



SUPPLIER QUALITY MANUAL

Supplier Quality Manual Approval Signatures:

President:

_____ Dated: _____

Plant Manager:

_____ Dated: _____

Quality Manager:

_____ Dated: _____

Purchasing Manager:

_____ Dated: _____

The signatures above are a commitment to the requirements and expectations of each of our suppliers. Our goal is to form a partnership and solid relationship with our Suppliers. We have an open-door policy and welcome all inquiries, concerns and solutions to all areas.

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INTRODUCTION

TransGlobal Expectations:

To exceed in meeting our customer expectations, it is imperative to have a solid relationship with our suppliers. The intent of the supplier manual is to eliminate any miscommunication between TransGlobal and our suppliers.

TransGlobal has the following expectations for their suppliers:

1. 100% on time delivery
2. Zero Defects

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

PURPOSE

This business operating manual for our supply base explains the quality requirements. This manual does not replace individual agreements or specifications, but are the requirements upon which other requirements and expectations are built.

SCOPE

This document applies to all suppliers of TransGlobal that supply product for production purposes. A “Hard” copy of this manual is given to the supplier, at the time of issuance of the P.O. (Purchase Order). It is expected that the supplier understands and utilizes this manual. All other copies can be obtained from our website at: www.transglobalco.com. It is the responsibility of the supplier to check periodically for any changes that may have occurred. Any questions can be directed to the Purchasing Department and/or Quality Department at TransGlobal.

TransGlobal, utilizes the Automotive Industry Action Group (AIAG) format for quality systems, quality planning and statistical methodologies. Suppliers are expected to establish goals aimed at becoming fully compliant to latest version ISO/IATF16949, and or ISO 9001 latest version at a minimum. This manual has been written to be in alignment with the AIAG reference manuals.

DEFINITION

Publications from the Automotive Industry Action Group, (AIAG) latest version, referenced in this manual are used as a guide to establish the requirements for Suppliers.

1. Advanced Product Quality Planning and Control Plan (APQP)
2. Potential Failure Mode and Effects Analysis (FMEA)
3. Measurement Systems Analysis (MSA)
4. Production Part Approval Process (PPAP)
5. Quality System Requirements: ISO: 9001/IATF 16949 (latest version)
6. Statistical Process Control (SPC)

PROCEDURE

Management Responsibility

Suppliers will have methods in place to measure customer satisfaction. These measurements should be used in identifying the need for corrective and preventive actions, as well as continual improvement.

Suppliers will at a minimum, use the Supplier Ratings as a method of measuring satisfaction.

TransGlobal will issue the Supplier Performance Ratings report at semi-annual intervals, in January and July.

The Supplier's rating is comprised of the following areas:

1. Quality 100%
2. Delivery 100%

For scores that are below 100% the Supplier is required to submit a formal corrective action and an on-site supplier evaluation may be conducted.

Suppliers are to identify a primary and an alternate contact for both normal and emergency communications with TransGlobal, for all shifts.

The following information is to be sent to TransGlobal.

1. Business Phone and Fax
2. Cell / Mobile Phone
3. E-mail Address
4. EDI / ASN capability

All suppliers must be at a minimum ISO 9001 (latest version), preferably ISO/IATF16949 (latest version) compliant. In the event a supplier does not have a 3rd party registered system, they cannot be selected. Only in special circumstances will a supplier be utilized without certification. This is determined on a case by case instance.

The supplier shall adhere to all statutory and regulatory requirements in the country of receipt, the country of shipment and the customer identified country of destination if provided.

The supplier shall adhere to referenced OEM Customer requirements as communicated per TransGlobal documentation. Also, refer to: <http://www.iaob.org/> for an outline of OEM Customer requirements.

The supplier, in turn, shall cascade TransGlobal's and applicable OEM requirements to their suppliers.

It is the Supplier's responsibility to ensure that all "due dates", requests for quote, PPAP submissions, corrective actions, preventative actions etc. are met.

QUALITY SYSTEM

Suppliers should develop and implement a documented system to control processes and ensure quality. Suppliers must allow for 2nd Party Audits by TransGlobal representatives for any of the following reasons.

1. Supplier Approval
2. Supplier Risk Assessment
3. The Supplier is being considered for new or additional business.
4. Supplier Monitoring (Quality/Delivery performance)
5. Supplier QMS Development
6. The Supplier failed to submit acceptable PPAP or corrective action reports.
7. When the quality of supplied product does not meet the PPAP, Drawing, Math Data requirements and / or shows evidence of deterioration.
8. Engineering Changes
9. Process Changes
10. Plant location changes (requires PA, PDR and PPAP submission)
11. To assist the Suppliers in improving performance as needed or requested.

