Preface

VU Manufacturing, referred as VU in the rest of this document, is committed to working with suppliers to ensure customer satisfaction, through total conformance to quality requirements.

VU sees ours Suppliers as part of its own team, a vital member to complete the system that will assure parts and processes will comply with our Customers Specifications and Quality Expectations.

VU has the following expectations for their suppliers:

1. 100% on time delivery.
2. Zero Defective Units.
3. Continuous Improvement.
4. Safety / Government / Regulatory Requirements are achieved.
5. Pricing targets and continual pricing improvements.

We also expect that your suppliers meet these minimum requirements. It is your responsibility to manage your supply base, in the same manner.

Our continuous goal is to improve the quality of our product and services to our Customers, and for this common goal we strive our suppliers for continuous improvement.

VU will assist our Suppliers whenever possible to meet our requirements. The responsibility for quality and on-time delivery, however, remains with the supplier.

Sincerely,

Don Cunningham
VU Manufacturing
President

A. Quality System

It is VU's policy to require all approved material / component suppliers to be third party certified to either ISO 9001 or IATF 16949, on their latest revision. This policy could exclude suppliers from testing facilities, and/or change on customer directed sources.

Suppliers are required to keep VU up-dated as to their ISO 9001 or IATF 16949 certification status. A copy of the supplier's registration certificate needs to be forwarded to the VU Mexico Purchasing Department whenever a new certification has been issued. Suppliers that supply product or services for the productions and delivery of product to the customer need to be ISO 9001 certified, along with a formal plan (or timeline) to becoming certified or compliant to the IATF 16949 standard requirements. VU Customer Care manager will monitor supplier's actions to becoming certified or complaint. On-site supplier evaluations may be needed to document supplier actions.

The Core Tools reference manuals required for suppliers process control, are the following, methods and requirements in these manuals are required unless specifically expressed otherwise:

- Production Part Approval Process – AIAG PPAP Manual.
- Statistical Process Control – AIAG SPC Manual.
- Measurement System Analysis – AIAG MSA Manual.
- Failure Mode & Effect Analysis – AIAG FMEA Manual.
- Advanced Product Quality Planning and Control Plan – AIAG APQP & CP

For injection suppliers, it is a requirement that the Supplier completes the specific requirement for the CQI-23 for Plastics injectors; the supplier is responsible to submit this report to VUM on an annual bases. This, along with internationally recognized quality management system standards and customer-specific requirements, defines the fundamental requirements for molding management system. The goal of the Molding System Assessment is the development of a molding management system that provides for continual improvement, emphasizing defect prevention and the reduction of variation and waste in the supply chain.

VU will be using CQI-19 Sub-Tier Supplier Management Process Guideline as a guideline to develop suppliers. VU strongly recommends to cascade this requirement to supplier sub-tiers. The CQI-19 documents can be located on the AIAG site. CQI-19 was developed to provide a common process for supplier management. CQI-19 contains the latest thinking on the subject from major automotive suppliers and some of their customers based on industry "best practices." The importance of CQI-19 is that the customer specific requirements of GM, Ford and Chrysler require suppliers to follow CQI-19.

B. Advanced Quality Planning

APQP Manual and questionnaires may be used to assure all documents and processes necessaries have been considered before mass production.

The Supplier shall use this methodology, with evidence to be accessible for VU review.

New suppliers / suppliers not on VU's approved supplier list will provide Self-Assessment Survey F-SOP-03-03-R01, the self-assessment will be conducted by the supplier itself, and returned completed with any supporting evidences that VU may considered as critical.

Audits on site may be required for major non conformances at supplier's cost.

Safety characteristics such as flammability and bond strength shall be verified and certified by supplier, and shall be controlled with SPC charts when applicable.

Safety characteristics need to be controlled by the supplier in such a manner as to protect and supply product to required specifications and requirements.

Special characteristics need to be verified and certified by supplier using methods and equipment for verification.

C. Continuous Improvement

Process improvement, product quality, cost savings and material protection should be proactively improved by all suppliers.

D. Production Part Approval Process

Requirement to submit a PPAP is in the purchase order submitted to the supplier. VU requires the use of AIAG PPAP Manual for this process; no supplier is exempt of this process, unless VU extends a PPAP Waiver or VU's Customer gives waiver to approved supplier.

The default PPAP level to submit is level III; please verify documents to be submitted in the AIAG PPAP Manual. No matter what level of PPAP is requested from VU, all suppliers are required to secure level III PPAP documentation on file for potential review. VU will require a PPAP submission when any of the following conditions occur:

- New part.
- New supplier for new or existing parts.

