Detroit Manufacturing Systems

Title of the document	**Supplier Requirements Manual**
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Purpose	
Scope	
Related documents	
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Owner	Purchasing Director
Approved by	Purchasing Director

Supplier Requirements Manual

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Introduction

DMS's supplier relationships are crucial to our mutual success. Recognizing the integral role that each supplier has in this value chain, it is our intent to establish strategic, long-term relationships to bring lasting value and benefit. Continued success will rely on effective communication with our suppliers to meet or exceed our expectations, as well as our customer's expectations. These guidelines have been created to assist our suppliers in understanding the Purchasing expectations and requirements for products supplied to Detroit Manufacturing Systems, LLC. Suppliers demonstrating the desire and ability to support DMS with appropriate engineering, quality and manufacturing disciplines focused on effective design validation, mistake proofing, process controls, delivery, service, and continuous improvement will continue to benefit from this partnership.

The relationship between Detroit Manufacturing Systems and its suppliers shall be managed to the highest degree of honesty, integrity and professionalism. Our standard of conduct will ensure that we consistently make our decisions based on optimization of value and sound business principles. We are committed to managing our supply base in a manner that fosters shared value, growth and reward. In support of maintaining a professional business relationship with our suppliers, DMS senior management encourages an open door policy to facilitate discussion and resolution of issues through escalation, as appropriate.

The requirements contained in this Requirements Manual are a minimum to doing business with DMS. It is your responsibility to understand these requirements and any additional requirements communicated to you.

Detroit Manufacturing Systems "Forever Requirements"

The premise of a foundation of a good relationship with our supply base is open, effective and proactive communication. The occurrence of non-conforming product, unauthorized changes and related supply or capability issues present risk to be DMS and our customer when not communicated and managed effectively. The risk can also be created in tier 2, 3 or 4 suppliers or subcontractor's facilities.

Our "Forever Requirements" are as follows:

- Proactively communicate with DMS (know when to "raise a red flag")
- Notify DMS of proposed material or process changes
- Notify DMS of proposed manufacturing location changes
- Notify DMS of potential supply chain and/or capability issues

The intent of these requirements is to eliminate surprises and special cause events that can impact DMS' customers. The requirements apply to ALL suppliers and subcontractors to DMS and it is expected that you will manage your entire supply base with these principles.

DMS considers these requirements paramount in establishing a relationship of trust with our suppliers. Violation of any requirement will result in escalation to corporate Quality and Purchasing. If deemed necessary, a suppliers ISO/IATF 16949:2016 registrar will be asked to engage to conduct the appropriate inquiries at the supplier's expense. Continued non-compliance could lead to new business hold or a loss of business. If you are uncertain of the appropriate occasions DMS should be notified, you should contact your DMS Supplier Quality representative for guidance.

ACKNOWLEDGMENT SHEET

Please retain this sheet and return a signed copy to the appropriate Buyer, indicating that you have received, reviewed, and accepted in principle the contents of this guideline. All communications with respect to the contents of this guideline are to be addressed initially in writing to your designed Detroit Manufacturing Systems Buyer. Comments or concerns should be noted below prior to returning your acknowledgment sheet copy. Updates to this guideline document will be posted on the Detroit Manufacturing Systems Web.

Comments (Please Type):

Supplier Name, Address, Teleo Number, E-Mail Address (Please Type):

Authorized Signature	
Name and Title (Please Type)	
Date Signed (Please Type)	

SUPPLIER CHECKLIST

Supplier Name:		Date Submitted:	

Along with the signed acknowledgment page, the following documents have been attached for inclusion in the Detroit Manufacturing Systems master supplier file:

Supplier Capability Survey or Supplier Profile*

Supplier Escalation / Emergency Contact List

Packaging Specifications Form

Sample Labels for Each Part Number

ISO 9001 : 2015 Certificate *

ISO/IATF 16949 :2016 Certificate *

ISO 14001:2015 Certificate *

Certificate of Liability Insurance

Minority Status Certificate (if applicable)

Duns # _____

Supplier Working Conditions Self-Assessment Questionnaire

Please enclose this checklist with the required information and note below reason(s) for any omission(s).

*Note: It is the supplier's responsibility to provide updated copiers of the certificates of registration and supplier profile whenever there is a change in the reported information

Supplier Profile (by location)

Manufacturing/Distribution Location(s): (Address, City, State, Zip Code)			DUNS#			Location #			
"Remit to" Address:			Nearest Airport						
Structure Type (brick, sheet metal, etc.)			Structure Age						
Facility Size	Total Square Feet		Plant		Warehouse		Lab		
Manufacturing Capabilities (mark with an "X")	Prototype		Production		Tooling		Lab		
Facility Size (mark with an "X")	Prototype		Production		Tooling		Lab		
Outside Suppliers used for Testing (must be certified) (Name and Address)									
CAD Capabilities (CATIA, IGES, Ideas, UG, etc.)									
CAD Translations (name and address of outsourced supplier used for translations)									
Outside Suppliers used for tool manufacturing and repair (name a address)									
Outside containment / inspection suppliers (name and address)									
Total Number of Employees	Management		Production		Engineering/Tech		Design		Other
Number of Shifts/Day	Hours/shift (less planned down time)		Days/Week		Weeks/year				
Scheduled Vacation Shutdowns			Inventory turns/year						
Union Affiliation?	Agent/Local		Contract Expiration Date						
Employee Involvement/Suggestion Program (Y / N)	Bonus Incentive Plans (Y/N)		Attendance Bonus (Y / N)		Profit Sharing (Y / N)		Value Analysis Program (Y / N)		
Major Customers 1. 2. 3. 4.	Current PPM 1. 2. 3. 4.		% On-time Delivery 1. 2. 3. 4.				Warranty Returns 1. 2. 3. 4.		
Major Suppliers 1. 2. 3. 4.	Current PPM 1. 2. 3. 4.		% On-time Delivery 1. 2. 3. 4.				Warranty Returns 1. 2. 3. 4.		
Name of Person Completing Profile (please print)							Date		
Title of Person Completing Profile (please print)									
Signature									

Supplier Escalation / Emergency Contact List

Supplier:	
Supplier Code:	
Site Code:	
MPA Status:	

Title	Name	Office Phone	Cell Phone	E-Mail	Notes
President/CEO					
Vice President of Sales					
Plant Manager					
Program Manager					
Product Engineer					
Quality Manager					
Quality Engineer					
PPAP Coordinator					
Materials Manager					
Accounts Manager					
Sales Contact 1 (Programs)					
Sales Contact 2 (Programs)					
Sales Contact 3 (Programs)					
MPL Release Contact					
MPL Supervisor					
Mfg. Engineering Manager					
Mfg. Engineer / Capacity Planner					
Packaging Engineer					
Customer Service					
Account Payable Contact					
Plant Emergency Contact 1st Shift					
Plant Emergency Contact 2nd Shift					
Plant Emergency Contact 3rd Shift					
EDI Contact					
Additional Contacts (ie additional plant location contacs)					

The Detroit Manufacturing Systems
Supplier Requirements Manual

GENERAL INFORMATION

Detroit Manufacturing Systems	
• Detroit Manufacturing Systems	12701 Southfield Rd, Building A Detroit MI, 48223 Phone: 313-243-0700
E-Mail Addresses are formatted:	FirstName.LastName@dms-na.com
Internet Address:	www.dmsna.com

Scope

These requirements apply to all DMS suppliers of production material, products and services. Acceptance of any and/or all purchase orders constitutes acceptance and commitment on behalf of the recipient to comply with these requirements. These requirements are provided as a supplement to, and do not replace or alter, any purchase agreement or the general purchase conditions or requirements included in applicable engineering drawings, specifications and other contractual documents. If an OEM three-way agreement conflicts with these requirements, the OEM agreement shall supersede these requirements, except when Detroit Manufacturing Systems specific requirements are more stringent or are in addition to the OEM requirements.

1.0 Communication

1.1 General Communication

An essential ingredient to a successful partnership is clear and concise communication. At Detroit Manufacturing Systems, our means of communicating direction, expectations, guidelines and systems include, but are not limited to:

- Purchase orders
- Supplier performance data
- Letters of intent
- Sourcing commitment documents
- Statements of work
- DMS' web site
- Newsletters
- Regular scheduled meetings
  - Cross functional program team meetings
  - Performance review meetings
  - Advanced Supplier Quality PPAP readiness meetings
- Supplier Requirements Manual

Details are noted in the appropriate sections of this manual. Refer to the Table of Contents.

1.2 Revisions to the Supplier Guidelines Manual

This manual will occasionally require revision as requirements, expectations and systems change. It is the suppliers' responsibility to ensure they have the latest released edition. Suppliers will be able to access the most current revision at the DMS website (www.dmsna.com). It is the suppliers' responsibility to contact the appropriate Detroit Manufacturing Systems personnel with any questions regarding the requirements contained within the Supplier Requirements.

2.0 Selection and Assessment of Suppliers and Subcontractors

2.1 IATF 16949 / ISO14001:2015 Certification

As specified by IATF 16949 (replaces ISO/IATF 16949:2016), Detroit Manufacturing Systems will perform supplier quality management system development with the goal of supplier conformity to IATF 16949. At a

minimum, suppliers must be registered to ISO9001:2015 and ISO14001:2015, by an accredited third-party certification body. The supplier is to provide Detroit Manufacturing Systems with current copies of their registration certificates. Additionally, the supplier is to notify DMS of any change in registration status.

DMS specific requirements will supersede the OEM requirements if, and only if, the DMS are more stringent or incremental to the OEM requirements. Non-production suppliers do not require IATF 16949/ISO4001:2015 certification but must maintain an adequate quality management system in order to satisfy DMS requirements.

DMS suppliers must develop, implement, and improve a quality management system certified to ISO 9001, unless otherwise authorized by the customer (e.g. item 'a' below), with the ultimate objective of becoming certified to the IATF 16949 Automotive QMS Standard. Unless otherwise specified by the customer, the following sequence should be applied to achieve this requirement.

a) Compliance to ISO 9001 through second party audits;
b) Certification to ISO 9001 through third-party audits: unless otherwise specified by the customer, suppliers shall demonstrate conformity to ISO 9001 by maintaining a third-party certification issued by a certification body bearing the accreditation mark of a recognized IAF MLA (International Forum Multilateral Recognition Arrangement) member and where the accreditation body's main scope includes management system certification to ISO/IEC 17021;
c) Certification to ISO 9001 with compliance to other customer-defined QMS requirements (such as Minimum Automotive Quality Management System Requirements for Sub-Tier Suppliers (MAQMSR) or equivalent) through second-party audits;
d) Certification to ISO 9001 with compliance to IATF 16949 through second-party audits:
e) Certification to IATF 16949 through third-party audits (valid third-party certification of the supplier to IATF 16949 by an IATF-recognized certification body

2.2 Potential New Suppliers / Competitive Bidding

Potential new suppliers follow the competitive bidding process as the method for receiving business awards from Detroit Manufacturing Systems. The process is initiated with a request for quote for goods or services not previously supplied to DMS. Should it become probable that business will be awarded to a potential new supplier, an assessment of the new supplier's quality system will be required to ensure requirements are met. Following a satisfactory assessment, potential new suppliers will be added to the approved supplier list for consideration of future business awards.