AUDIT CRITERIA

The criteria for these audits focus on certification, performance, product and process change. However, other criteria may be utilized. The TransGlobal, LLC Supplier Quality Representative shall determine the appropriate criteria and communicate this information to the supplier's Quality/Sales Department.

SUPPLIER DEVELOPMENT

Supplier development activities shall be prioritized based on the following:

- Risk Analysis
- Supplier performance report scores
- 2nd Party Audit findings
- 3rd Party Certification status

PROCESS AUDIT (PA) AND PRODUCTION DEMONSTRATION RUN (PDR)

The TransGlobal, LLC PA (Process Audit) and PDR (Production Demonstration Run) is conducted for all parts determined by the customer to be HIGH RISK to the vehicle program. If any non-acceptances are noted, then the PA and PDR remains open. Corresponding corrective action shall be submitted by the supplier and validated through a re-visit and/or re-evaluation by the Sourcing Team for PA and PDR closure.

Note:

Once a PA and PDR has been approved, changes to the supplier's production process cannot be implemented without prior TransGlobal, LLC Sourcing Team approval. The SREA (Supplier Request for Engineering Approval) (Appendix E) Form shall be submitted for approval to the TransGlobal, LLC Sourcing Team, if the supplier wants to implement process changes.

PPAP REQUIREMENTS (Production Part Approval Process)

Suppliers are to submit a PPAP package in accordance with the latest version AIAG Production Part Approval Process Manual. Level three is the default submission for PPAP. Any other Level submission PPAP's such as Level 1, 2, 4 or 5, must be approved by TransGlobal prior to the supplier submitting. All approvals must be in writing to be valid, and be from a Project Team Member at TransGlobal.

The total PPAP package including sample parts and related documents, for example; IMDS, Material Certifications, Test Reports etc, are to be submitted in English.

The PPAP package is to be labeled with **“PPAP Enclosed – Please forward to a Project Team Member within the Purchasing Department.”**

The label must include the following:

- Part Number
- Part Name or Program Name
- Purchase Order Number
- Date of Submission
- PPAP Parts Included – (minimum of 6)

In preparation for the PPAP submission, the Supplier must develop the following process control tools in accordance with the AIAG manuals latest version and are to be used as a guideline to improve the process.

- A Process Flow Chart of the process used to produce product.
- A PFMEA – Process Failure Mode and Effects Analysis
- A Control Plan

The PPAP must include (six) sample parts per cavity, each tool, with full dimensional layout. Any change on quantity must be approved by the Quality Manager or Launch Manager at TransGlobal, and be in writing to be valid.

Dimensional reports need to be correlated with a “Ballooned Drawing” and math data file as appropriate and all the dimensions on the drawing, including title block and notes. Data should be in summary form showing out of tolerance readings.

Process Capability studies and analysis of data is to be performed on key or critical characteristics, as determined by TransGlobal. If no key or critical characteristics are determined, then it is the responsibility of the supplier to pick or designate them, based on previous history, and submit those to TransGlobal for approval. CP, CPK (1.67) and PpK values are to be calculated and submitted with the PPAP.

A minimum of thirty piece studies are to be submitted, from a 300-piece production intent run.

No PPAP that deviates from the established requirements can be submitted without prior written approval for deviation from TransGlobal, with the necessary associated documentation. Once the approval is obtained for deviation, the supplier will include the written approval from the TransGlobal Quality Manager, in their submission package.

The PPAP may be rejected, approved or given an interim approval by the TransGlobal Quality Manager.

Suppliers must also clearly identify each box, each shipment for product that is not yet fully PPAP approved. Suppliers must first obtain an interim approval or deviation to do so, and can only ship per these documents, until expiration of the deviation or interim or full PPAP approval is achieved.

A new submission of the total or partial PPAP package will be required if the original submission is rejected. TransGlobal must submit a full explanation with the reason for the rejection and include the new requirements to the supplier.

A PPAP warrant that is marked “Interim Approval” is sent to the supplier along with an explanation of what is required to gain “Full Approval” and the date that the “Interim Approval” expires.

On the date that the “Interim Approval” expires, the status of the PPAP reverts to “Rejected”, unless an extension has been granted or the warrant has been signed granting full approval. At the time of expiration, the supplier can no longer ship product and must obtain an extension from TransGlobal to ship.