- Engineering changes.
- Change in material.
- Other circumstances as dictated by VU.

The supplier will advise VU of any change in their process, and a new PPAP submission must be re-submitted, for changes such as, but not limited to:

I. Change in manufacturing location including major layout changes.
II. Changes in manufacturing process, including:
    - Addition of new tools, equipment, dies, molds or cavities.
    - Major repair of equipment or tooling.
    - Changes in sub-tiers for raw material

Parts evaluated for PPAP purposes must be produced on production ready tooling and equipment.

Material Performance Test Data: the supplier is responsible for conducting all material and performance testing in applicable customer-specific, government mandated or industrial organization's engineering specifications. If supplier does not have the capacity of performing testing, they can contract the service of a qualified laboratory. External labs used must be ISO/IEC 17025 certified or national equivalent.

For cloth, vinyl, leather or similar material, the supplier is responsible to evaluate color, gloss and shade, as applicable, of product before shipment and submit test results; any variation of shades shall be noted in material's roll identification label.

The supplier is responsible for the type of equipment needed for the evaluation of an appearance item. For plastic parts with appearance requirements, evaluation results for color, gloss and grain are required as applicable.

In order to meet ISO 9001 and IATF requirements, clause 8.6 Release of products and services shall implement controls to validate product meets material requirements per design; and shall retain documented information on the release of products and services, including evidence of conformity with the acceptance criteria and traceability to the person(s) authorizing the release.

VUM is requesting to the supplier to include with every shipment, a Certificate of Conformance (CoC) of the product being shipped. This CoC shall contain a statement certifying that the product meets the requirements of its design and that you have all the "evidence of conformity with the acceptance criteria" properly archived and available for review.

This CoC / statement can be added at the bottom of your BOL or invoice, or printed in a separate sheet and included with the shipping goods. It is important you include the serial numbers or lot numbers that you are certifying.

In case you choose to email this CoC, please use vu-certs@vumfg.com.

PPAP shall be submitted at supplier costs, a copy of the PPAP will be sent electronically to the email jmena@vumfg.com.

The PPAP shall contain full dimensional layout of the part, with a minimum of five samples. Three of those five samples will be submitted to VU properly identified with the sample number that links it to the dimensional report.

Suppliers are requested to submit an annual layout validation of the product, a PSW level 4 along with dimensional and material results by the month of June every year, data reports submitted should not be more than 12 months older.

E. International Material Data System – IMDS

It is a requirement of each supplier to submit to VU their IMDS information for each component.

This is to be completed prior to submission of the level three PPAP to VU. The IMDS number that is used must be included on the PSW from the supplier. The VU IMDS number is **98760**. It is the Suppliers responsibility to keep current their IMDS for system upgrades and for component changes.

If a supplier fails to complete their IMDS, the submission package will be rejected.

Should a supplier require assistance with IMDS they should inquire with the Sales Department and ask for the IMDS Contact information.

F. Quality Practices

I. Statistical Methods

Suppliers shall utilize appropriated statistical methods for process control, process improvement, and evaluation of process capability.

Refer to SPC and MSA Manual for known statistical methods / charts.

II. Lot Traceability Plan

Suppliers shall utilize appropriated methods to provide product traceability though their entire process. Each part shall be identifiable though VU's process and shall be traceable to supplier's records.

III. Change control

Suppliers shall have implemented a change control point system to control planned and unplanned changes, that addresses any changes for, but not limited to, Man, Method, Machine & Material (4M).

Planned changes are to be communicated to VU Manufacturing at least 120 days before it is implemented; supplier is to broadcast procedure for this control.

Unplanned changes are to be recorded and controlled by the supplier; supplier is to broadcast procedure for this control. If unplanned changes alter or impact the product or service in anyway, a formal communication to VU Manufacturing is necessary for its revision and approval before implementation.

All first shipments of product manufactured with planned or unplanned changes are to be identified by the supplier.

IV. Gauging

Suppliers are expected to establish and maintain a gauging system that will provide adequate and accurate data to demonstrate the conformance of the product. The system shall provide adequate inspection, measuring and test equipment. The measuring / testing equipment must be controlled and calibrated at scheduled intervals.

V. Control Plans

Control Plans are developed for the pre-launch and production phases and must meet specifications as indicated in AIAG APQP & Control Plan manual.

The control plans are to be submitted to VU with the PPAP package.

VI. Process Flow Chart and PFMEA

Process flow charts shall list all process steps, beginning from receiving raw material though shipping final product.

PFMEA shall meet requirements as indicated in AIAG FMEA Manual.