2.3 Customer Directed Suppliers

In those instances where sources are directed by DMS's customer for a specific part or commodity, the directed sources shall meet all requirements as specified in the Supplier Requirements and may also undergo an assessment review.

2.4 Supplier Profile and Escalation / Emergency Contact List

All suppliers are required to furnish a supplier profile consisting of general information, company contacts, etc. Other data may also be required, such as financial and technical information and union contract status as a means for supplier consideration and monitoring. It is the supplier's responsibility to provide an updated profile whenever there is a change to the information previously submitted. A supplier contact escalation list must also be submitted to DMS for production suppliers. Supplier profile and escalation/emergency contact list templates are included on pages 8 and 9 of this Supplier Requirements Manual.

2.5 Approved Supplier List

An approved supplier list exists for production suppliers and is used by DMS for strategic sourcing

decision-making by commodity or service performed. The list is updated on a continuous basis in order to reflect input from supplier assessments and performance monitoring systems maintained by DMS. Non-production do not require an approved supplier list but are added on a case by case basis to fulfill a specific need. The non-production buyer will assess new suppliers as required.

2.6 Current Suppliers

Current suppliers on the approved supplier list must continue to meet performance objectives of DMS. Supplier performance will be monitored as specified in the "Supplier Performance and Monitoring and Evaluation" section. Performance measures will contribute to future sourcing decisions.

2.7 NAFTA Responsibilities

In support of NAFTA requirements, all suppliers must provide to DMS Purchasing the supplier profile, financial information, supplier guidelines, packaging form, country-of-origin certificate, NAFTA form and traced value forms.

- Country of origin is required for all components.
- NAFTA required for all components with an FOB point outside of the United States of America.

2.8 Embedded Software

Suppliers of automotive product-related software or automotive products with embedded software must implement and maintain a process of software quality assurance. This includes any activities required to ensure that the software issues are identified and corrected. The supplier must additionally ensure that the appropriate version of the software is implemented at the appropriate time. The supplier must maintain documented information of a software development capability self-assessment that demonstrates/ensures that the appropriate updates are implemented and the quality/accuracy of their software product is maintained.

- Suppliers are responsible to update and provide annually, as well as with every engineering change.
- Traced value is required for all components to identify costs of any raw materials manufactured outside of the United States of America.

3.0 Supplier Performance Monitoring, Evaluation and Development

3.1 Monitoring Methods

Once the manufacturing process for producing a component is successfully validated, the next phase encountered is that of regular production. During this stage there are a number of requirements each supplier should be fully aware of and follow. Key areas include change management, concern management, sub-tier supplier management and annual revalidation. Additional expectations are also detailed in the following sections.

DMS suppliers are responsible for the control and continuous improvement efforts of its suppliers. No product or production process changes should be made after PPAP without the notification and approval from DMS.

Detroit Manufacturing Systems has established a system to monitor measure and report supplier performance in the areas of **quality, delivery** and **commercial activity**. In support of Continuous Improvement, DMS will provide rating information to suppliers.

DMS supplier performance requirements include, but are not limited to:

- PPM
- SQC's and repeat concerns
- Controlled shipping
- Timely problem resolution
- Responsiveness
- Sample submission
- Key delivery metrics and material shortage disruptions
- Cost performance
- Technical support
- Financial health
- Commercial issues

Detroit Manufacturing Systems requires specific actions be taken by the supplier when performance levels are not met. Typical actions may include (but are not limited to) documented corrective actions, cost recovery, on-site management reviews at the supplier's or the DMS facility, controlled shipping status, probationary status precluding new business awards and, in extreme circumstances, de-sourcing.

3.2 Concern Management

The supplier shall have processes and systems in place to prevent the shipping of nonconforming material to any DMS facility of any of DMS's customer's facilities. It is the policy of DMS not to accept product that does not meet the requirements of the applicable drawings and specifications.

Repaired, reworked, or out-of-process product shall be re-inspected to all control plan requirements and documented procedures. If it is possible for the non-conforming product to be used by DMS, the receiving plant must be provided with a request for deviation. This request for deviation must be reviewed and approved by DMS's quality personnel prior to the supplier's shipment.

Deviations shall be approved only for a specific time period or quantity of parts. No permanent deviations are permitted.

A deviation request shall be accompanied by the supplier's problem solving analysis. This report shall include the identification of a clean point and the manner in which product will be identified, including how traceability will be maintained.

Suppliers shall have personnel formal trained in problem solving (such as AIAG 8D training). The supplier's trained personnel must have the ability to quickly and permanently resolve product and process issues using data driven problem resolution tools and techniques. Problem resolution must be conducted using a defined, structured process like the 8-Discipline process, Six Sigma DMAIC (Define, Measure, Analyze, Improve, and Control) or any process that includes verification of the root cause and verification of corrective action effectiveness.

When a problem occurs, suppliers are expected to immediately put their operations in containment to protect DMS or DMS's Customers, from receiving non-conforming material. Suppliers will receive a Supplier Quality Concern (SQC) that will identify the problem resolution steps required by DMS. Supplier shall respond to all SQC's issued by DMS. The initial response to a problem is due within 24 hours. This initial response shall include details as to how the supplier is 100% containing the non-analysis, is due within 10 calendar days, unless otherwise directed or approved by the DMS Supplier Quality Engineer (SQE). Suppliers shall complete a 5 Why Analysis as a means of identifying root cause(s).

If a non-conformance is detected by either DMS or DMS' customer, see section 11.1.4 Quality Non-Conformance.

3.3 Sub-supplier Management

Suppliers to DMS shall have capabilities to manage their respective suppliers (regardless of how directed) including APQP disciplines, supplier scoring/rating and as appropriate periodic auditing. DMS, when it deems necessary, will audit the critical processes of the sub-tier suppliers to assure that proper controls are in place throughout the entire supply stream. Suppliers to DMS shall ensure they audit and manage critical processes such as heat-treating and plating and, when directed, use the designated AIAG CQI format(s).

Sub-tier suppliers have a tremendous impact on the quality of the final component. Whether they provide raw materials, services or sub-components their influence is so profound that it is critical for each of DMS's suppliers to have a supplier management system in place. This system shall include a function that tracks and reports on their supply base quality and delivery performance. DMS

Suppliers shall be able to demonstrate that they manage their suppliers' issues through documented corrective actions and verification activities

3.4 Supplier Facility Access

The supplier shall allow DMS, an approved 3rd party representative, or our customers into their facility to audit the manufacturing processes.

3.5 Supplier Ratings

Sourcing decisions will be based on supplier performance, establishing the need for suppliers to be aware of their standing and to resolve performance issues expeditiously.

3.5.1 **Quality performance** will be monitored by tracking defective parts per million (PPM) received and will make up 50% of the overall performance rating. Suppliers are expected to implement a process that prevents the shipment of defective material.

3.5.2 **Delivery performance** will be monitored by tracking compliance to ship/due date(s) and quantity accuracy. Any deviations from timeliness and quantity accuracy requirements must be approved by the appropriate DMS Material representative. Written authorization will be in the form of a modified supplier release. Delivery performance will make up 50% of the supplier's overall performance rating. Suppliers are expected to implement a process to meet 100% on time shipping requirements.

3.5.3 **Responsiveness** will be considered in the rating when a supplier fails to respond as directed, and may result in the issuance of a DPR (Delivery Performance Report), and/or a DMN (Defective Material Notice). Responsiveness includes, but is not limited to, timely receipt of advanced shipping notices, packing slip accuracy, complying with packaging and bar code label requirements, and timeliness in responding to DMNs and DPRs. The administrative accuracy goal is 100%.

3.5.4 **The Supplier Performance Summary (SPS) Rating** system is being developed. It is intended that the SPS will be issued at least quarterly to production component suppliers and sub-contractors. Other forms of communication (letters, phone calls, DPSs, DMNs, etc.) regarding the supplier's performance rating is optional and only provided as a courtesy. It is the supplier's responsibility to review the monthly performance rating report and respond to unsatisfactory ratings with a written corrective action plan. Should the supplier disagree with their monthly performance rating, they may request that the rating be reviewed. The request and supporting details must be submitted in writing to the appropriate Materials and/or Quality Representative within five business days of receipt; otherwise the rating will stand without review.

3.5.5 Unsatisfactory supplier performance will be determined by the following:

- Less than 100% on-time delivery performance, unless otherwise agreed upon by Detroit Manufacturing Systems.
- PPM greater than 25, unless otherwise agreed upon by DMS.
- Noncompliance to any requirements as outlined in the Supplier Guidelines.
- Non-responsiveness to customer service request(s).

3.5.6 Unsatisfactory supplier performance will be monitored by the designated Buyer, Materials and/or Quality Representative with any of the following steps being taken:

- Corrective actions requested and monitored for compliance.
- Meeting between the supplier representative(s) and the designated Buyer, Materials representative, Purchasing Manager, Program Manager and/or Quality representative(s) to develop a timeline for completion of required corrective action(s).
- On-site supplier audit, as required.
- Notice of placement on Controlled Shipping 1 (CS1), which requires 100% inspection by a Detroit Manufacturing Systems approved 3rd party prior to shipment. Refer to section 11.2, Controlled Shipping Levels.
- Notice of placement on Controlled Shipping 2 (CS2), which requires 100% inspection by a Detroit Manufacturing Systems approved 3rd party prior to shipment. This expense will be the supplier's responsibility. Refer to section 11.2, Controlled Shipping Levels.
- On-site evaluation of the supplier's manufacturing, Quality and/or containment activities.
- Notification to the supplier of New Business Hold status.
- Notification to the supplier of product de-sourcing due to continued non-compliance.

3.6 New Business Hold

3.6.1 Suppliers could be placed on New Business Hold (NBH) for any one, or a combination of, the following criteria:

- Suspension of the supplier's Quality and/or Environmental System Registration certificate.
- Performance issues resulting in multiple instances of controlled shipping.
- Financial risk or instability.
- Contractual issues, at the discretion of DMS Purchasing.