Labs used for testing for PPAP submission must be certified as follows:

- If the supplier utilizes its own internal lab for testing the supplier must be ISO 9001/IATF16949 (latest version) registered. The testing performed must be covered under the lab scope.
- If the supplier utilizes a third-party lab, the lab must be ISO 9001/IEC 17025 (latest revision) certified. The testing performed by the lab must be covered under the lab’s scope of accreditation.
- If there are other specific requirements for the testing facility, the supplier will be informed.
- All certification testing must have been completed within one calendar year of the PPAP submission.
- All certifications must include a copy of the required results, detailed test data and a statement of compliance.
- The person who performed the test or inspection must sign and date all reports.

- All deviations, exceptions, extensions, etc. must be approved in writing, by the QE assigned to the affected project.

INTERNATIONAL MATERIAL DATA SYSTEM - IMDS

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

This is to be completed prior to submission of the level three PPAP to TransGlobal. The IMDS number that is used must be included on the PSW from the supplier. The TransGlobal IMDS number is 9340. 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 TransGlobal IMDS Coordinator.

CONTRACT REVIEW

Suppliers must maintain records of contracts in accordance with the requirements of the business operating system requirements manual or written agreements with TransGlobal

DESIGN CONTROL

All designs for tooling used to produce product for TransGlobal, must be shared with TransGlobal, if requested by TransGlobal.

DOCUMENT AND DATA CONTROL

All documents including prints, drawings, manuals, specifications, functional parts received from TransGlobal etc., are the property of TransGlobal and must be returned to TransGlobal upon request or at the end of the contract to do business.

When TransGlobal issues revised prints, specifications or manuals, the obsolete copies must be marked obsolete, destroyed, or returned to the proper TransGlobal contact.

PURCHASING

Suppliers to TransGlobal are fully responsible for all aspects of controlling the quality and delivery of product and/or services from sub-suppliers/subcontractors.

Suppliers are also responsible for ensuring that sub-suppliers/subcontractors understand and meet TransGlobal requirements and expectations.

Suppliers must upon request, from TransGlobal, provide PPAP submissions for material, certificates of compliances or services from sub-suppliers/subcontractors.

Suppliers will ensure that all certificates and other required documentation is available for product and or services from sub-suppliers/subcontractors.

Suppliers upon request will arrange for a TransGlobal representative to visit sub-suppliers/subcontractors.

TransGlobal suppliers will maintain their supply-base in the same manner as they are requested to from their customers, and per the requirements set-forth in ISO 9001 (latest version) and ISO/IATF16949 (latest version)

When a sub-supplier/subcontractor is used without certification, it is the Supplier's responsibility to manage that sub-supplier/subcontractor accordingly, and if necessary, to start the de-sourcing process to find a supplier that does comply. This should start six months from the time of award of business.

CONTROL OF SUPPLIED PRODUCT

Suppliers will store and maintain all products supplied from TransGlobal, in a manner that will prevent damage or loss.

Any supplied product that is damaged, lost or otherwise unusable must be documented and reported to TransGlobal in a timely manner.

Tools, equipment and returnable packaging owned by TransGlobal must be permanently marked so that the ownership of each item is visually apparent.

Tools and equipment as provided and owned by TransGlobal cannot be used for any other customer, without prior written approval from TransGlobal.

Reusable packaging owned by TransGlobal must be handled and stored in a manner that will prevent damage or loss. It is the responsibility of the supplier to maintain records of inventory of the reusable packaging.

Prior to use, it is the supplier's responsibility to inspect, clean and repair or replace all reusable/returnable packaging to ensure that the packaging will protect product during storage and during transit.

PRODUCT IDENTIFICATION AND TRACEABILITY

Suppliers will ensure that all products are identified according to print and / or purchase order requirements and specifications.

Unless otherwise specified by TransGlobal, Suppliers will utilize an effective system, such as unique lot numbers and date stamps, to maintain lot traceability of raw and/or finished material.

Whenever possible, material received by TransGlobal must have the outside of each carton marked with the following and have two (4" x 6 ") Barcode label with the following information:

- Part Number
- Part Name
- Quantity
- Purchase Order Number
- Date of Manufacture
- Lot Number
- Supplier Name
- Supplier's Number

Any failure to properly label product, may result in a rejection of the material. A charge back may be issued to re-label the material or a disposition of it.

TransGlobal may request material prior to formal approval for evaluation purposes. Material shipped prior to PPAP approval must have the outside of each carton marked as follows "Sample Parts" and have the appropriate documentation with the sample parts.

- This does not apply to items which have interim approval.
- Matching barcode labels and "Sample Parts" labels shall be on adjoining sides of each carton. "Sample Parts" are to be on Orange Barcode stock, unless otherwise noted.

