



Supplier Quality Manual

**For use with current editions of
ISO/TS 16949 or ISO 9001**

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Supplier Quality*

*Revision: D
Revision Date: March 9, 2012*

Amendment Record

Date of Revision	Rev. #	Section #	Details of Change
3/9/12	D	#5 Transportation –NEW, #6 PPAP Requirements A#2 - C of A; Supplier Performance #2	Added a new section Transportation (now #5) and renumbered the sections; PPAP #2 Certificate of Analysis requirements for detail to be included on the certificate for Plastics and Metals per the PO/Contract; added org. change updates to Supplier Performance.
8/26/11	C	QMS: #5, #6, #8, #9B, Material Requirements: #7	Changes in product/process submission requirements; added bailment; CS-added example criteria; added reference to Par 5A; 1 st paragraph (Package and Label) added last sentence and 3 rd par. Changed shall to should.; added EXAMPLE to Addendums A & D
3/16/11	B	1. Quality System	Clarified requirement for certification and references to environmental reqmts.
2/18/11	A	All	Official Release

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QUALITY MANAGEMENT SYSTEM

1. Quality System Registration

This manual contains a brief summary of procedures and requirements that involve our suppliers and sub-suppliers. All Suppliers are required to be 3rd party registered to current edition of ISO/TS 16949 or at a minimum ISO 9001 with the ability to demonstrate compliance to ISO/TS 16949 (refer to the ISO 9001, ISO/TS 16949 current versions available through AIAG) and certification to the current edition of ISO 14001. All suppliers must meet the Quality System Requirements; including any applicable customer-specific requirements as documented in this manual (see [Required References](#) below and [Suppliers of Special Processes](#)).

This manual applies to all suppliers (direct, non-production /capital) and sub-suppliers that do business with Flex-N-Gate, globally. This manual does not alter or reduce any other contractual requirements covered by purchasing documents or requirements of engineering drawings or specifications. This manual describes the minimum requirements expected and is applicable to all (production, non-production) material, capital, and service suppliers whether the products and/or services are provided directly or indirectly through sub-suppliers.

Certification to Federal Regulations if the product provided is affected by regulations; such as, the Federal Motor Vehicle Safety Standards published under Public Law, the supplier is required to certify compliance of the product with such standards prior to initial production shipments and as required thereafter. The written certification, with supporting test data, shall be directed to the Quality Assurance Department Quality Manager, at the appropriate Flex-N-Gate facility, and is in addition to original compliance documentation.

Suppliers are responsible for ensuring that all materials and processes used in sale and manufacturing of products to Flex-N-Gate are in compliance with all Federal, State & Local requirements regarding environmental, toxic and hazardous waste, mechanical, electrical and electro-magnetic devices. This applies in the country of manufacture and sale.

Suppliers are required to upload all pertinent information relating to the material used in their product per IMDS and Reach Regulations into the MDS website (www.mdsystem.com) 30 days prior to PPAP (reference PPAP section).

2. Required References

Suppliers are responsible for obtaining and maintaining copies of the latest revised/current versions of all associated and referenced publications, (copies of these publications can be obtained from the Automotive Industry Action Group) such as;

- Advanced Product Quality Planning (APQP)
- Statistical Process Control (SPC),
- Measurement System Analysis (MSA),
- Failure Mode and Effects Analysis (FMEA),
- Product Part Approval Process (PPAP),
- ISO 9001 and/or ISO/ TS 16949
- Customer-specific Requirements (available through the IATF website)

- Sanctioned Interpretations (available through the IATF website)
- FNG Facility-specific standards/specifications
- CQI-Special Process Assessments; i.e., Plating, Coating, Welding, Heat-Treat, etc. (see [Suppliers of Special Assessments](#))

At times, Flex-N-Gate facilities may reference industrial or International references that are required. These could be specifications, procedures, test methods, etc. that may have to be purchased by the supplier from third party document sources.

3. Pre-Award Survey

A [Pre-Award Survey](#) shall be completed with new Suppliers under consideration for award of business. All potential Suppliers must complete the initial Pre-Award survey and return to the respective Flex-N-Gate facility. Subsequent surveys may be conducted at Flex-N-Gate's discretion. *We have established an email address for pre-award surveys to be sent. The email is preaward@flexngate-mi.com.*

Flex-N-Gate will assess the risk level of each supplier for each part being supplied.

4. Request for Quotation

Prior to award of any business, the supplier will be expected to complete the Flex-N-Gate RFQ with complete detailed cost breakdown. Should a discrepancy between the supplier's layout and our layout occur, then our layout is to be followed.

5. Transportation

This Transportation Policy, issued by Flex-N-Gate Corporation and its related companies, including but not limited to Flex-N-Gate Plastics, Guardian West, Masterguard, Veltri Metals, Ventra, Ventra SPD and Ventra Plastics (hereinafter collectively called Flex-n-Gate), is applicable as follows:

- To all Suppliers selling goods of any type to Flex-n-Gate Corporation and its related company facilities located in North America; and,
- To all Shipments, regardless of mode and points of origin and destination, where freight costs will be borne either directly or indirectly by Flex-n-Gate Corporation and its related company facilities located in North America.

This policy is published supplemental to the Terms and Conditions document, and is not intended to supersede any provisions thereof.

As a handbook for Suppliers, this policy is designed to support formal issuance of Buyer instructions or Buyer requirements relative to transportation and shipping as noted in the Terms and Conditions. In the event of conflict between the North American Transportation Policy and the Terms and Conditions, the Terms and Conditions will apply.

This policy may be periodically updated and will be posted on the Flex-n-Gate website at http://www.flex-n-gate.com/ci/files/FNG_Transportation_Policy11-1-11.pdf without additional notice to Suppliers. Suppliers may print copies of the policy from the website at will, which will reflect a revision level and effective date of the revision. Individual shipments will be

governed by the version of the policy in effect as of the date of shipment. Suppliers are responsible to ensure that shipments are made in accordance with the current version of the policy as of the date of shipment.