3.6.2 The following describes the NBH process:

- DMS Purchasing and/or Quality/Supplier Development can initiate the NBH process based on poor supplier performance.
- DMS Purchasing will notify the supplier in writing of the NBH status via an NBH letter. The supplier's quality system registrar may also be contacted regarding controlled shipping or NBH status.
- Supplier status will be noted in the Supplier Performance Rating System.
- Purchasing and/or Quality/Supplier Development will develop and review the improvement expectations and exit criteria with the supplier.
- Purchasing and/or Quality/Supplier Development will monitor the supplier's progress relative to the plan.
- Once the supplier has met the exit criteria, an NBH removal letter will be issued to the supplier and the supplier's quality registrar, if applicable.

- Purchasing and/or Quality/Supplier Development removes the NBH status (for the affected supplier Duns location) from the Supplier Performance Rating System.

3.7 Supplier Development

DMS's commitment to suppliers is to provide support through a specific supplier development activity to assist in the correction of issues and continuous improvement to achieve performance expectations. Suppliers should contact the designated Buyer, Supplier Development representative or Quality representative for additional details.

3.8 Supplier Special Status OEM Notification

It is the supplier/subcontractor's responsibility to notify the appropriate Detroit Manufacturing Systems Material and/or Quality representative upon notification that they have been placed on special status such as CSL1, CSL2, New Business Hold, Q1 revocation, etc. by one of their customers due to quality or delivery rated issues.

Note: Such notification will not affect the supplier's performance rating from DMS provided there is no residual affect to their delivery or quality performance to DMS.

4.0 Document Control and Record Retention

4.1 Control of Design Records

All suppliers/subcontractors must have a documented system in place for monitoring receipt, control, and obsolescence of all Detroit Manufacturing Systems supplied design records. Suppliers will be responsible for being able to read math data files in the appropriate language (No translations, i.e. IGES), and have the ability to print files which include wire frame, GD&T, and notes (i.e. performance and material requirements).

Note: Confidentiality applies to all customer supplied drawings, math data media and specifications.

4.2 Control of Specifications

Specifications noted on drawings and/or sketches supplied by Detroit Manufacturing Systems, and subsequent specifications referred to within the body of those specifications shall be obtained by the supplier/sub-contractor directly from the controlling authorities (i.e. ASTM, SAE, etc.)

All suppliers/sub-contractors must have a documented system in place for obtaining the latest released editions of required specifications. The system shall address annual verifications by suppliers/sub-contractors to the controlling authorities.

4.3 Control of Procedures

4.3.1 Suppliers/sub-contractors shall establish documented quality practices for all areas of the quality function based on AIAG Advanced Quality Planning (APQP) Guidelines.

4.3.2 A multi-disciplined approach shall be utilized for approval of quality documentation.

4.3.3 A documented method shall exist for revising, approving, re-issuing and implementing policies, procedures and work instructions.

4.3.4 All procedures and supporting documentation shall be controlled, maintained and available on site for review, upon request by Detroit Manufacturing Systems personnel.

4.4 Record Retention

Suppliers are expected to maintain applicable retention periods as specified in the latest released edition of the ISO/TS-16949 standard and OEM specific requirements when applicable, unless otherwise specified by Detroit Manufacturing Systems. Legal or government requirements prevail.

5.0 Control of Inspection Gages, Fixtures, Measuring/Testing Instruments and Equipment

5.1 General Requirements

5.1.1 The supplier must have a documented system for the control, calibration, analysis, use and maintenance of all gages, fixtures, measuring/testing instruments and equipment.

5.1.2 Gages, fixtures, and measuring/testing instruments/equipment are to be calibrated and adjusted at prescribed documented intervals or prior to each use, against certified equipment having a known valid relationship to nationally recognized standards.

5.1.3 Gages, fixtures, and measuring/testing instruments/equipment are to be assessed for accuracy and repeatability /reproducibility (R&R) at prescribed documented intervals.

5.1.4 The environmental conditions must be suitable for use of the equipment.

5.1.5 Handling, preservation and storage is to be such that accuracy and fitness for use is maintained.

5.1.6 Documented procedures and instructions for the control, calibration, analysis, use and maintenance of all gages, fixtures and measuring/testing instruments and equipment are to be available at the point(s) of use.

5.1.7 Records associated with the control of inspection gages, fixtures and measuring/testing instruments and equipment are to be properly maintained and available for review upon request.

5.1.8 Control, acceptance criteria and procedural requirements are to be in accordance with the latest released edition of the AIAG Measurement System Analysis Guideline (MSA).

5.2 Control of DMS Supplied/Owned Equipment

5.2.1 All equipment provided by, and/or property of, Detroit Manufacturing Systems for measuring and test activities at the suppliers/sub-contractors facility shall be monitored with respect to the latest product engineering change level for which each piece of equipment is used.

5.2.2 Detroit Manufacturing Systems shall monitor the recall, modification, update, verification, return and/or replacement of all such equipment.

5.2.3 All suppliers/sub-contractors shall have a documented system in place for monitoring all changes to the Detroit Manufacturing Systems supplied/owned measuring and test equipment. The system shall address an annual verification procedure.

5.2.4 All tooling, inspection and test fixtures supplied by and/or property of Detroit Manufacturing Systems are to be permanently marked with clear identification indicating ownership**.**

5.3 Calibration and Validation

5.3.1 Calibration is to be performed at prescribed intervals against certified equipment having a known, valid relationship to nationally recognized standards.

5.3.2 All gages and test equipment must be calibrated annually at a minimum.

5.3.3 The calibration certificate must be on file at the supplier's facility, and be traceable to the actual gage identification information. Calibration Services, when used, must meet the requirements of the latest released edition of ISO/IATF 16949.

5.4 Gage Instructions

Operating instructions must be displayed at every inspection station requiring the use of a gage or other measuring /testing device. The operating instruction must describe the proper methodology for use in inspection. These instructions must include a reference to the gage identification number, and revision level, and be approved by appropriate management. Whenever there is any change to the inspection procedure that affects the use of the gage, or when any identification information is revised, the operating instructions must be updated to reflect the current status.

5.5 Equipment Identification

All gages, fixtures, measuring devices and test equipment, including employee owned must be identified as follows:

5.5.1 Unique identifier

5.5.2 Revision level (when applicable)

5.5.3 The calibration date and the next calibration due date.

5.5.4 Name/initials of the person who performed the calibration.

5.6 Measurement System Analysis

5.6.1 Evidence is required that appropriate statistical studies have been conducted to analyze the variation associated with each type of measuring and test equipment system. Analytical methods and acceptance criteria must conform to the latest released edition of the AIAG Measurement System Analysis (MSA) manual.

5.6.2 The supplier must have a documented system in place to control, calibrate, and maintain the proper function and accepted level of gage repeatability and reproducibility (R&R) of all inspection fixtures, gages, measuring / testing instruments and equipment.

5.7 Inspection, Measuring and Test Equipment Records

Records of calibration, verification, maintenance and statistical analysis activities must be traceable to the part revision level demonstrating conformance to standards and corrective actions taken where applicable. Records must include:

- Device identification number and change level (when applicable).
- Date of calibration/analysis and identification of the person performing the activity.

- Conditions and readings as received and prior to calibration.
- Calibration results and actions taken (i.e. replace, repair, etc.)
- Gage R%R results.
- Action taken on products measured with out of calibration and/or non-capable equipment.

Note: Detroit Manufacturing Systems must be notified if suspect or discrepant product has been shipped as a result of our calibration gages, fixtures, measuring or test equipment or any other reason.

6.0 Packaging

6.1 Packaging Suitability

It is the supplier's responsibility to provide any product sold to Detroit Manufacturing Systems in approved packaging as determined by DMS's APQP / PDP process. The criteria necessary to determine suitability may include:

- Robustness to ensure integrity of product
- Compliance with health and safety guidelines
- Compliance to DMS Divisional Operations requirements
- Compliance to AIAG standard guidelines
- Divisional approval
- All expendable packaging should be recyclable

6.2 Initial Packaging Approval/Change Requests

6.2.1 Detroit Manufacturing Systems must approve all packaging prior to the first shipment. Approval is required for packaging type (i.e. returnable, expendable), container size, container quantity and pallet quantity. The supplier must submit a completed "Supplier Packaging Proposal" form (see supplemental section) to the applicable DMS Division Materials or Logistics Representative, or as otherwise instructed, to obtain this approval. Any changes or deviations from the approved packaging require written approval.

Note: Packaging is also part of the PPAP submission.

6.2.2 Suppliers are encouraged to confirm with the applicable Detroit Manufacturing Systems Division any additional requirements such as:

- Container fill and identification for a "balance out" or "final release" situation
- Foamed plastics or expanded polystyrenes (EPS)
- ISO Modular Packaging Requirements for import/export product
- Maximum weight for manually and mechanically handled goods

6.2.3 All goods sold to Detroit Manufacturing Systems that are considered to be "controlled" under Workplace Hazardous Material Information Systems, must comply with appropriate legislated regulations for packaging and shipping.

6.3 Returnable Containers

Returnable containers are the primary packaging method considered on new programs. On an individual basis, Detroit Manufacturing Systems may assess current production part packaging feasibility using returnable containers. Suppliers are encouraged to consider conversion to reusable containers.

DMS has developed and implemented returnable containers with many suppliers. As a result, specific styles of containers best suited to shipping, storage and manufacturing requirements have been identified. Any inquiries regarding this packaging may be submitted to the Detroit Manufacturing Systems Packaging Engineer or designated Buyer.

6.3.1 The supplier shall be responsible to maintain the cleanliness of all returnable containers. This requirement extends to removing all prior container labels.

6.3.2 The supplier is responsible for all maintenance and logistical tracking of the returnable. The supplier shall notify Detroit Manufacturing Systems when repairs are necessary.

6.3.3 Financing of returnable packaging will comply to mutually agree upon terms.

6.4 Pallets

Pallets are to meet the following specifications:

- Pallets are to be banded and/or stretch wrapped.
- Boxes must fit on pallet, without any overhang.
- Pallet height limit is 48", unless otherwise authorized.
- "DO NOT STACK" sticker is to be affixed to 2 adjacent sides (when applicable).
- Pallets must be 4-way entry.
- Like parts may be mixed on a skid only if less than a skid quantity of each part is required. Otherwise, all cartons for the same part number must be on the same skid(s).
- All mixed pallets must be clearly labeled as "MIXED SKID" on 2 adjacent sides.
- Parts should be palletized by program and by part number.
- **DO NOT** mix RH/LH, FRONT/ REAR or programs together on a pallet, unless otherwise authorized.

Pallet information must be included on the Packaging Specifications Form

7.0 Labeling

7.1 Container Label Requirements

7.1.1 All materials for prototype or production consumption, shipped to divisions of Detroit Manufacturing Systems, must be identified with labeling containing human-readable text/ graphics, and machine-readable bar-coded symbols.