PROCESS CONTROL

Suppliers must identify and plan production, installation and servicing processes that directly affect the quality of product supplied to TransGlobal. Suppliers must ensure that these processes are carried out under controlled conditions.

Suppliers will have documented process for process monitoring, as well as detailed operator instructions for all employees having responsibilities for operation of processes.

All instructions should be accessible at the workstation, including receiving and shipping.

The instructions should be derived from the PFMEA (Process Failure Mode Effects Analysis) and Control Plan.

Where key characteristics (control dimensions) are identified on the print, TransGlobal requires that the Supplier monitor the process capability on an on-going basis.

Each of these items must be identified on the Control Plan.

For all control dimensions, SPC data showing capability must be submitted with the PPAP package.

Capability studies require a check of 100 pieces taken from 300-piece run.

The process must achieve a CpK of 1.67 or higher.

Gage R&R studies must be submitted with the PPAP package for all gages.

TransGlobal may require submission of SPC data on a regularly scheduled basis.

Suppliers must maintain records of all process changes and the effective dates.

A new PPAP must be submitted and approved by TransGlobal, prior to implementing any process or material changes. Suppliers must notify TransGlobal of a process or material change and submit a new PPAP.

For Suppliers manufacturing parts designated by the customer as “Appearance Items”, the following requirements must be met:

- Appropriate lighting for evaluation. TransGlobal may specify the lighting requirements for the inspection of product.
- Masters for color, grain, gloss, metallic, brilliance, texture, distinctness of image (DOI) as appropriate. All masters must be signed and dated by a TransGlobal representative or customer.
- Color checks or match must be conducted in an approved lighting source such as a Macbeth booth, X-Rite or Spectrophotometer, must be calibrated and those making decisions affecting appearance must be trained.
- The Munsell Farnsworth 100 hue color test must be conducted annually at a minimum for each person checking product with a requirement for appearance.
- Boundary samples exhibiting the maximum allowable defect, (max limit samples) may be provided by TransGlobal. All boundary samples must be approved and dated by TransGlobal. In addition to, the supplier may initiate boundary samples and may use those samples with TransGlobal’s approval.
- Maintenance and control of appearance masters and evaluation equipment must be maintained.

INSPECTION AND TESTING

Suppliers are to establish and maintain documented processes for inspection and testing activities to ensure that the specified requirements for the product are met. The control plan may satisfy this requirement.

Product should not be moved to subsequent processes or shipped until all inspections and tests have been successfully completed and the results documented, unless positive recall procedures are utilized.

The quality plan (control plan) should include inspection of incoming product at all stages. This includes sub-supplier/subcontractor processes for example: sending product out for paint and then re-inspecting product upon re-entry into the plant.

All inspection and test records will be maintained and available for review by TransGlobal

The Supplier's test and inspection external laboratory should be operated and maintained in accordance with ISO17025 (latest version) and have the laboratories scope available for review.

CONTROL OF INSPECTION, MEASURING AND TEST EQUIPMENT

Suppliers of TransGlobal, must maintain calibration records for all inspection and test equipment used to make pass/fail decisions on products manufactured for TransGlobal.

All calibrations must be current and all test or inspection equipment tagged or labeled showing current calibration status.

All masters and boundary samples must be controlled and included in the document and data control system.

INSPECTION AND TEST STATUS

All Products of TransGlobal must be tagged or labeled showing inspection and or test status throughout the process.

When required by TransGlobal, additional verification/identification and or certification requirements are met for product.

CONTROL OF NON-CONFORMING

Suppliers must request a deviation prior to shipping any product that does not meet all specified requirements, or that was produced outside the process approved by the PPAP. This should only be used in the rare instance where there is data to show that the product is usable by TransGlobal. Shipment is authorized after TransGlobal does an evaluation and has notified and received approval from customers to TransGlobal. An approval signature from a TransGlobal Project Team Member on the requested deviation authorizes shipment.

All rework and/or repair which is not part of the normal process (process approved as part of PPAP) must be authorized, in writing by TransGlobal Project Team Member prior to shipment of product.

Suppliers must contact TransGlobal immediately if it is discovered that suspect product may have been shipped to TransGlobal.

When defective material is detected at TransGlobal, a DMR (Defective Material Report) is completed and sent, via fax or email to the Supplier detailing the nature of the problem, the part number and quantity of parts involved.

The supplier is to document the reason for the nonconformance and the corrective action on a proper 8D form (TransGlobal Form # F2-056) and return it to the TransGlobal Quality Manager and Purchasing Manager.