Where noted within the North American Transportation Policy, individual plants may issue deviations from instructions found herein. Those deviations must be made in writing and indicate an effective date in order to have the effect of superseding the Policy. Provisions of the Policy not subject to deviation by Flex-n-Gate plants or facilities will be so noted.

6. PPAP Requirements

A. Submission Criteria

Flex-N-Gate requires a full PPAP submission unless otherwise detailed in the Purchase Orders. Supplier PPAP's must conform to the latest AIAG PPAP manual (including the latest AIAG forms) and all referenced latest AIAG manuals (i.e. FMEA, MSA, etc.) It will be the responsibility of the Supplier to ensure that the PPAP reflects the latest revision level of the controlled drawing issued by Flex-N-Gate. The PPAP checklist (per the AIAG PPAP Manual) may be used as a communication tool back to the supplier if the PPAP submission requires additional or corrected information.

It is the responsibility of the Supplier to meet all appearance criteria directed by Flex-N-Gate on components that are deemed appearance items. The Supplier is responsible for providing resources and managing it's sub-suppliers to ensure that appearance parts are provided to Flex-N-Gate for approval by Flex-N-Gate customers in a timely manner. This applies to AAR submissions for initial PPAP approval, and any further AAR submissions required by Flex-N-Gate and its customers.

Flex-N-Gate requires early notification and consent prior to any process or material changes. For supplier-initiated changes, it is the supplier's responsibility to notify Flex-N-Gate and submit for part approval prior to the first production shipment. This applies to all situations identified in Table 3.1 and Table 3.2 of the AIAG PPAP Manual, 4th Edition. In some cases, FNG may waive this requirement; when this happens, the supplier must review all items in the PPAP file and update them as necessary to reflect the current process.

Suppliers are expected to submit PPAP packages, in their entirety, to the appropriate plant Quality Manager or designate before the agreed-upon date. FNG will review the submission and give one of three statuses:

- Full approval indicates that the part or material meets all specifications and requirements. The supplier is authorized to ship product. Unless otherwise agreed on, supplier can only invoice for tooling when they achieve full PPAP approval.
- Interim approval permits shipment of production for production requirements on a limited time or piece quantity basis. The supplier must submit, at the time of PPAP, an action plan to address the issues preventing the PPAP from obtaining full approval.
- Rejected means, that the submission, does not meet the specifications and requirements. Flex-N-Gate will state the reasons the submission was rejected on the PPAP warrant and return the warrant to the supplier. A corrected PPAP must be submit and approved before the supplier can ship product.

Tier-2 suppliers are responsible for the PPAP submission and approval of subsequent tier suppliers. All submitted parts for PPAP should be clearly identified and marked per respective reports and documentation. All gauges owned by Flex-N-Gate must be built in accordance to [Flex-N-Gate Check Fixture Standard](#) (see [Addendum A](#) for the link to the standard for the Design & Build Approval checklist).

All submissions, except annual revalidations, must include IMDS number and NAFTA Certificates, [as applicable](#).

All test results must be conducted by an accredited test facility. An internal laboratory facility shall have a defined scope that includes its capability to perform the required inspection, test or calibration services. This laboratory scope shall be included in the quality management system documentation. The laboratory shall meet the requirements as stated in 7.3.6.1 of the TS standards.

External/commercial/independent laboratory facilities used for inspection, test or calibration services shall have a defined laboratory scope that includes the capability to perform the required inspection, test or calibration, and either accredited to ISO/IEC 17025 or national equivalent or approval designated by the customer.

1) Annual Part Verification/Validation

Supplier's to provide an annual layout (Level 3 submission minimum or as specified by the PPAP requirements) for all Flex-N-Gate released parts or components as detailed in customer-specific requirements (per the program being supported).

2) Material Certifications

A completed Certificate of Analysis (COA), which includes the engineering specification number, must be provided prior to the shipment for each lot. The COA must contain the actual physical or testing measurements per the specified OEM customer engineering specification for the key parameters as detailed on the contract or amendments to the contract. SPC data, when required must be provided with each shipment. A copy of the actual physical or testing measurements detailed in the OEM specification must be maintained on file at the production location and available upon request. Reference examples:

A. RESIN

- Customer Specification materials was tested
- Min/Max Specifications and Values
- Lot/ Batch Number for Traceability
- Estimated Quantity Shipped
- Melt Flow Rate
- Ash Content
- Density
- Flexural Modulus
- Notched Izod Impact

B. METALS

- Material Spec
- Material Description (dimensions, tolerance and unit of measure)
- Heat Number

- Mechanical Properties (if applicable)
- Chemistry
- Coating Weight per side (if applicable)
-
- *Bumper Facilities also require...*
- *Grain Size if applicable as per ASTM E112*
- *RA if required (microns/micro-inch)*

For suppliers of components, a certificate must be maintained on file at the production location and available upon request.

B. Qualification of Personnel

The supplier's system shall provide for the qualification of personnel performing critical inspection and production operations. Operator training records are to be made available upon request by Flex-N-Gate representatives.

C. IMDS

The European Directive "REACH Guideline" came into force for used cars that prohibit the use of heavy metals. To be able to ensure compliance with this EC directive in the future, it is vital that all the reports on first samples include confirmation that the components delivered to Flex-N-Gate comply with the latest IMDS/ Reach requirements.

Suppliers must register with IMDS (International Material Data System) on www.mdsystem.com. Refer to IMDS website for training material.

The Supplier is responsible for obtaining an IMDS-module reference number for each part number supplied to Flex-N-Gate. The IMDS reference number must be included with the PPAP submission on the PPAP form and the Warrant.