VII. Rejections and Corrective Actions

a. DMN (Defective Material Notice)

VU will contact suppliers when non-conforming material is found. A DMN report will be issued and sent to the supplier.

First notification of non-conformance to the supplier may provide information on the non-conformance found and quantity of detained product. The supplier shall respond to the DMN within 24 hours with an interim action, such as containment activities.

Supplier is expected to respond with a Rejection Authorization Number (RMA), where the supplier is accepting the defect being reported in a period no longer than 48 hours, after this period, if no RMA is received, the

material will be disposed at Supplier's expenses and the supplier's account debited.

The DMN issued to a supplier could include a processing fee of 2 hrs @ $50 an hour, minimum fee of $100 USD, depending on the magnitude of the rejection.

If rejected goods are from final Customer, caused by non-conforming products from suppliers, the supplier will be charged a fee of $250 USD, plus any other expense caused by the customer complain.

Any charges incurred for poor quality, and / or disruption at VU's Final Customer, due to non-conforming material will be charged back to the supplier.

VU may require sorting at our facilities if the production / delivery have been compromised due to non-conforming material being detected.

If activities of sorting, rework and handling are performed by VU, the supplier will be charged at a rate of $50 USD per hour.

For sorting activities that exceed 5 working days in VU installations, VU will be adding a daily charge for square meters used for the sorting activities, plus overheard costs caused for the administration of this activity.

For sorting activities, it is mandatory to use ISO 9001 certified sources; VU can provide a list of approved sorting companies if required. The supplier and/or the sorting company shall meet requirements list for sorting activities in our facilities that will be provided by the Customer Care Manager in any event.

b. Delivery Performance Review

VU will contact suppliers when a discrepancy on received material is found. This will affect directly the supplier's scorecard.

c. Corrective Actions

Suppliers shall maintain a corrective action methodology for problem solving, such as AIAG CQI-10 Problem solving manual and CQI-20 Effective Problem Solving Guide. As required, suppliers will respond to VU's concerns using the corrective action methodology, and corrective actions will be evaluated following CQI-10 guideline. Corrective action methodology will be used to communicate actions taken for concerns documented on a DMN or for repetitive concerns detected at VU.

Any Corrective Action format / methodology can be use, and shall include (but not limited):

- Containment actions.

- Temporary countermeasures.
- Root cause.
- Permanent corrective actions.
- Verification of the effectiveness of corrective actions.
- Preventive action taken.

VIII. Internal Process Audits

The supplier shall use methods for process audit to ensure continuous monitoring of system performance, please refer to AIAG CQI-8 Layered Process Audit manual.

IX. Record retention.

As indicated in the ISO 9001:2008 or ISO/TS 16949:2009 standard.

X. Labeling

All suppliers, unless waived by VU, are required to use bar-coded labels when shipping to VU. Each container must have 2 standard AIAG labels on adjacent corners.

Label shall contain:

- The product shipped shall contain the proper bar coded label.
- The proper PO # and or release #.
- VU Part number.
- Material description: type of material and color, and other data (i.e. thickness, width, style, grain, etc.)
- Quantity: yards, meters or pieces contained.
- Engineering or Revision Level.
- Serial and/or Lot number.
- Manufacturing date.
- Manufacturer's Name and Address.

XI. Packaging

Expendable packaging will be designed by the supplier to insure the product is delivered free of damage or contamination at minimum cost.

A form for packaging instructions proposal is to be submitted to the VU Materials Department during development stages, and have it approved by VUM before the first shipment. Packaging and staging of product in the truck

is supplier's responsibility, it must ensure product will be properly protected during transit.

Packaging instructions and details should be included in the Production Parts Approval Process documentation.

Material in roll shall be protected by plastic liners / poly bag that will insure material will be isolated from dust and humidity. Shall contain two identification labels, one outside attached to the poly bag and a second one inside of the core that can be easily removed in case the outside label is damaged during transit.

Unit to use to count roll good quantity is Yards.

Core: 6 inch tube or similar.
Roll size: Max 82 yds – Standard 76 yds – Min 16 yds.
Nap direction: Into roll

In case of roll material, the supplier shall identify areas of the material that presents imperfections or damages that will not be admissible for cosmetic of functional purposes. The defects can be marked as spot defects (circle the defect) or complete areas to be discarded. The defective inches / yards shall be discounted from the total of yards / meters shown in the shipping label.