The Supplier is required to respond within 24 hours of the DMR (Defective Material Report) date, the initial response to the problem, concern or issue. Root Cause analysis must be completed in a timely manner (10 days) and include permanent corrective actions. An associated “5 Why” or “Fishbone Diagram” should be included to show how the root cause was identified.

The Supplier’s performance rating for the current period will be negatively impacted by each DMR issued.

Upon notification that nonconforming product has been detected at TransGlobal the Supplier must contact TransGlobal immediately; to discuss options and disposition of the nonconforming product.

The Supplier may choose to have nonconforming material returned to their facility, scrapped at TransGlobal or if approved by TransGlobal (in writing), arrange for the material to be sorted and or reworked.

The supplier is responsible for all transportation charges associated with returning nonconforming material.

A charge for rework, sort and other fees apply as appropriate to the nature of the issue and/or if TransGlobal has to implement containment action to protect TransGlobal and their customers from suspect/defective product. (A list of rates per every item are referenced in the Appendix A)

TransGlobal may refuse to allow sorting and or rework on nonconforming material.

All rework must be approved by TransGlobal on an individual basis.

All reworked material must be identified in a method approved by TransGlobal, and re-inspected.

The Supplier is responsible for all costs associated with sorting and or reworking nonconforming material.

TransGlobal is responsible for the supervision of personnel performing sort and or rework of nonconforming material at TransGlobal, including 3rd party containment companies.

If TransGlobal has not received a response from the supplier within five (5) days of issuing a defective material notice, a debit memo will be issued.

If a response is not received within ten (10) days of issuing a defective material notice, the defective material may be returned to the supplier without authorization.

When defective product is detected at TransGlobal, the Supplier will provide for sorting, rework, or replacement of parts to ensure that production needs are met.

When necessary to support production requirements, TransGlobal may sort and or rework rejected material and charge back the cost without approval from the responsible Supplier.

CORRECTIVE AND PREVENTIVE ACTION

When a request for a corrective action report is received from TransGlobal, the response must be documented on an 8D form TransGlobal form # F2-056.

Special attention must be given to identification of the root cause and action to prevent recurrence. The root cause must show systemic corrective actions.

When a request for a corrective action report is received from TransGlobal, a response detailing the short-term containment action(s), must be received by TransGlobal within twenty-four (24) hours after being issued. The long-term corrective action(s) information must be submitted with (10) ten days.

All responses must be reviewed and approved by a TransGlobal Project Team Member.

If the TransGlobal Project Team Member rejects a corrective action response, the Supplier is required to respond with a different corrective action within five (5) days from the rejection date and show permanent corrective actions are in place.

HANDLING, STORAGE, PACKAGING, PRESERVATION AND DELIVERY

The supplier is required to develop procedures to handle, store, package, and ship materials in a manner to ensure that it meets all functional and appearance specifications upon arrival at TransGlobal. Material may be rejected at TransGlobal incoming/receiving inspection due to damaged or incorrect packaging. If the packaging is not adequate to protect the material during handling and storage at TransGlobal, then it must be addressed immediately.

Whenever it is possible, the material supplied to TransGlobal must be on pallets that can be moved with standard warehouse equipment.

All packaging labels must be positioned in a manner that allows the package labels to be read without rearranging the material on the skid.

When a shipment contains several cartons of the same product/part, cartons may be placed in the center of the skid, thus hiding the labels.

All material supplied to TransGlobal must be packaged, labeled, and shipped in accordance with the guidelines set forth in This Manual and/or the Purchase Order.

Suppliers must have on file documentation which certifies that the raw materials used in the production of TransGlobal meets the print specifications.

Suppliers are required to provide material certifications, certificate of analysis, and certificate of compliance or test/data reports with each shipment.

All restricted, toxic and hazardous material shipments must include a blanket warrant or certificate that shows products comply with governmental and safety regulations with regard to packaging, labeling, and storage, handling and first aid instructions.

CONTROL OF QUALITY RECORDS

Suppliers should adhere to the minimum record retention times specified by the ISO 9001/IATF 16949 (latest version) requirements and the TransGlobal Supplier Quality Manual for all product.

TransGlobal may require extended retention times.

INTERNAL QUALITY AUDITS

Suppliers are required to develop an internal audit program with qualified auditors to insure all established policies and processes are being followed, per ISO 9001/IATF 16949 (latest version).

TRAINING

Suppliers are also required to maintain training records for all employees who are required to make pass/fail/quality decisions on parts supplied to TransGlobal.

STATISTICAL TECHNIQUES

Suppliers should investigate opportunities to utilize statistical techniques as defined in the AIAG SPC (Statistical Product Control) Reference Manual.