A supplier PPAP package will not be approved without this reference number being included with the submission. The IMDS-module of this purchased component must also have been submitted and approved by the appropriate Flex-N-Gate facility.

Declarable substances in a Supplier's product must be reported in a declaration statement. Action plan to remove these prohibited substances must be submitted. Review the Analysis-Tab for "Declared / Prohibited" (DIP) substances. Please reference IMDS system for document instructions on DIP substances.

D. Suppliers of Special Processes

FNG suppliers that provide special processing that fall under the directives identified in the AIAG CQI Assessments (at all tier levels) to the latest edition (available from AIAG) are required to complete and submit to Flex-N-Gate. The assessment shall be performed annually on the anniversary date. Failure to submit a requested deliverable will result in the supplier's PPAP being rejected.

Note: Additional assessments may be required per customer-specific requirements. Suppliers are required to maintain onsite records of compliance for a time period specified by Flex-N-Gate plant representative.

7. Tooling

The supplier is expected to maintain Flex-N-Gate owned and customer-owned assets located at the supplier's facility. It is the supplier's responsibility to track and identify Flex-N-Gate tooling in their facility, and the supplier must tag the tooling "property of Flex-N-Gate ". These assets are to be used solely for the production of Flex-N-Gate products. When there is no future need for these assets, the supplier must request direction for disposition. A bailment receipt and tooling information (as per plant request) shall be returned to the plant designated purchasing contact. Failure to do so may result in delay of payment of final tooling invoice.

Control of Flex-N-Gate Owned / Supplied Equipment and Tooling – Flex-N-Gate owned/ supplied equipment and tooling includes gages, test equipment and tooling supplied by Flex-N-Gate for use in production or maintenance or made by the Supplier and paid for by Flex-N-Gate supplier shall:

- Use Flex-N-Gate Supplied Gages, Special Test Equipment, and Special Tooling on Flex-N-Gate purchase orders only and for only those purchase orders for which the items were supplied.
- Identify all tools and test equipment, unless size or use prohibits, with identification tag(s) ensuring legibility and permanency, which states the ownership designation as "Property of Flex-N-Gate" upon receipt or fabrication.
- Obtain written approval from Flex-N-Gate prior to making modifications or changes to gages, test equipment or tooling.
- Maintain, protect and preserve tooling, test equipment, and gages. Tooling and gauging shall be maintained for three years after the Flex-N-Gate purchase order is complete unless Flex-N-Gate directs otherwise.
- Contact the Flex-N-Gate Buyer before the transfer of gages, test equipment or tooling among supplier facilities (address location) or to other suppliers.
- Supplied gages, test equipment or tooling that become excess to the needs of the purchase order shall be reported to Flex-N-Gate.
- Obtain written approval from Flex-N-Gate before the disposal or destruction of Flex-N-Gate supplied gages, test equipment or tooling.
- Report all cases of loss, damage or destruction of Flex-N-Gate's property in possession or control or property located at Supplier's second-tier suppliers to the Flex-N-Gate Buyer within 72 hours as such facts become known.
- Maintain a record (Tool List) of all Flex-N-Gate supplied gages, test equipment or tooling. The list shall be traceable back to the Flex-N-Gate tooling purchase order and job number.

8. Containment / Non Conforming Material

The supplier must have a system implemented to ensure that "nonconforming" items are identified and quarantined to prevent introduction into production shipments.

Should the supplier detect that products do not meet what is defined in the Purchase Order, Drawings, Flex-N-Gate and customer supplied requirements and/or applicable standards and specifications, the supplier should immediately inform the Purchasing and Quality Departments of all impacted Flex-N-Gate plants.

Where non-conforming material has been shipped to a Flex-N-Gate facility, the supplier must submit a corrective action, indicating their Containment Plan within **24 hours** of receiving a corrective action request. The Containment Plan must include material in transit. The Containment Plan will be reviewed and agreed to by Flex-N-Gate.

A. Corrective Action Requests (CAR): Suppliers receiving a nonconformance will be responsible for submitting Corrective Action as follows:

1. If non-conforming material received by Flex-N-Gate from the supplier causes a major disruption (downtime) to production lines, and/or issue at Flex-N-Gate's Customer, the supplier shall respond *within 24 hours* with a containment plan and submit an approved corrective action plan (i.e., 8D, 7-step, 5 phase, etc) *within 10 days*. Any deviation from this requirement must be agreed to by the Flex-N-Gate Quality Dept. *Within 90 days* of action plan, the completed corrective action must be implemented and verified that action taken was effective.

2. Upon receiving a Corrective Action Request from Flex-N-Gate, Suppliers are required to immediately sort 100% of their product, including product at the Flex-N-Gate plant(s), in transit, in warehouses, at the Supplier's production facility, etc., and to ensure that Flex-N-Gate's assembly plants are supplied with enough certified stock to assure no disruptions to production. Material must be labeled as certified for the specific defect or defects for the next three shipments unless otherwise directed by Flex-N-Gate.
 - a. Depending on the continuity of supply situation, the following may occur:
 - High inventory at Flex-N-Gate: Supplier may choose to have product returned or Supplier may sort at Flex-N-Gate.
 - Low inventory at Flex-N-Gate: Supplier must come on-site to Flex-N-Gate to sort for defective product.
 - Extremely urgent (possible line down): Flex-N-Gate will take the appropriate action and the Supplier will be responsible for all costs incurred.

NOTE: *Some of Flex-N-Gate's production facilities do not allow sorting of purchased material to take place on-site. Suppliers must make arrangements for transporting non-conforming material from Flex-N-Gate, sorting the material, re-packaging, creating new packing slips with accurate quantities, affixing new bar code labels as needed, and arranging transportation of certified stock back to Flex-N-Gate.*

- b. Disposition shall be provided for Non-conforming material in the following manner:
 - Use as is (with documented approval): material used, quantities not counted against PPM total.
 - Sort / Rework: supplier will be charged a standard sort / rework fee; defective pieces found will be counted against PPM total.
 - Scrap: Removal of non-conforming material will be the responsibility of the supplier. For Non-conforming material remaining over 48 hours will be scrapped and any related scrap fees will be charged back to the supplier.