7.1.2 Containers shall be identified with the following, as applicable:

- container labels
- master labels
- mixed load labels (DMS authorization required)
- primary metals labels and
- part labels when specified by design records, specifications, or other written requirements

All labels must be legible and scan able to AIAG Standard and unobstructed from banding and other packaging materials.

7.1.3 Characters and symbols shall comply with the DMS requirements of the AIAG, B-10 standard – Quality Assurance Guide for Shipping Labels and Other Bar Code Applications.

7.1.4 Parts Shipping Labels (container, master, and mixed load), shall comply with the layout formats defined in the AIAG, B-10 standard – Parts Shipping Label. Custom formats may be specified by a Detroit Manufacturing Systems Division via a Customer Compliance Specification Sheet.

7.1.5 Primary Metals labels shall comply with the layout format defined in the AIAG, B-10 standard – Primary Metals.

7.1.6 Label placement, orientation, quality and quantities shall follow the guidelines contained in the AIAG, B10 standard – Trading Partner Labels Implementation Guide, unless otherwise specified by division specific requirements.

7.1.7 Each container must have two AIAG bar-coded labels (formatted as described above); this also includes any items not in cartons such as rolls, bundles, drums, etc. The labels must be affixed to the upper RH corner of at least two adjacent sides. If the container is returnable, the supplier is to ensure that old labels are removed and replaced.

7.1.8 Labels will include the following information:

- Supplier name and address
- DMS ship-to location name and address
- Part Number
- Revision Level
- Description (the description must exactly match the description on the Purchase Order and Releases).
- Quantity (the quantity must be as per the standard Unit of Measure
- Unit of Measure (UOM).
- Serial Number
- Purchase Order Number or Supply Agreement Number
- Manufacturing Date

7.1.9 Pre-production and/or trial material must be clearly identified by Program and Purchase Order Number, as well as any other information defined by Detroit Manufacturing Systems.

7.2 Part Barcode Labels

7.2.1 When required that a barcode label be affixed to each part, such labels must be affixed in an area as not to interfere with the part function or appearance. Exceptions to part labeling requirements are made for components that are restricted in size (i.e., fasteners). Contact the appropriate Detroit Manufacturing Systems Division Material Manager for requirements and exception details.

7.2.2 Part labels shall comply with the requirements defined in the AIAG, B-4 standard – Parts Identification and Tracking Application Standard, unless otherwise specified by design records or Detroit Manufacturing Systems division specific requirements.

7.2.3 Typical Part Barcode Labels will include, at a minimum the following information:

- Part Number
- Part Revision Level

- Part Description

The supplier shall submit a sample label for each component that is to be barcode labeled to the applicable Detroit Manufacturing Systems for approval.

7.2.4 Component Labeling- Additional Detail

The material type mark must be in accordance with DMS requirements:

- After assembly, no marking has to be visible on the visible side. In all cases, the marking area must be specified on the supplier drawing following agreement by all concerned parties. In the case of large parts, the marking will have to be repeated.
- The marking has to be in accordance with the relevant requirement with individual traceability.
- The product part(s) must contain the flow chart number and the trademark.
- OEM marking
- DMS marking

Component scan label must be in accordance with DMS requirements:

- DMS utilizes AIAG standards as guideline for scan label requirements.
- Types of labels DMS machinery is compatible with:
  - 1D
  - 2D
- Other DMS Requirements:
  - Preferred scan label is to include the entire DMS part number.
    - If not possible, DMS will allow utilization of the OEM part number.
      - If those cases where the OEM part number is utilized- the entire number including color information must be on the label.
  - Scan code must be both barcode and human readable.
  - Scan label shall include a description of product.
  - Date and Time of manufacturing included on the scan label.
  - If Safety/Regulatory information is included – a separate barcode placed at right hand side of label to include the serial number for traceability.
  - DMS also requires manufacturing information to be included on the scan label:
    - Mold Number
    - Tool Number
    - Recipe

7.3 Label Approval

Suppliers must obtain approval of newly introduced label formats from the affected Detroit Manufacturing Systems Division prior to implementation.

8.0 Transportation

It is important that Detroit Manufacturing Systems' suppliers are aware of transportation and delivery requirements, as it is one of the key performance metrics upon which they will be assessed. DMS supports the industry initiative of inventory reduction, recognizing however the importance this places on accurate and timely delivery of quality product. It is our expectation that suppliers will deliver 100% on time to our locations, in compliance to schedules.

In an effort to support JIT delivery, we expect our suppliers to constantly strive to reduce lead times with their suppliers, improve flexibility and minimize changeover times. If necessary to support JIT schedules, the supplier may be asked to support local warehousing.

8.1 Schedules, Routing and Carriers

8.1.1 All appropriate scheduling, routing, FOB points and delivery requirements will be communicated early in program award, typically through the Supplier Statement of Work or similar documentation. All transportation arrangements and requirements must be signed and agreed to by both organizations.

8.1.2 Specified truck lines along with customs and brokerage information, if required, will be detailed on Detroit Manufacturing Systems Routing Instructions.

8.1.3 All goods imported into the USA must show the Detroit Manufacturing Systems Division Custom Bond Number and Importer Number on all required documentation. Contact your Logistics and Packaging Representative to ensure that you have the correct numbers.

8.1.4 Any changes to carrier or delivery frequency must be approved in writing by the applicable Detroit Manufacturing Systems Division Materials Department, unless it is for an expedited shipment.

8.2 Transportation Routing Information

8.2.1 Suppliers will receive routing information including transportation method, and pick-up and delivery window times. Routing information will be communicated using a Routing Control Notice, Transport Routing Information Sheet, Routing Instruction, or similar document used by Detroit Manufacturing Systems. Detroit Manufacturing Systems will make certain that all transportation and routing details are clearly specified. Suppliers shall question any ambiguous instructions. All costs incurred as a result of missed or late shipments that are clearly the responsibility of the supplier, shall be recovered from the supplier.

8.2.2 All material entering from a foreign country must have "Country of Origin" clearly marked on the pro forma Invoice, as well as on the original Commercial Invoice. Brokerage fees for all imported product is typically the responsibility of Detroit Manufacturing Systems, unless otherwise negotiated. All fees and charges resulting from the export / return of defective product shall be the responsibility of the supplier.

8.3 Packing Slip and Bill of Lading

8.3.1 Packing Slip

It is required that all material shipped be identified on a Packing Slip or Bill of Lading. While individual Division requirements may differ, the information typically required includes:

- Ship date
- Invoice/Packing Slip number
- Ship to and Sold to Addresses
- Separate line item for each part number shipped
- Part number(s) and descriptions
- Engineering change level of each part number

- Purchase Order number for each part
- Order release number
- Quantity ordered and Quantity shipped of each part
- Number of cartons/skids/containers/weight per part
- Supplier Code
- Ship via
- Indicate whether freight is prepaid or collect

The packing slip is to be attached in a clearly visible location.

8.3.2 Bill of Lading

The Bill of Lading must include the following information:

- Total Number of Containers Shipped.
  Examples of Containers Shipped:
  - 20 cartons on 1 skid -**or-** 1 skid @ 20 cartons
  - 50 cartons on 3 skids **-or-** 2 skids @ 20 cartons ea + 1 skid @ 10 cartons
  - 70 cartons on 4 skids + 3 loose cartons **-or-** or 3 skids @ 20 cartons ea. + 1 skid @ 10 cartons + 3 loose cartons
- Number of Cartons per Skid and/or the Number of Loose Cartons
- Total Weight
- Proper NMFC Description, Item Number, and Class
  Example:
  - OEM PLASTIC AUTOMOTIVE COMPONENTS, NM18850, CL 85.
- Indicate whether freight is prepaid or collect

Questions regarding the correct NMFC description, item number, or class should be directed to the designated carrier. Because this information affects freight rates, it is critical to ensure its accuracy. This information is also to be included on the Packaging Specifications Form.

8.4 Advance Shipping Notice (ASN)

8.4.1 The ASN must be sent within ½ hour of the shipment leaving the supplier's facility. ASNs may NOT be sent early.

8.4.2 In the event of a known shortage or late shipments, the supplier must immediately contact the appropriate Detroit Manufacturing Systems Division and advise them of the shortage or late shipment. The supplier shall also indicate the anticipated time of delivery of the expedited material required to complete the original schedule.

8.4.3 The supplier must maintain a third party contingency to ensure uninterrupted communication of ASNs in the event of a system failure at the supplier's location. The Detroit Manufacturing Systems divisional Materials Representative must be in agreement with the third party selection.

8.5 Hazard / Non-Hazard Chemical Requirements and Material Certifications

8.5.1 DMS suppliers/sub-contractors considered to be "controlled" under W.H.M.I.S. (Workplace Hazardous Material Information Systems) **must** be familiar with and comply with all such regulations, for packaging and shipping.

8.5.2 Material Safety Data Sheets (M.S.D.S.) **must** accompany all initial shipments from all suppliers/sub-contractors and marked to the attention of the Environmental Health and Safety Coordinator.

8.5.3 Where required, Material Certifications are to be placed in a separate envelope and addressed to the using division's Materials Department.

9.0 Purchasing

9.1 Conditions of Business Placement and Purchase Orders

9.1.1 As a condition of business, all suppliers/sub-contractors must be prepared, on request, to provide information required to substantiate the capacity to provide the necessary products, commodities and services. This shall include, but is not limited to, technical capability systems/procedures to evaluate key product characteristics, price structure, and financial information. In addition, the supplier must be prepared to provide proactive initiatives such as cost reduction proposals and recycling programs to the Detroit Manufacturing Systems.

9.1.2 The extent of the purchase contract and order of precedence shall be:

- Compliance with all relevant local, provincial, state and federal government legislation with special emphasis on hazardous waste and other environmental requirements
- The Purchase Order terms and conditions
- Requirements as stated in the Supplier Guidelines
- Letter of Intent
- Statement of Requirements

9.1.3 All suppliers/sub-contractors must provide Country of Origin Certification and other documentation required under the US/Canada Free Trade Agreement and the North American Free Trade Agreement (NAFTA). All customs requirements must be met in a timely manner to ensure efficient transportation of goods.

9.1.4 All suppliers shall have documented procedures for assessing, selecting, monitoring and developing their suppliers/sub-contractors with adherence to a continual improvement philosophy geared to complete customer satisfaction and cost reductions.

9.1.5 Suppliers / sub-contractors are expected to sign up to a Long Term Agreement (LTA), Productivity Program or other type of cost savings agreement. This LTA is to provide cost savings through, but not limited to, raw material price decreases, value analysis, or productivity improvements.

9.1.6 Suppliers must utilize appropriate Advanced Product Quality Planning techniques as identified in the AIAG Advance Product Quality Planning and Control Plan reference manual or similar techniques.