The use of plastic flags is needed as follows:

Yellow Plastic Flag in both edges of material: to show start and the end of a continuous defect. Areas > 4.5 inches

Blue Plastic Flag in both edges of material: to show defects in the back side of the material (defective foam, lamination, foam joint, other defects for scrim or foam). Areas ≤ 4.5 inches

Red Plastic Flag in both edges of material: to show spot defect marked. Areas ≤ 4.5 inches

Quantity of permitted defects in a roll:

Quantity of Defects	Cloth (Yards)	Vinyl (Yards)
1	1—9	1—9
2	9—18	9—18
3	18—27	18—27
4	27—36	27—36
5	36—45	36—45
6	45—54	45—54
7	54—63	54—63
8	63—72	
9	72—81	
10	81—90	
11	90—99	

12	99—108	
13	108—117	

XII. Shipping and Delivery

Supplier is expected to meet the following requirements:

- Shipments against "Blanket" purchase orders should only be made as stated on material releases.
- All dates on material releases are "Delivery" releases.
- It is the supplier's responsibility to ship products with enough time to arrive on the date stated on the release.
- All late shipments must be moved at the supplier's expense or they must receive approval from their VU customer contact to send the following week.
- Any downtime or premium expenses incurred due to a late delivery will be charged back to the supplier.
- Supplier claims must be presented within 15 days of receiving a buildout notice or zero release.
- All claims must be accompanied by the release forecast supporting the quantities being claimed.
- Claims will be paid when VU receives coverage from their customer.

XIII. Supplier Performance

The Materials Department will generate a supplier Score Card which will rate the supplier on any Quantity Discrepancies, On Time Delivery, Product Quality and Missing Documents (shipping documents such as but not limited to packing slip or shippers).

The score card will be published to the suppliers on a quarterly basis.

Score will be assigned as it follows:

- Discrepancy, missing documents – 20 points
  - 0 occurrences – 20 points
  - 1 occurrences – 15 points
  - >1 occurrences – 0 points

  * Discrepancy could include events such: shortage of units, missing BOL, wrong material, missing CoC, etc.

- Responsiveness – 10 point
  - 0 occurrences – 10 points
  - Late response – 5 points
  - No response – 0 points

* Corrective actions, supporting activities.

- On Time delivery– 20 points
  - 0 occurrences – 20 points
  - 1 occurrences – 15 points
  - >1 occurrences – 0 points

- Premium freight, line interruption – 20 points
  - 0 occurrences – 20 points
  - 1 occurrences – 15 points
  - >1 occurrences – 0 points

  * When line interruptions occurs in VU process or direct customers (assembly plants, OEM, dealers, etc.) that are caused for major failures in the material, supplier will be responsible for all expenses caused by this event, and the scorecard affected accordingly.

- Damage – 10 points
  - 0 occurrences – 20 points
  - 1 occurrences – 15 points
  - >1 occurrences – 0 points

  * Damages incurred due to not using the approved packing and/or transportation/handling appropriate methods will impact the scorecard.

- PPM – 20 points
  - 0 PPM – 20 points
  - ≤ 500 PPM – 15 points
  - ≤ 1000 PPM – 10 points
  - > 1001 PPM – 0 points

Suppliers with score card ratings below 80 will be requested to submit a corrective action detailing steps to correct and improve upon their rating.

Any supplier with 3 or more consecutive quarters below 75 points will be requested to attend a meeting with the corporate staff located in Troy.

XIV. Contacts

To ensure the correct information flow, VU encourage our suppliers to use the representative of your corresponding departments. Supplier will receive the present manual with a cover letter with the contact information.

XV. Changes to Manual

Level	Date	Change
04	Sep/22/2016	• Section XIII for changes in manual added. • CQI-23 for Plastics injectors in page 3. • Applicable OEM Customer-Specific Requirements in page 3. • DMN with cost to be received within a week, page 7
05	May/02/2017	• Section D, PPAP requirements changed, submission is electronically. • Section X. Packaging forms to be submitted before first shipment. • Section X. Roll goods shall contain 2 labels, on inside of center core. • Section XI. PPM scores modified.
06	May/16/2017	Minor change, added cover sheet with VU logo.
07	Jun/16/2017	Correction typo in page # 11. Score for PPM
08	Feb/26/2018	General revision. Included highlighted in yellow all changes made to this revision. Changes due to IATF Norm & specific requirements from Customers.
09	Oct/16/2019	Acknowledgment signature in page # 2. Requirement for PPAP for changes in sub-tiers. Charges in DMN adjusted. CQI-19 and CQI-20 requirement added.
10	Aug/20/2020	• ISO 9001 suppliers need a plan to become IATF 16949 certified. • CQI-23 survey is to be submitted by injector suppliers annually. • CQI-19 requirement specified. • Email address to submit CoC is modified.