3. Supplier is responsible for reporting accurate sorting results and to request adjusted effective quantities when appropriate. This can have an impact on the Supplier's PPM calculation.
4. Flex-N-Gate will not manage Supplier sorting using an outside source. Suppliers are responsible for outside sources and must make all arrangements to ship parts between Flex-N-Gate and outside source.
5. Flex-N-Gate will contact the Supplier for authorization to return the material at Supplier's expense (for example RMA).
6. Defective parts returned to the Supplier, reworked and returned to Flex-N-Gate may still be counted toward the Supplier PPM. Reworked parts must meet specifications. The repairing of parts is not permissible without prior written authorization from Flex-N-Gate.
7. Evidence of the defect; such as, digital photos will be provided when possible. A sample of the defect may be sent to the Supplier upon request. Flex-N-Gate and its Customers reserve the right to verify product conformance to the requirements at the Supplier's and their subcontractor's plants.
8. Verification of the implemented corrective action on-site at the Supplier may be accomplished during subsequent visits. If Corrective Actions take more than two (2) weeks to implement, a progress report may be required. When the corrective action is completed and verified to be effective, the Flex-N-Gate Corrective Action Champion is responsible for approving the corrective action closure and notifying the Supplier contact of the closure.

B. Preventive Action Request

If non-conforming material received by Flex-N-Gate from the supplier causes zero or minor disruption (no down time / no scrap / no issue at Flex-N-Gate's Customer), the supplier shall submit a corrective action plan and meet any requirements approved through the corrective action plan.

C. Continual Improvement

1. General

Continual Improvement in regard to cost reduction is an essential element of long-term business success for Flex-n-Gate and for its Suppliers. In order to remain competitive, Flex-n-Gate and its Suppliers must recognize the requirement to find effective ways to eliminate waste and reduce the cost of our products.

2. Expectation—Improvement Factor

Flex-N-Gate expects all Suppliers to constantly examine and optimize the entire cost structure of their business and the products supplied to Flex-N-Gate; including process improvements, cycle-time reduction, scrap reduction, die/tooling set-up reduction, design improvements, Sales, General and Administration (SG&A) reduction, fixed and variable overhead reduction, transportation, etc. In order to

ensure proper review and validation of Suppliers' design and process improvement ideas, Suppliers must strictly comply with Flex-N-Gate's change management requirements for all design and process change proposals.

10. Controlled Shipping

Flex-N-Gate may determine that special measures are required to ensure adequate quality and delivery performance.

Controlled Shipping is a requirement by Flex-N-Gate for a Supplier to add a redundant inspection process for sorting of a specific non-conformance, while implementing a root cause problem-solving process. The redundant inspection is in addition to normal controls and should be completed in a controlled area. Submission of the sorting data showing inspection results is required. The data obtained from the redundant inspection process is critical as both a measure of the effectiveness of the secondary inspection process and the corrective actions taken to eliminate the initial non-conformance.

Flex-N-Gate will notify the Supplier they have been placed on Controlled Shipping. Examples of criteria for a supplier being placed on controlled shipping may include some of the following:

- Repeat quality performance issues
- Critical launches
- New Suppliers
- Customer-specific requirements such as, GP-12 and FPSC.

Note: This list is not all encompassing and may be determined by the FNG facility.

Two levels of Controlled Shipping exist:

- Level 1 includes a problem solving process as well as a redundant inspection process. The Supplier's employees at the Supplier's location enact the inspection process in order to isolate the Customer from receipt of non-conforming parts/material.
- Level 2 includes the same processes as Controlled Shipping – Level 1, with an added inspection process by a third party representing Flex-N-Gate or Flex-N-Gate's Customer's interests specific to the containment activity. The third party is selected by the Supplier, approved by Flex-N-Gate or Flex-N-Gate's Customer, and paid for by the Supplier. Continued failure to meet expectations could result in removal from the Approved Supplier List.

Note: Suppliers at CS level 2 are not permitted to bid for new, existing or transfer business until otherwise notified by either the plant or MTC Purchasing.

Other measures may be required if level 2 controls are not effective.

Criteria for application for Controlled Shipping – Level 1 or 2:

- Flex-N-Gate will make the determination whether the Supplier can effectively correct the non-conforming material situation through the normal corrective action process and isolate Flex-N-Gate or Flex-N-Gate's Customer from the problem.

11. Supplier Charge Back

A. General

Suppliers are responsible for the quality, on-time delivery, and reliability of the product they supply. Product must meet the drawing and any referenced specification requirements. The Supplier accepts financial responsibility for the consequences of nonconforming product and rejected PPAP submissions including, but not limited to, costs incurred for containment, sorting, premium freight, rework, repair, and replacement of defective material, resulting overtime, and productivity loss incurred by Flex-N-Gate or by Flex-N-Gate customers.

Following is the schedule for charge back costs associated with non-conforming product sent to a Flex-N-Gate site:

- Administration fee for each Corrective Action issued.
- Off-site 3rd Party Sorting—charges to be paid directly between Supplier and 3rd Party Sorting Company.
- In-house sorting by 3rd Party Sorting Company (if allowed by specific Flex-N-Gate site)—charges to be paid directly between Supplier and 3rd Party Sorting Company.
- In-house sorting by Flex-N-Gate personnel (if required to avoid down production line—Supplier will be responsible for actual costs incurred.
- Production Line Down Charge—Supplier will be responsible for actual costs incurred.
- Miscellaneous fees (rework, material handling, required Customer visit time and travel costs, expedites, Customer location sorting fees, tooling/machine damage, testing, etc.) Supplier will be responsible for actual costs incurred.