9.2 Compliance of Business and Purchase Orders

9.2.1 Purchase Order / Letter of Intent

Detroit Manufacturing Systems will issue purchase orders to suppliers for awarded programs. In advance of receipt of purchase orders, suppliers to DMS may receive a letter of intent from the Purchasing department providing the following information pertaining to supplier conditions, requirements, and responsibilities:

- Design, development, prototype and production source award.
- Pricing
- Packaging (Expendable and Returnable)
- Tooling design and timing
- Freight and Customs
- Pre-Production Activity
- Cost Reduction
- Currency

It is the intent of Detroit Manufacturing Systems that the supplier be the product supplier for the related program provided the supplier meets commercial, design, program support, quality, and delivery requirements. Where Detroit Manufacturing Systems or OEM dictated program changes necessitate adjustments to the purchase order or LOI, the Supplier will be required to quote and substantiate such adjustments.

The supplier will be required to conform to Detroit Manufacturing Systems and/or OEM tooling documentation and audit requirements. DMS reserves the right to audit tool costs incurred by the supplier in support of awarded programs. Such an audit may include, but not be limited to, a review of quotes, purchase orders, invoices, and other documentation.

Business award is conditional upon the supplier's concurrence with the requirements of the DMS Bailee Bond, and the applicable Statement of Work.

9.2.2 Statement of Work

The supplier will receive a copy of the applicable program Statement of Work (SOW) issued to prospective suppliers for applicable programs. Suppliers will be expected to fulfill all applicable elements of the SOW. The requirements outlined in the SOW are consistent with the OEM expectations of Detroit Manufacturing Systems and reflect a cascading of these expectations to Tier II suppliers.

9.2.3 Product / Program Changes

DMS will not accept cost increases due to process-oriented developmental changes that are necessary to meet the design requirement. The supplier will be reimbursed only for approved costs associated with product/program changes mandated by Detroit Manufacturing Systems or the applicable OEM. If Detroit Manufacturing Systems initiates product/program changes that result in reduced production tooling or manufacturing costs, DMS will expect piece price or tooling costs to be reduced to reflect the entire amount of the reduction.

9.2.4 Quotation Response Requirements

When Detroit Manufacturing Systems is considering a product or program change, an RFQ (Request for Quote) will be generated and forwarded to the supplier. Suppliers are expected to respond by the due date identified in the RFQ, with documentation as defined

by the Detroit Manufacturing Systems initiator. RFQ response is a measurable for supplier performance. Failure to meet response expectations may result in new business hold or removal from the Approved Supplier List.

9.3 Manufacturing Process

If the supplier manufacturing process assumptions are based on new technology, or on processes that are new to the supplier, the supplier must document how and when the processes will be proven out in a pilot program prior to production launch. The pilot program must provide for the manufacture of a sufficient quantity of parts so that the program production launch curve is based on the experience of the pilot program rather than unproven assumptions.

If a pilot program cannot be accomplished, the supplier must provide a detailed back-up manufacturing plan based on proven processes; to be implemented in the event problems are encountered during the launch of the new technology or processes that may impact supply to Detroit Manufacturing Systems.

Regardless of process assumptions, the supplier must submit periodic launch plans reflecting process assumptions as well as key launch events, associated timing and progress to plan. The due date for the first submission will be discussed at the APQP kick-off.

9.4 Process Sign-Off Requirements

Process Sign-Off (PSO) must be performed on all new or modified parts. Products that have a high or medium Initial Risk Evaluation will require that the PSO be led by Detroit Manufacturing Systems personnel. Parts with a low risk evaluation will have a supplier led PSO.

Any product or process change that occurs during the lifecycle of a part or system must be reviewed by the product team to determine whether a new PSO is required. Submission for full PPAP approval will not be accepted unless PSO approval is achieved.

It is the responsibility of the supplier to submit PPAP documentation for review and approval prior to shipping products to Detroit Manufacturing Systems.

9.5 APQP Kick-Off

Suppliers are expected to have a formal process for quality planning for new or changed production activities; DMS requires suppliers to utilize the Automotive Industry Action Group (AIAG) Advanced Product Quality Planning (APQP) manual as a guide. The DMS Supplier Quality Manual provides reference to APQP activities and the submission requirements for Production Part Approval Process (PPAP).

Suppliers introducing a new part to a DMS assembly (no matter the relationship with the OEM) must assign a team "champion" for the project and coordinate their milestone(s) progress with DMS Advanced Supplier Quality (ASQ).

DMS ASQ shall be responsible for managing the APQP/PPAP process for external suppliers within the purchasing / procurement function, and providing program management support.

The APQP process is a methodology designed to ensure that suppliers integrate preventative quality measures with their business systems, through the use of prevention-oriented methods like Failure Mode Effects Analysis (FMEA) and Measurement Systems Analysis (MSA), culminating in a process control plan that assures stable and capable processes, rather than relying on post-production product inspection.

The APQP process methodology consists of various steps and/or elements, integrated into a program management approach. DMS has defined five APQP phases for ASQ.

An APQP kick-off meeting will be scheduled upon business award. Personnel representing the supplier's Program Management and Quality Assurance shall participate to establish and outline APQP requirements, timetables, and contacts. All immediate technical concerns will be addressed at this time.

The following documentation is to be provided at the APQP kick-off meeting:

- Manufacturing facility status as Union/Non Union. (identify each union affiliation and the respective contract expiration date(s)
- Documentation certifying the facility as a certified minority location (if applicable)
- Applicable IATF 16949 and ISO14001 facility registrations

The supplier is required to submit periodic launch plans reflecting process assumptions as well as key launch events, associated timing and progress to plan. The due date for the first submission will be discussed at the APQP kick-off.

9.5.1 Supplier Launch Support

DMS Pre-Production Build Events:

During any program launch at a DMS production facility, selected suppliers may be required to provide on-site representation. The supplier's launch support representative(s) must be knowledgeable, capable and empowered to make decisions.

Supplier Pre-Production Build Events:

DMS ASQ may request to be present during any pre-production build at the supplier's facility. The supplier shall cooperate in communicating the timing with DMS ASQ and make available resources at the supplier's production facility for evaluation of the supplier's production process and control plan.

Communication:

It is the supplier's responsibility to communicate with the DMS Launch Team any internal supplier issues that will impact the timing of the program launch schedule. Issues include design flaws, tool modification and any other factors that will impact availability of pre-production parts or PPAP timing.

9.6 Duration of Supply

The supplier must meet program commercial, design, support, quality, and delivery requirements to be selected as Detroit Manufacturing Systems' production source for awarded program component(s). The supplier must remain fully cost competitive with qualified alternate suppliers throughout the life of the program.

10.0 Scheduling of Requirements

10.1 Communication/EDI

10.1.1 Suppliers must be EDI (Electronic Data Interchange) capable.

10.1.2 All material, purchased components, assemblies and associated services will be ordered by issuance of an individual Purchase Order or Blanket Purchase Order. Suppliers will be issued production material requirements weekly at a minimum, or as need dictates. Schedules will be communicated through a variety of options including FAX, e-mail or Electronic Data Interchange (EDI). Each Detroit Manufacturing Systems Division will dictate the method of communication.

10.1.3 It is the supplier's responsibility to contact the Material Planner or appropriate divisional contact if a weekly release was not received or if unable to meet all requirements for delivery date, time, quantity or quality.

10.2 Forecasting

10.2.1 Material forecasting information will be communicated to the supplier through weekly scheduled releases. While this information is an indication of future material requirements, it is not considered binding on the part of Detroit Manufacturing Systems unless supported by a specific purchase order.

10.2.2 The supplier must maintain the ability to absorb a 15% volume increase at all times. Additionally, the ability to accommodate a 30% increase within 24 hours notice without expenditure to plant or equipment is also required.

10.2.3 Material authorization will typically include three to five weeks (combined finished goods, work in process and raw material) and is determined by each individual Detroit Manufacturing Systems Division. In any case, additional material lead times require specific approval from the using Division's Purchasing Department.

10.2.4 The supplier is expected to maintain sufficient safety stock and finished goods inventory to accommodate 100% on-time delivery. Short shipments must be communicated immediately, along with a Corrective Action/ Recovery Plan.

10.2.5 Suppliers must maintain an effective contingency plan, in order to mitigate undue risk to Detroit Manufacturing Systems, in the event of utility disruption, labor disruption and/or equipment failure. The intent of the contingency plan is to reasonably protect the procuring division from disruption of supply in the event of an emergency.

10.3 Scheduling and Releases

10.3.1 Raw material may be ordered by issuance of individual purchase orders or releases under a "blanket" Purchase Order.

10.3.2 Suppliers who have been issued a "blanket" Purchase Order will typically receive weekly releases; however some suppliers may receive daily releases, depending on the product type and/or volume.

10.3.3 The supplier is to ship only those quantities that have been released unless the Material Representative has authorized other arrangements. If deviations are made, a revised release will be issued as documentation of scheduling deviation approval. Over shipments may be subject to return at supplier's expense and without receipt of a return material authorization. Excess Transportation Charges resulting from unauthorized multiple shipments; past due requirements and/or unauthorized truck lines will be debited in full to the supplier.

10.3.4 Suppliers who are unable to meet all delivery requirements including date, time, quantity and quality must notify the Materials Representative immediately. Note that this communication does not alleviate the supplier of any of the related costs and penalties associated with being past due or shipping defective material.

10.3.5 Telephone calls noting schedule deviations, while appreciated for planning purposes, do not result in allowances for deviation of the requirement schedule. If a shipment is missed or is incomplete, an expedited carrier must be set up at the supplier's expense.

10.4 Cums and Material Authorization

10.4.1 Cums that do not match is an indication that an error has been made either in receipt history or ship history. Cums must match to ensure the correct release of parts. It is recommended that the supplier review cums daily. At a minimum, cums should be reviewed weekly.

10.4.2 In the event the received and the shipped cums do not match, the supplier must immediately notify the appropriate Materials Representative. Until the cum discrepancy is resolved, the supplier should consider the Detroit Manufacturing Systems cum to be correct, and ship per the current release. It is the supplier's responsibility to provide proof of delivery when a discrepancy is found.

10.4.3 The supplier will have 30 calendar days after product shipment receipt to resolve invoice cum discrepancies. Failure to resolve discrepancies may result in non-payment of open invoices items. Cum discrepancies must be communicated in writing to the Materials Department.

10.4.4 Unless otherwise specified, standard FAB authorization is 2 weeks and raw authorization is 3 additional weeks, for a total of 5 weeks. Exceptions to these authorizations require written approval by the appropriate Materials Representative.