Supplier will be responsible for all applicable warranty costs.

B. Unauthorized Changes

In cases where a Supplier has implemented an unauthorized change or has failed to deliver contracted products in accordance with the specifications and terms of the Flex-N-Gate Purchase Order, all cost that are incurred by Flex-N-Gate and/or its Customers will be the sole responsibility of the Supplier. ([Refer to Section 6A, paragraph](#))

C. Charge Back Debit

The method of charge back will be by debit memo, processed by the Flex-N-Gate receiving location. See the appendix for a breakdown of expected costs to be assessed at the Flex-N-Gate facilities. [For additional information on cost, associated costs and general costs – See Addendum B.](#)

MATERIAL REQUIREMENTS

1. Material Management Operation Guideline (MMOG)

Some Suppliers may be required to provide a copy of their MMOG certification. If Flex-N-Gate requires you to implement MMOG and you fail to do so by the target date, a SCAR may be issued. For further information on receiving MMOG training, contact your AIAG/Odette representative, or the Supplier Development contact at Flex-N-Gate for assistance.

2. Material Releasing and Authorization

Authorization is the number of weeks of financial commitment for released material Flex-N-Gate provides the supplier. In other words, it is how much material (measured in weeks) Flex-N-Gate will buy from the supplier if the part is no longer required. If a supplier has a raw authorization of six weeks, Flex-N-Gate will purchase no more than six weeks worth of raw material from that supplier if Flex-N-Gate decides no longer to use the part.

All suppliers shall receive:

- A minimum of two weeks fabricated material – finished goods – authorization.
- An incremental two weeks of firm - work in process - authorization.
- An incremental four weeks of raw material authorization.

To be clear, the total authorization period is eight full weeks.

Flex-N-gate will supply up to 16 weeks or more of releases for material planning and forecast purposes only.

It is the responsibility of the Supplier to ensure all requirements are met as directed by the release and / or purchase order.

Flex-N-Gate's goal is to minimize the amount of obsolescence of product for the supplier and for Flex-N-Gate. It is the supplier's responsibility to work on continuous improvement activities to reduce the Material Authorization needed.

For Extended Material Authorization, complete the appropriate form [\(Addendum C\)](#) and submit for approval to your Flex-N-Gate buyer.

3. Just-In-Time (J.I.T.) Delivery

All production material/service requirements will be against a Blanket Purchase Order, which will be forwarded to the Supplier by the Flex-N-Gate Purchasing Department.

As a supplier to Flex-N-Gate, it is imperative that you are aware of our delivery expectations. Flex-N-Gate focuses on reducing inventory levels. We fully expect our suppliers to deliver 100% on time to our ship schedules.

The purpose of JIT delivery is to improve the overall productivity and quality of parts, for both supplier and customer, through the elimination of waste. It is expected that all suppliers will provide JIT delivery to Flex-N-Gate:

- According to material releases

- Local warehousing may be required if you are a supplier located outside of the local delivery area in order to support JIT deliveries.

If there are problems anticipated with meeting Purchase Order Release requirements, communication must take place with the Flex-N-Gate Materials department. In the case of a production stoppage due to a Supplier non-conformance to the Purchase Order Releases, the Flex-N-Gate will debit the Supplier's account with all costs incurred, including cost incurred at Flex-N-Gate's customer location.

Flex-N-Gate is not responsible for any inventory at the supplier's location beyond the authorized levels indicated on the Purchase Order Releases.

4. Missed Shipments

Flex-N-Gate expects all their suppliers to expedite all missed shipments the same day at the supplier's expense. All missed shipments will be documented and will be reflected in the quarterly Supplier Performance Rating.

5. Safety Stock & Change Responsiveness

Fluctuations in demands have become commonplace in the automotive industry. Flex-N-Gate expects that an increase or decrease in demand of up to 15% be supported at all times. Suppliers to Flex-N-Gate are required to carry sufficient inventory of product to protect Flex-N-Gate and their Customers from shortage situations. Suppliers should establish the minimum inventory required as protection and be prepared to provide this information to Flex-N-Gate upon request.

In order to prevent missed deliveries to Flex-N-Gate, suppliers must ensure they have the capability to maintain a continuous flow of material despite potential interruptions involving:

- Labor disruptions
- Equipment failures
- Tool transfers
- Material shortages
- Capacity shortfalls

Maintaining a base amount of safety stock will be required of all Flex-N-Gate suppliers. The amount of safety stock will depend on many factors, such as; geographic proximity and manufacturing processing time, but will typically amount to **one week's supply**, or more in the case of a new product/program launch. Overseas supplier safety stock requirements will be determined on an individual basis.

Short shipments will require a supplier action plan and will result in delivery performance penalties.

6. Supplier Bank Build Requirements

Suppliers may be required to build **banks** for engineering changes, moving of equipment, etc. A bank is required when there is a physical movement of tooling. The supplier must supply a Bank Build Plan and submit to the Flex-N-Gate Engineering Manager for approval. This plan must be updated and submitted to Flex-N-Gate as requested. The bank build will not be considered complete until a sign off by the Flex-N-Gate Management team and is required prior to any changes or moves. The supplier will be required to provide updates to the Bank Build Plan as directed through final consumption of bank.

7. Packaging/ Labeling (See Addendum D)

A. Labeling

All material shipped by the Supplier shall be identified with a label that will ensure product identification and traceability throughout all stages of production. All cartons/ containers/ racks shall be identified. Labeling should adhere to Flex-N-Gate labeling standards. Labeling requirements may be dictated by the product being shipped or the facility that the product is being shipped to.

The identification method shall meet the specifications provided by Flex-N-Gate. A Master Label is required for multiple containers of the same part number on a single pallet. The supplier should ship one part number per skid unless approved otherwise by the Materials Department.

The Supplier should have a process in place for scanning all bar code labels to create shipping documents and the Advance Shipping Notice. Failure to label correctly may result in administrative charges

B. Packaging

Packaging will be reviewed on an individual basis. Flex-N-Gate must approve packaging specifications in writing prior to shipments.

In general, material designated as hand transfer may not exceed 35 lbs.; one lift cannot weigh more than 2,000 lbs.; maximum height cannot exceed 48 inches per lift.

Steel handling will be reviewed on an individual basis by Flex-N-Gate Plant. O.D. and I.D. requirements detailed in either the Purchase Order or Release must be adhered to.

All wood packaging material (including dunnage) that is imported for Flex-N-Gate into the United States, Canada and Mexico must comply with ISPM #15 (international standards for phytosanitary measures-guidelines for regulating wood packaging material in international trade). It is the supplier's responsibility to conform to the requirements. Proof of this treatment will need to be marked accordingly on the outside of the packaging material. Please visit website: "www.ippc.int". Suppliers that do not comply with this requirement are liable for any and all costs and fines incurred by Flex-N-Gate.

8. Supplier Communication

Suppliers should be capable of receiving and sending electronic communication with Flex-N-Gate.

The Supplier must notify Flex-N-Gate within 24 hours of a production interruption. The nature of the problem shall be communicated to Flex-N-Gate and immediate actions taken place for continued supply of product to Flex-N-Gate.

Supplier shall inform Flex-N-Gate immediately if they receive a Major Nonconformance in a TS 16949 or ISO 9001 Audit which puts them on probation or restricted ship or hold, or if they receive a letter indicating they are in special status.

Suppliers with collective bargaining agreements will be responsible for providing Flex-N-Gate with an Action Plan for potential production interruptions six months prior to negotiations.

Product volume change requests from Flex-N-Gate increasing/decreasing volume by 20% or more over the previously verified volume capability shall require confirmation from supplier management to ensure no interruptions from the supplier to Flex-N-Gate.

9. Contingency Plans

Flex-N-Gate requires suppliers to establish contingency plans to prevent failure of the supplier to deliver product within the terms of the contract / purchase order / release in the event of an emergency such as utility interruptions, labor shortages, key equipment failure, and field returns. Flex-N-Gate reserves the right to review the supplier's contingency plan.

If Flex-N-Gate and/or its customer's production is interrupted by the failure of the supplier to deliver scheduled product within agreed to terms, all costs and/or penalties that are incurred by Flex-N-Gate and/or our customers will be the sole responsibility of the supplier.

SUPPLIER PERFORMANCE AND DEVELOPMENT

1. Review Frequency

Performance shall be monitored on a pre-determined frequency and feedback as required per Flex-N-Gate procedures. The reviews may consist of but not limited to:

- a. PPM*
- b. Delivery
- c. Communication
- d. Response Time
- e. Documentation requirements met
- f. PPAP Timeliness
- g. Corrective Action –
 - Containment response and effectiveness
 - Response Time for planned and implemented action
 - Effectiveness of Containment and corrective action taken
 - Effectiveness of verification of action(s) taken

During the Sourcing and Quoting process for further potential business, supplier Performance Ratings shall be considered as part of the review. ([See Addendum E for FNG Supplier Evaluation Form as an example of a tool that can be used to initially review and ongoing monitoring of suppliers.](#))

2. Parts Per Million Rating

One of the measurements of Quality Performance of suppliers is defective Parts Per Million (PPM). The expectation for supplier performance is 0 PPM (zero defects).

Product received into Flex-N-Gate facilities that does not conform to the drawing, specifications and/or agreed upon standards will be counted against a supplier's PPM record.

Quantities will be reported in the units of measure in which they are purchased. This applies to production parts / saleable units.

The following are PPM assignable:

- Production Parts which do not meet drawing specifications or dimensional, functional, or appearance standards as called out in the specifications or from an agreed-upon boundary sample.
- Out-of-spec parts that require rework/repair in order to be used.
- Production Parts damaged from inadequate packaging or transportation for which the supplier is responsible.
- In cases where the supplier may be shipping prior to PPAP with an approved customer deviation, any defects outside of the boundaries defined by the deviation.
- Out-of-spec parts shipped prior to PPAP approval without an approved customer deviation.
- Shipments that are received with mixed parts or parts that are the wrong revision level after the break point has been established. PPM is assigned for the quantity of incorrect parts only.
- Shipments that are received with mislabeled containers are considered PPM assignable. The reject quantity shall reflect the total number of containers with incorrect labels. In cases where each individual part requires identification, the total number of incorrectly labeled parts will be counted toward PPM. If mislabeled products are used incorrectly in production operations, the total number of incorrect assemblies will be counted against the supplier's reject quantity.

3. Supplier Development

Supplier Development personnel and/or Plant Quality Managers, or designee has primary responsibility for obtaining corrective actions for quality and Plant Materials Manager's, or designee has responsibility for corrective actions due to delivery issues from suppliers. Purchasing and/or Supplier Development may become involved when suppliers are not responsive to requests from FNG plants for corrective actions and/or overall poor performance from a supplier due to quality and delivery issues.

- A. Purchasing will make the final determination (i.e., first or one time occurrence, competitiveness in the market place, etc.) to place a supplier on probation, de-source, and/or to continue to monitor suppliers with performance issues.
- B. Supplier Development may conduct onsite supplier development, which may include, but not limited to, verification of correction action, supplier process audit, conducting PSO's and improvement activities.
- C. Suppliers are expected to at a minimum of every three years submit a current contact list to validate existing contacts. In addition, any time changes are made to the organization, must be updated immediately and forwarded to their respective FNG plants. Failure to comply with this requirement may impact your overall score for FNG.