10.4.5 Detroit Manufacturing Systems will not be responsible for material beyond the cums as authorized above. Quantities on release beyond the RAW cum are for planning purposes only.

DMS's release requirements may change on a daily basis due to fluctuations of customer requirements. Detroit Manufacturing Systems is committed to meeting these requirements without exception or assistance from our customer. Excess freight or labor costs incurred by DMS in order to meet delivery requirements are not passed on to our customer, no matter the circumstance. Because of this, we require our supply base to provide the same level of flexibility and support. This is the basis for FAB and RAW authorizations as stated above.

11.0 Incidents of Quality and Delivery Nonconformance's

11.1 Quality Nonconformance

11.1.1 Purchased components found to be nonconforming through line rejections, testing failures, failed inspection results, customer concerns, warranty, customer returns and/or obsolete material are handled through the following procedure:

- The supplier will be notified of the concern via telephone and/or electronically. All relevant containment actions will be established at this time.

- A Defective Material Notice (DMN) will be issued to the suppler.
- Incidents of nonconforming product will be reflected in the monthly supplier ratings.

11.1.2 A corrective action report addressing the reported concern is to be submitted in the appropriate format (Global 8-D, 7-Step, DMS Divisional format, or other pre-approved format) within the following time frames:

- Initial response describing immediate containment activities up to and including sort, rework and shipment of certified material required within 24 hours.
- A completed corrective action report including preventive action is required within 3 business days for Direct Ship suppliers.
- A completed corrective action report including preventive action is required within 5 business days for standard purchased components (unless otherwise specified).
- For more complex nonconformance issues, a corrective action report citing as a minimum, containment actions, the potential root cause(s) and the planned permanent and preventive actions and timing for such actions is to be submitted within the timeframes noted above.

Note: Should a response not be received from a supplier, any stated charges associated with the notice will be considered accepted by the supplier.

11.1.3 Root cause for escape and occurrence and action addressing both must be included on the corrective action report. Documented corrective actions must address product, process and system causes of the reported nonconformance.

11.1.4 Terms associated with costs charged to the supplier (time duration of applied charges, sort costs, methods of calculation, etc.) as a result of a quality concern that may be applied as applicable are as follows:

- Sort of supplier product on or off line to support production schedules.
- Production line shutdown.

Program	$ Total/Min
F150 (DTP)	$76
F150 (KCAP)	$29
Mustang	$38
Taurus/Expl	$31
Exp/Nav	$45
Focus	$33
Wrangler	$68

Table 1
Line Downtime

- Sort and/or scrap of finished product.

- Material transfer of nonconforming supplier product.
- Costs associated with problem investigation.
- Testing costs.
- Costs associated with rework.
- Related transportation expenses.
- Any costs incurred by DMS for customer sort, rework, and/or line disruptions.
- OEM assembly plant changes assessed to DMS as a result of a supplier non-conformance.

- Instrument panel tear downs.

Program	$ Total/IP
F150 (DTP)	$1,038
F150 (KCAP)	$312
Mustang	$311
Taurus/Expl	$336
Explorer - Leather only	$1,395
Expedition	$1,831
Navigator	$1,914
Navigator - Leather only	$2,810
Focus	$486
Wrangler	$1,133
Table 2	
Rework/Teardown	

- Warranty returns.
- Administrative costs.
- The process is defined, below:

Incoming Non-conforming Materials Containment and Supplier Chargeback Policy

1. If a non-conformance is detected by either DMS or DMS' customer, DMS will:
    a. Implement immediate containment to prevent issues from reaching DMS's customer.
    b. Contact the supplier, by phone, to inform them of the necessity for containment and to provide whatever details are available about the non-conformity that might include, but are not limited to, dimensional date or photographs.
    c. Follow-up the phone notification with the same message in an email that will include a Supplier Quality concern (SQC) form to document the potential for an impending charge back.
2. The supplier must:
    a. Take immediate containment actions to prevent further non-conformities from being sent to DMS.
    b. If requested by DMS, send resources to DMS to contain their product (Note: Until a clean point has been established, all

product at DMS confirmed as conforming to requirements and containment or corrective action have been validated at the supplier, DMS will continue to apply either internal or 3rd party resources to ensure only satisfactory parts are presented to DMS manufacturing for use in assembly. The supplier will be charged for this containment activity.) Note: For suppliers of electrical components, for which DMS is not equipped to analyze, summary on-site presence at DMS is required.

c. The supplier, in writing, acknowledges responsibility of the issue.
d. Within 24 hours, provide an 8D to DMS through, at least, D3.

3. If the supplier is not able to provide evidence of validated containment, DMS will engage 3rd party containment on-site at DMS, for which the supplier will be billed. The following charges will then apply:
    a. A $350.00 administrative fee.
    b. A 5% management fee added to the 3rd party sort cost.
    c. A $500.00, per shift, access fee for floor space and inventory control and management.
4. Daily follow-up is required from the supplier's Quality department to the DMS Supplier Quality department on the progress of the 8D until the 8D is complete. A completed 8D is required by DMS within 10 days to allow DMS to comply with Ford's 15 day requirement.
5. DMS will solicit an RMA form the supplier for approval to return all defective material found at DMS. The defects will be applied toward the calculation of PPM.
6. If DMS incurs charges from its customer as the result of a supplier defect, the charged will be passed through to the supplier, in addition to a $1,000 DMS processing fee.
7. Upon closure of the non-conformance case (SQC), DMS will issue a supplier charge back report with a summary of charges. The supplier will be given 5 working days to respond to the report. If the supplier doesn't respond within 5 working days, the charges will be deemed acceptable to the supplier and they will be processed by means of applying a debit. In the event that the non-conformance has a severe impact and / or is a repeat problem, DMS may require Controlled Shipping. Controlled Shipping is a formal demand by DMS for a supplier to put in place an additional offline inspection process to sort for nonconforming material, while implementing root-cause analysis and corrective actions. See section 11.2 for Controlled Shipping Procedure.

    Note: Costs subject to change to ensure complete recovery.

11.1.5 All anticipated supplier charges will be discussed and mutually agreed upon by Quality Representatives of the affected Detroit Manufacturing Systems Division and the designated Supplier Representative. If agreement cannot be reached, the issue will be forwarded to the appropriate DMS Purchasing Representative within 30 days of final notice issuance.

11.1.6 It is the responsibility of the supplier to notify the affected Detroit Manufacturing Systems Division in the event that a nonconforming condition of supplier components exists or is suspected. Notification must be followed by documented corrective action as previously described.

11.1.7 If the DMN requires part certification, each container must be clearly marked with the following:

- Reason for Certified stock (DMN #, sort reason, etc).
- Inspector initials and date certified.

11.1.8 Detroit Manufacturing Systems reserves the right to send the appropriate Purchasing, Supplier Development, Materials and/or Quality representatives into the supplier/sub-contractor's production facility to establish 100% compliance and ensure that effective containment and corrective action has and is currently taking place. Detroit Manufacturing Systems' customer may accompany DMS Representatives if so requested.

11.2 Controlled Shipping

Placement on **Controlled Shipping 1 (CS1)**

Controlled Shipping Level 1 is Level 1 containment is defined as additional controls implemented at the supplier's location, upon DMS's request, following the identification of a supplier quality issue. The goal of this containment is to cleanse the entire system of any non-conforming material and to shield DMS from receiving any additional defective product. The supplier is required to quarantine and sort all suspect product within their facility, at their subcontractors, in transit, and at DMS facilities, and at any customer service parts location which may have parts in inventory.

Upon identification of an issue, the DMS site quality contact will initiate containment activities by sending the Level 1 form to the supplier's Quality Manager. The letter details the specific nonconformance and required supplier actions, including inspection and exit criteria. The DMS site quality contact will place a follow-up phone call ensuring that the supplier representative has received the letter and requesting immediate containment activity based at the supplier's facility. The supplier is responsible for acknowledging the Level 1 notification by returning a copy of the letter with an authorizing signature to the DMS site quality contact.

The supplier will be responsible to reply with their implemented containment plan via an initial 8D within 24 hours of Level 1 notification. The containment plan must be reviewed and agreed upon by the DMS site quality contact. The supplier is responsible for keeping the customer location advised of ongoing containment results until released from Level 1.

Data from the supplier's containment activities must be kept on file and available upon DMS's request. Quality tools such as trend, Pareto, or Paynter charts are expected to be utilized as verification of containment effectiveness. This data will be held in DMS's product file after completion and exit from Level 1 containment.

Criteria for exiting Level 1 containment will be determined by the DMS site quality contact. Exit criteria will be based on reaching a pre-determined quality level, not a number of parts or days sorted. To exit required containment, the supplier must achieve a pre-determined quality level after a minimum of 30 days and, or three production lots. The exit plan must include clear and measurable elements for the specific non-conformance issues being addressed and a timeline for implementation of permanent corrective actions. DMS site quality contact will evaluate the exit

criteria and will communicate in writing that the supplier has been removed from Level 1 containment.

Placement on **Controlled Shipping 2 (CS2)**

Controlled Shipping Level 2 containment is defined as the implementation of additional controls by an impartial third party selected by DMS at the expense of the supplier. Level 2 containment is enacted when a supplier's Level 1 containment activity fails to shield DMS from receipt of non-conforming material. The DMS site quality contact analyzes the non-conformance issue(s) and determines if Level 2 containment is required. The DMS site quality contact will initiate containment activities by making the selection of who will be doing the 3rd party containment and by sending a Level 2 letter to the supplier's Site Manager and Quality Manager. DMS Purchasing Buyer and or DMS Quality are actively involved in the decision to implement Level 2 containment.

The Level 2 letter details the specific non-conformance and required supplier actions, including inspection and exit criteria. In addition, the letter may communicate a kick-off meeting specific to the supplier's failed Level 1 activities.

The DMS site quality contact will place a follow-up phone call ensuring that the supplier representative has received the letter. The supplier is responsible for confirming receipt of the Level 2 notification with an authorized signature by returning a copy of the letter to the DMS site quality contact.

The DMS site quality contact assigns a sorting company (third party) to perform the Level 2 containment activities. The supplier's input on the company used will be considered in the decision making process. DMS site quality contact will define the required checks and facilitate definition of the exit criteria.

The third party will be responsible for performing the sort function per the established inspection criteria and recording the results. The third party will provide documentation to both the supplier and DMS site quality on the progress of containment activity.

The supplier is responsible for issuing the purchase order to the third party source and is responsible for all costs for the sort company performing containment activities. Initiation of Level 2 containment does not relieve the supplier of any relevant Level 1 activities following the aforementioned containment guidelines and responsibilities.

Additionally, the supplier is required to develop a Level 2 communication plan. The plan should address the format and frequency of communication to the affected DMS location. The supplier is responsible for communication of all issues identified during Level 2 containment.