Addendum A (Example)

Flex-N-Gate Check Fixture Standard Link

Check Fixture Design and Build Approval Checklist							
GENERAL INFORMATION							
Part Number		Supplier		Program No.			
Part Name		Address		Phone Num			
Part Rev Lev				Quality Engin			
Customer		Contact		Phone Num			
Program		Phone Num		Mfg Plant			
ITEM	CHECKLIST	DESIGN			BUILD		
		Accept	Reject	NA	Accept	Reject	NA
1	Fixture built using approved materials per Check Fixture Standard and RFQ						
2	Fixture at current part revision level						
3	Part orientation complies with GD&T						
4	All datums present and properly identified						
5	All checks present and properly identified						
6	Fixture base (type, certified, scribed body lines, weight stamped)						
7	Provisions made for handling (cart (part number identified))						
8	Alignment features (type, stamped)						
9	Datum locating pins and net pads (size, shape, quantity, location, stamped, attached, proper function)						
10	Clamp pivot point in line with clamp surface						
11	Clamp sequence identified						
12	Form checks (properly identified, correct tolerance, stamped)						
13	Adequate clearance provided for component or assembly load and unload						
14	Swing details (proper and safe function, adequate clearance, within perimeter of base in open position)						
15	Removeable details (properly identified, proper and safe function, storage)						
16	Trim line checks (properly identified, correct tolerance, stamped, flush block)						
17	Steel details (protected from corrosion, black oxidized)						
18	Go / no go pins (size, stamped, attached, slot width and length checked with separate pins)						
19	Hole, slot and fastener check pins (size, stamped, attached, proper function, orientation)						
20	Hole sight checks (minimum and maximum size, scribed)						
21	Go / no go feeler pins (size, stamped, attached)						
22	Data ports (properly identified, quantity, location, proper and safe function, adequate clearance)						
23	Digital indicators (type, certificate of calibration, storage, master block, required calibration tools)						
24	Part identification, ownership, part level tag (properly identified, attached)						
25	Operator instructions (properly identified, attached)						
26	Builder and 3rd party certification sticker (properly identified, attached)						
27	Certification documentation provided and within FNG Check Fixture Standard tolerance (datum net surfaces and locator pins, feeler surfaces, templates, trim line, go / no go pins, check pins, sight checks and data ports)						

Flex-N-Gate Michigan Check Fixture Standard Attachment

ADDENDUM B

COST RECOVERY

When a quality problem is reported and is agreed to be the fault of the supplier there will be a charge of:

- | | | |
|--------------------------|---------------|-------------------------|
| <input type="checkbox"/> | United States | \$40.00 US |
| <input type="checkbox"/> | Canada | \$40.00 CF |
| <input type="checkbox"/> | Mexico | \$12.50 US |
| <input type="checkbox"/> | Spain | Will vary by occurrence |

Man-hours used for sorting/ rework if deemed necessary to meet production requirements will be charged at rate of listed above per hr. or negotiated cost. This charge will also apply if supplier sort "non-conforming product" at the Flex-N-Gate facility (if feasible).

Down time caused by supplier quality or delivery problems will be charged back to the supplier at negotiated cost.

All parts will be charged back at cost for returns or scrap. Freight is the responsibility of the suppliers for returns.

A standard three hour charge for administrative handling will be charged at the rates referenced above for each defective material notice issued.

Other costs associated with the impact of a quality or delivery problem may also be charged back to the supplier. This cost may include but are not limited to:

- Travel expenses to the Customer or Supplier
- Customer charges to a Flex-N-Gate Facility
- Laboratory, testing or layout
- Premium freight

This does not eliminate supplier's responsibility as stated in the Terms and Conditions.

ADDENDUM D – LABEL REQUIREMENTS STANDARD (EXAMPLE)



LABEL REQUIREMENTS STANDARD General Notes Regarding All Labels:

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BARCODE SYMBOLOGY

ALL BARCODES ARE TO BE:

- 1) AIAG STANDARD CODE 39 – 9.8 mils or higher is preferred.
- 2) DATA IDENTIFIERS – As noted below, these must be included as a prefix in the barcode and must appear within the human readable portion.
- 3) QUIET ZONE – Must be maintained at the beginning & ending of each barcode segment.
- 4) CHECK DIGITS – Do Not Use
- 5) REFLECTIVITY AND CONTRAST – Must meet reflectivity and contrast requirements specified in AIAG-B10, at all electromagnetic wave lengths from B633 to B900 nanometers.

MANDATORY SEGMENTS

All segments (human readable and barcode) are required unless stated differently in the examples below.

SUPPLIER NUMBER

Your number will be communicated to you by the destination plant's purchasing departments. Typically this will be your 9 digit Dun & Bradstreet number.

DATE

Format MM/DD/YYYY can be Manufacturing, Shipment, or Label print date.

PART NUMBER

This will be the FNG destination plant's assigned part number. This will be communicated to you on the Purchase Order.

UNIT OF MEASURE

When the Unit of Measure (UOM) is "piece", notation is not required. Otherwise, note the UOM in the human readable area only. When used, the UOM shall be directly to the right of the human readable quantity and shall be a minimum of 0.2 in high. The unit of measure shall not be bar coded.

PART DESCRIPTION

Non-Steel Label only - No Title necessary - Description of Part not to exceed 30 chars.

FIELD TYPES

As noted below

SERIAL NUMBER

The serial number shall be a unique ascending sequential number assigned when the label is printed. The maximum length of the serial number shall be 12 digits. The serial number must not be repeated within two years.

HEAT TREAT NUMBER

Heat Treat Number or Master Coil Number – Direction given by local destination plant's purchasing department.