Level 2 will not be removed until a review of the data indicates that all significant issues show problem closure as evidenced through no issues found in the Level 1 containment upstream in the process. If applicable, a review meeting will be scheduled at the supplier's facility to review the data prior to discontinuing the audit.

Following this review, the DMS site quality contact will evaluate the exit criteria and communicate in writing that the supplier has been removed from Level 2

containment. Level 1 containment must continue at the supplier's location until the DMS site quality contact has given approval for Level 1 to be discontinued.

11.2.1 When so directed, suppliers will be required to certify product after a lot rejection has occurred. Two types of controlled shipping actions are employed when this situation occurs.

- Supplier conducted sort and certification of subsequent part shipments (CS1).
- Third party sort and certification (CS2).

11.2.2 The level of inspection (CS1 or CS2) will be determined based on one or more of the following reasons:

- Repeat quality issues and/or failure to resolve a quality issue.
- Severity or risk to the organization.
- Incapable supplier process(s).
- Line disruption.
- High PPM level.
- Customer complaints.
- Other factors deemed applicable.

11.2.3 The Controlled Shipping Process will be applied as follows:

- The appropriate Detroit Manufacturing Systems' Quality Representative will initiate controlled shipping as deemed necessary based on a review of the quality concern(s).
- The supplier will be notified of their Controlled Shipping status. Additionally, DMS's customer and/or the supplier's quality system registrar may be notified of Controlled Shipping Level 2 as deemed necessary.
- Controlled Shipping status will be reflected in the Supplier Performance Rating System.
- DMS Purchasing, Supplier Development and/or Quality will develop and review the Controlled Shipping expectations and exit criteria with the supplier.
- DMS Purchasing, Supplier Development and/or Quality personnel will monitor the supplier's progress to plan.
- When the supplier has met the exit criteria, the Controlled Shipping status will be removed. Detroit Manufacturing Systems' customer and the supplier's quality system registrar will be notified of the change in status as applicable.
- Failure to exit from Controlled Shipping status may result in New Business Hold or de-sourcing.

11.2.4 Coordination and follow up of all controlled shipping actions are the sole responsibility of the supplier. Part supply to the using DMS Division must meet released quantities without supply interruption.

11.2.5 The supplier and using Detroit Manufacturing Systems Division will mutually define the certified material identification requirements.

11.3 Delivery Nonconformance's

11.3.1 A Delivery Performance Report (DPR) may be issued to the supplier, at the discretion of the Materials Representative or Supplier Development, for any delivery related nonconformance. If the supplier does not agree with the reported discrepancy, the Materials Representative must be notified in writing within 48 hours from receipt of the DPR; otherwise the DPR will stand as is without review.

11.3.2 A DPR may be issued for any of the following reasons, but is not limited to:

- Under, over, late or early shipments
- No ASN or late ASN
- No documentation or inaccurate documentation
- Damaged freight
- No label or inaccurate label
- Incorrect packaging

11.3.3 The Supplier is to provide an initial response to each DPR within 48 hours of issue, and provide a written Corrective Action Report with preventative action within 3 business days of the monthly Supplier Delivery Performance calculation being issued.

11.3.4 At the discretion of Detroit Manufacturing Systems' Purchasing or Materials Representatives, the supplier will be required to submit a detailed plan addressing behind schedule situations (as applicable). The plan is subject to DMS Purchasing and/or Materials Representatives approval and will be closely monitored for adherence.

11.3.5 The supplier is to immediately notify the affected Detroit Manufacturing Systems Division Materials Representative of an inability or anticipated inability to ship to schedule requirements. Notification is to be followed by documented corrective action as previously described.

11.3.6 The supplier is expected to automatically expedite shipment should they foresee or incur a past due situation. In addition, it is the supplier's responsibility to contact the Materials Representative to ensure availability of a receiving dock.

11.4 Excess Transportation Charges

If the need to expedite shipments is deemed to be the fault of the supplier, the supplier will bear the costs for expedited freight required to meet delivery requirements. This includes any excess freight charges incurred by DMS to meet the customer's delivery requirements.

Additionally, excess transportation costs may be debited back in full to the supplier for reasons including, but not limited to the following:

- Unauthorized multiple shipments
- Expedited freight as a result of past due requirements
- Expedited freight as a result of defective material
- Using unauthorized truck lines
- Past due parts received on regularly scheduled truck(s)

11.5 Downtime Costs

The supplier is responsible for all costs associated with downtime at Detroit Manufacturing Systems and/or downtime costs billed to Detroit Manufacturing Systems by their customer when such costs are deemed to be the fault of the supplier due to quality, delivery and/or other incidents of nonconformance. Refer to the DMN and DPR Fee Schedule located on Supply Web. Indicated charges are subject to change without notice. See section 11.1.4 for more information.

12.0 Engineering Changes

12.1 Detroit Manufacturing Systems Initiated Changes

All potential, proposed and/or mandated engineering changes affecting purchased product, will be submitted to the supplier for impact and timing. These engineering change/change request documents will be processed via Detroit Manufacturing Systems ECR/ECO procedures. Documentation for approved engineering changes will be forwarded to the supplier for execution as defined in the DMS ECR/ECO procedures. All changes are required to be approved in accordance to the PPAP requirements before production implementation.

The supplier is required to:

- Respond to ECR/RFQ requests within 5 business days or as otherwise arranged with the designated Buyer.
- Itemize applicable cost and timing in the required format.
- Manage and report all applicable engineering changes of the Tier 3 supply base.
- Submit samples of all executed changes, in accordance with Production Part Approval Process (PPAP) requirements prior to production implementation. Report Tier 3 changes as part of the PPAP process.

12.2 Supplier Proposed or customer Directed/MPA Engineering Changes

Supplier proposed changes must be submitted for approval consideration via the Detroit Manufacturing Systems Engineering Change Request and Notification (ECR/ECN) procedures. All proposed changes, including but not limited to the following are to be communicated as applicable:

- Proposed material changes.
- Proposed process changes.
- Proposed tooling and/or fixture changes.
- Proposed manufacturing location changes.
- Proposed Tier 3 supplier changes.
- Any other changes as defined in the AIAG PPAP manual, including Customer Specifics.

12.2.1 **Rejected Supplier Change Requests** will be returned to the supplier with an explanation and/or request for additional information.

12.2.2 **Approved Supplier Change Requests will** be communicated to the supplier through Detroit Manufacturing Systems ECR/ECN process documentation. The appropriate Quality Engineer will communicate sample submission expectations and timing requirements. Other

instructions and required documentation, when applicable, will also be communicated at this time.

Many DMS suppliers have a directed or MPA relationship with DMS' OEM customers to implement design engineering changes to pre-production component parts that are utilized in DMS assemblies. In this case, it is the responsibility of the supplier to:

1. Notify and communicate the timing of the change at the earliest possible time.
2. Arrange trials as appropriate with DMS.
3. Inform DMS of the impact on PPAP timing and pre-production builds.

DMS requires suppliers to inform their DMS contact prior to engineering changes being released in the OEM system.

*Ford-directed suppliers of components for DMS products (where the final customer is Ford Motor Co.) must also provide their Ford VPP timing to the DMS VPP Coordinator or assigned ASQ on request.

12.3 Engineering Change Notification and Control

All applicable documents and data to support engineering changes will be forwarded to the affected supplier(s) and controlled as defined in the Document Control Requirements section.

All executed engineering changes are to be submitted and approved in accordance with Production Part Approval Process (PPAP) requirements prior to production implementation.

12.4 Engineering Change Product Identification

The first shipment of engineering change products is to be identified as directed by the applicable Detroit Manufacturing Systems Quality Engineer or other authorized DMS Representative. Subsequent shipments may also require engineering change identification when deemed necessary by DMS. Each container of engineering change product is to include this identification. Failure to properly identify engineering change materials may result in the issuance of a Defective Material Notice. Related DMN charges may apply.

12.5 Product Obsolescence

Suppliers must submit obsolescence claims resulting from engineering changes within 28 calendar days of the change implementation date, including new model launches. Suppliers must use the Obsolescence Claim form posted on Supply Web, and submit via email to the appropriate Detroit Manufacturing Systems Material Planner. Claims received outside of the 30 days will not be processed.

DMS allows obsolescence claims for 2 weeks fabricated parts and 3 weeks of raw material, for a total of 5 weeks of material authorization.

13.0 Sample Submission Requirements

13.1 Advance Product Quality Planning (APQP)

All suppliers are required to utilize the methodologies defined in the latest released editions of AIAG Core Tools manuals, including:

- Advanced Product Quality Planning and Control Plan (APQP).
- Failure Modes and Effects Analysis (FMEA)

- Statistical Process Control (SPC)
- Measurement System Analysis (MSA)

These manuals are tools intended to assist the suppliers in meeting the requirements necessary to produce a world-class product.

It is the responsibility of each supplier to ensure that their subcontractors (Tier 3 suppliers to Detroit Manufacturing Systems) are meeting similar expectations and requirements.

13.2 General Sample Submission Requirements

13.2.1 Suppliers are to meet all requirements of the latest released edition of the AIAG Production Part Approval Process (PPAP) manual. This requirement extends to all commodities supplied by the supplier's subcontractors and third tier suppliers.

13.2.2 All submissions for production part approval must include the required information as specified for a Level 3 submission, unless otherwise instructed in writing. All submissions for prototype part approval must include the requirements specified for Level 2 submission unless otherwise instructed in writing.

13.2.4 Regardless of submission level, all documentation defined in the AIAG PPAP manual and DMS specific requirements are to be on file and available for review upon request.

13.2.5 Suppliers are responsible for costs incurred by Detroit Manufacturing Systems resulting from late or incomplete submissions.

13.2.6 All parts purchased by DMS require the complete and accurate completion of the program specific DMS PSW supplied by your ASQ. Below are items that are uniformly required:

1. Your buyer/purchasing agent (on the warrant) shall be your assigned program buyer.
2. Ensure that your IMDS # is on the warrant and that the IMDS #'s for your parts were already posted as required.
3. DMS part numbers must be used on the warrant.
4. Current revision numbers must be completed on the warrant.
5. Current print numbers must be completed on the warrant.
6. Part weight (kg)

13.2.7 Suppliers that have entered into an MPA with DMS and the OEM customer are required to engage in all APQP activities and processes, including PPAP, with the OEM customer Supplier Quality representatives. In addition, they are required to communicate timing of PPAP approval with DMS to ensure the timing commitments of our common customer are met. However, the documentation required as evidence of their successful PPAP varies from traditional DMS suppliers.