LABEL LOCATION

Unless otherwise directed by the destination plant's purchasing department, two labels must be affixed to each container - one, on the top right hand corner of the front of the container, and one on the top left corner on the adjacent right side. The entire label must be unobstructed so the barcode areas can be scanned.

LABEL PROTECTION

Label protection against moisture, weathering, abrasion, etc. may be required and is encouraged wherever practical. Clear plastic pouches are one example of possible protection methods. In choosing any protection method, care must be taken to assure that the labels will still meet reflectivity and contrast requirements as outlined above and can be scanned.

LABEL PURPOSE/USE: Customer Segment of an AIAG Label to be used on a single container holding one or more parts with a single part number



LABEL REQUIREMENTS STANDARD

General Notes Regarding All Labels:

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STEEL SHIPPING LABEL


User Defined Area		
DATA IDENTIFIER = (P) FNG's Part Number Alpha/Numeric	PART (P) 1234567890 [Barcode]	
	BOL / PACK SUP (2S) 12346578 [Barcode]	
DATA IDENTIFIER = (K) FNG's Purchase Order Number Numeric	PO # (K) CUST PO [Barcode]	
	ACTUAL WGHT (2Q) 12345 [Barcode]	
DATA IDENTIFIER = (1T) Heat Treatment ID or Master Coil Number, Alpha/Numeric	HEAT TREAT (1T) ABC1234567 [Barcode]	
DATA IDENTIFIER = (S) Serial Number, not to repeat within two years, Alpha/Numeric	SERIAL (S) 100200300 [Barcode]	DATE 12/31/2010
IDENTIFIER = (V) Your Supplier Number Issued by FNG Alpha/Numeric	SUPPLIER (V) ABC100 [Barcode]	SIZE .0232 .0280 48.5000
	User Defined Area	

(2S) = DATA IDENTIFIER
Shipment ID Number (Optional)
Alpha/Numeric
 (2Q) = DATA IDENTIFIER
Actual Weight of Coil/Unit
Numeric
 (DATE) = SHIPMENT/MFG
MM/DD/YYYY
 (SIZE) = COIL SIZE
Numeric

NON-STEEL SHIPPING LABEL

6 inches				
4 inches	IDENTIFIER = (P) FNG's Part Number Alpha/Numeric	PART# (P) 123456789012 [Barcode]	QTY (Q) 1234567890 [Barcode]	(Q) = IDENTIFIER Quantity in Package Numeric
		PART DESCRIPTION		DATE 11/15/2010 [Barcode]
	IDENTIFIER = (V) Your Supplier Number Issued by FNG Alpha/Numeric	SUPPLIER (V) 123456789 [Barcode]	PO# (K) 12345678 [Barcode]	(K) = IDENTIFIER FNG's Purchase Order Number Numeric
	IDENTIFIER = (S) Serial Number, not to repeat within two years Alpha/Numeric	SERIAL # (S) 210987654321 [Barcode]	BOL/PACKSLIP(2S) 12345678 [Barcode]	(2S) = IDENTIFIER Shipment ID Number (Optional) Alpha/Numeric
	[User Defined]			
Ship From: Supplier Name, Address Line 1, Address Line 2, City, ST, Zip				

ADDENDUM E (EXAMPLE)

		PRODUCTION OR SERVICE SUPPLIER EVALUATION RECORD	
Supplier Name: _____		Processing _____	
Supplier Location: _____		Material _____	
1) DELIVERY		Points	<input type="text" value="0"/>
(a) 100% on time delivery (attach delivery performance record)		25	<input type="text"/>
Corrective action plan submitted and in process - subtract 15 from (a) <i>No corrective action plan submitted; enter 0 for b) below</i>			
(b) FNG and supplier premium freight record updated		5	<input type="text"/>
		<i>Possible Points</i>	30
2) QUALITY / ENVIRONMENTAL		Points	<input type="text" value="0"/>
(a) TS 16949 or ISO 9001 Certified		15	<input type="text"/>
Audit to ISO requirements completed & Action plan in process = 10 <i>Not Certified - no plan in place = 0</i>			
(b) 8D or General Responsiveness		15	<input type="text"/>
(c) Supplier Quality Concern(s) Issued = (-2) points per issue		0	<input type="text"/>
or (-5) points per repeat issue		<input type="text"/>	<input type="text"/>
(d) Supports / adheres to Flex-N-Gate Environmental policy		5	<input type="text"/>
		<i>Possible Points</i>	35
3) COMMUNICATION		Points	<input type="text" value="0"/>
(a) EDI Capable		5	<input type="text"/>
Corrective action plan submitted and in process = subtract 5 points <i>Not capable - no action plan submitted = 0</i>			
(b) 1st/2nd/3rd Shift & Emergency contacts verified		5	<input type="text"/>
		<i>Possible Points</i>	10
4) DOCUMENTATION		Points	<input type="text" value="0"/>
(a) Shipping papers and/or Certifications correct and complete		10	<input type="text"/> *15
(b) Supply Chain Security Acknowledgements and/or Highway Carriers -		5	<input type="text"/> *10
Supply Chain Security Acknowledgements - accurate and complete		<input type="text"/>	<input type="text"/>
(c) Special Process Assessments complete (as applicable) - Updated annually		10	<input type="text"/>
Note: Date completed = expiration date of assessment <i>* If N/A for (C) add the 5 points to A and B</i>			
		<i>Possible Points</i>	25
TOTAL SCORE			<input type="text" value="0"/>
SUMMARY			
<input type="checkbox"/> Recommended for continued business (≥ 85 pts). Maintain on approved supplier list.		<input type="checkbox"/> Requires corrective action and/or improvements to be considered for continued business (70-84 pts)	
		<input checked="" type="checkbox"/> **Remove from approved supplier list (≤ 69 pts) **N/A for FNG Plants, or customer directed	
APPROVED			
_____	_____	_____	_____
Buyer	Date	Quality Manager / Engineer	Date