13.2.8 DMS is responsible for approving all supplier (non-MPA) PPAP submissions. It is DMS' obligation to our OEM customers to ensure that all requirements of PPAP are met by our suppliers. Any certification or business relationship with a common OEM customer does not relieve DMS of full responsibility for the quality of supplier product from the sub-tier suppliers. Thus, DMS requires full level 3 PPAP package submissions and completed DMS PSW. This applies even when the supplier has an OEM signed PPAP PSW or has self-certified statues with the OEM.

13.2.9 Unless otherwise specified, a complete annual layout inspection, including all sub-components, is required for all parts. **All suppliers shall annually revalidate their respective production**

components, and be able to provide the results to DMS within 48 hours of the request. Suppliers shall compile revalidations and document this requirement in the production control plan for all parts supplied regardless of the product line/region. Those features/characteristics/notes that will be part of the revalidations package need to be designated such at the time of initial PPAP, but at a minimum shall also include a PSW and valid material certification report(s) not more than 12 months old, a full dimensional report, and a capability study for all print designated special characteristics.

13.3 Specific Sample Submission Requirements

13.3.1 When requested, PPAP submissions must be made in accordance with OEM specific requirements. Examples of OEM specific PPAP Submission requirements are:

- Electronic submission through ePPAP.
- Phased PPAP.

13.3.2 Part submission warrants must be filled out completely, indicating the finished part number(s) that are being submitted. Only parts within the same product "family" (i.e. multiple colors of the same product) and of the same revision level may be submitted on a single warrant. All part numbers must be listed on the warrant.

13.3.3 Unless otherwise instructed, six (6) sample parts per cavity will be required for tools consisting of 1-3 cavities; two (2) sample parts from each cavity is required for tools with four (4) or more cavities.

13.3.4 Dimensional layout data must be provided for each drawing dimension and note. A ballooned reference drawing showing the relationship between the layout results and drawing specifications must accompany the layout report. Graphical math data plots are acceptable for profile dimensions. A sufficient number of inspection points to adequately define the surface are required. Prior approval of inspection points is recommended.

13.3.5 Only PPAP approved raw material sources may be used. Material certifications must include a copy of the OEM customer color and/or construction approval (e.g. General Motors Material Evaluation Form). Material certifications must indicate lot numbers and dates as certification that these approved materials were used in the manufacture of the submitted samples.

13.3.6 Laboratory testing, when applicable, must be conducted by an accredited facility (GP-10 (GM), IS0 / IEC Guide 17025). A copy of the accreditation with scope of testing is to be included with the submission.

13.3.7 Appearance approval, when required, must be submitted via an Appearance Approval Report (AAR). The AAR is to be completed in its entirety. On occasion, the supplier may be requested to obtain appearance approval directly from the end customer. Suppliers will be notified in writing when this is the case.

13.3.8 Significant characteristics must demonstrate preliminary process potential and capability indices of 1.67 or greater. Long-term process potential and capability indices must be 1.33 or greater.

13.3.9 Restricted and reportable chemicals contained in the raw materials and parts used in the manufacture of supplied components must be reported based on the IMDS (International Material Data System) requirements. This form must be submitted with packages whether reportable chemicals are contained in components or not.

Note: All questions regarding PPAP submission should be directed to the appropriate Detroit Manufacturing Systems Quality Engineer.

13.4 Reporting Material Composition (IMDS)

The supplier is required to provide evidence that the Material/substance Composition reporting for each part has been completed and complies with requirements. Material is to be reported in the International Materials Data System (IMDS) unless another system or method is pre-approved by Detroit Manufacturing Systems authorized personnel.

Note: IMDS is available through mdsystem.com.

13.5 **Conflict Minerals:** All DMS suppliers are required to be compliant with United States Securities and Exchange Commission conflict minerals rules. The rule applies to companies that use minerals including tantalum, tin, gold or tungsten if: a) the company files reports with the SEC under the Exchange Act, and b) the minerals are "necessary to the functionality or production" of a product manufactured or contracted to be manufactured by the company.

13.5.1 Directed Suppliers: All directed suppliers will handle all reporting and compliance matters directly with the OEM. Copies of compliance reports must be provided to DMS.

13.5.2 DMS Sourced Suppliers:

- If conflict minerals are necessary to the functionality or production of a product manufactured or contracted to be manufactured by a public company, it must disclosed annually whether the minerals originated in the Democratic Republic of the Congo or an adjoining country.
- If so, the registrant must file a separate report detailing the measures taken to exercise due diligence on the source and chain of custody of the conflict minerals, the products that have not been found to be "DRC conflict free", the processing facilities, the country of origin and the efforts to determine the mine or location of origin.

13.6 Supplier Prototype Product Requirements

The requirements noted below pertain to prototype submissions received from suppliers providing component parts during the Design Verification and Prototype builds. If for any reason the Supplier cannot meet these requirements, they are required to notify DMS Supplier Quality in writing, prior to shipment. The supplier is to use the appropriate program documentation to note discrepancies.

13.6.1 **Prototype Submission:** The following documentation must be completed and provided with each shipment supplied for the prototype build. All documentation must reference the product number and the drawing date/level.

- Prototype Control Plan
- Pre-Production Sample Report
- Drawings
- Dimensional Results
- Sample Parts
- Proper Identification

13.7 Product Submission Disposition Status

13.7.1 FULL Approval

Full approval indicates that ALL engineering design record and specification requirements have been satisfactorily met.

13.7.2 CONDITIONAL Approval

Conditional approval MAY be granted under the following conditions:

- Product is from production tooling and meets all Appearance, Dimensional, & Test Specifications.

Exceptions/examples: Document missing/incomplete, Capability 1.0 to < 1.67 - Action Plan Required

- Product is not from production tooling or production tooling is off-site, but product meets all customer requirements.

  Exceptions/examples: Production tooling not complete or off-site, low volume tooling used, conveyors not in place, automation not complete – Action Plan Required.

13.7.3 REJECTED

Rejected status indicates that the product does not meet the required customer specifications

13.8 Special & Key Characteristics

13.8.1 Special Characteristics

As defined by AIAG, are product characteristics or manufacturing process parameters which can affect safety or compliance with regulations, fit, function, performance or subsequent processing of product.

13.8.2 Key Characteristics

DMS defines a key characteristic (material, dimension, performance) or a process parameter whose variation can negatively affect: compliance with the regulations (environmental/safety); safety of the user of a vehicle or product; the satisfaction of the final customer through quality reliability or durability of a fit, form and function; the performance of the product by downstream processing customers (inability to be workable/mountable).

Based on identification in the customer DFMEA, customer product development engineer approved supplier DFMEA (design responsible suppliers) and customer prints shall be clearly identified on process flow diagrams, PFMEA, control plans and addressed appropriately in supporting PPAP studies.

14.0 Lot Traceability

All material received by Detroit Manufacturing Systems must contain a lot code, or serial number, clearly identified on each label and container, ensuring full traceability of all material. Material must be traceable from receipt of raw material to each processing stage and through final assembly and shipping to DMS.

The supplier shall communicate, to DMS, the traceability method used (e.g. date and shift of manufacture along with sequential processing number). In some cases the component may be critical enough so as to

warrant part identification; these instances will be communicated through the appropriate quality and engineering groups.

A lot should contain a specific quantity of parts, and should not exceed eight hours or one day of production, at a maximum. In the event of certain commodity-based material, methods such as "dye lots" or steel coils will be acceptable.

The supplier shall ensure implementation and management of an effective FIFO method of stock rotation.

Failure to comply with traceability requirements may lead to rejection of material and issuance of non-conforming material reports.

Traceability Records shall be maintained and accessible for the life of the product, including service, plus one year.

15.0 INTERNAL AUDITS

15.1 Supplier/Sub-Contractor Internal Audits

15.1.1 Suppliers and sub-contractors will perform internal audits to verify the continued effectiveness of the Quality and Environmental Management Systems.

15.1.2 The internal audit will be performed at least once per year in accordance with a documented audit schedule. The audit schedule will be revised to increase audit frequency when warranted by internal and/or external performance issues.

15.1.3 Internal audits are to be conducted by personnel who are independent of the organizational or functional activity that is being audited.

15.1.4 Documented internal audit procedures will be in effect indicating:

- Audit system review for effectiveness and continuous improvement.
- Defined responsibilities for personnel conducting the audit.
- Content/questions within the audit.
- Documented audit schedule and frequencies.
- Follow-up procedures to monitor and confirm that corrective actions are completed and verified for effectiveness.

15.1.5 Internal audits and corrective action activities are to be maintained on file for three years and are to be available for review, upon request by Detroit Manufacturing Systems.

15.1.6 Detroit Manufacturing Systems may perform an audit review anytime a supplier/sub-contractor falls within the unsatisfactory supplier performance guidelines as previously established in the Supplier Guidelines.

15.1.7 Detroit Manufacturing Systems may review the suppliers' internal and/or third party audit results when based on just cause and reason.

15.1.8 Detroit Manufacturing Systems may perform audits of the suppliers'/subcontractors' Quality and/or Environmental Management Systems as deemed appropriate based on supplier performance issues and/or for supplier development purposes.

16.0 Associated Business Conditions

Additional situations may arise, from time to time, that are not specifically addressed in other sections of this manual. They will be noted in this section.

- Detroit Manufacturing Systems and its customers expect to have access to DMS's supplier facilities and records at reasonable times for the purposes of audits, assessments, inspection of goods and associated control systems.
- Suppliers are expected to share with Detroit Manufacturing Systems detailed cost data. Suppliers are also expected to use a fair and consistent method of applying the profit factor and distribution of overhead expenses in support of DMS requirements, consistent with goals of long-term financial viability.
- Suppliers must be willing to extend the benefits of cost reduction efforts with Detroit Manufacturing Systems.
- It is expected that a target for compliance of zero discrepancies be set for all goods and services to be supplied to Detroit Manufacturing Systems.
- Warrants and certification requirements will be stated on Detroit Manufacturing Systems purchase orders. Annual validations for raw material are to be carried out by an independent accredited testing when required by DMS.
- Suppliers will be held accountable for warranty costs due to negligence, process and supplier design issues.
- Products/processes that are jointly developed between Detroit Manufacturing Systems and its suppliers will be considered to have co-ownership and be royalties free unless otherwise negotiated.
- Suppliers must provide Country of Origin Certification and other documentation required under the US/Canada Free Trade Agreement and the North American Free Trade Agreement. All customs requirements must be met in a timely manner to ensure efficient transportation of goods.
- As a condition of business, all suppliers must be prepared, on request, to provide any information required by the Detroit Manufacturing Systems Purchasing Department to substantiate the ability to provide the necessary products, commodities and services. This shall include, but is not limited to, quotes provided on DMS developed cost model, technical capability and systems/procedures to evaluate key product characteristics and financial information. In addition, the supplier must be prepared to provide proactive initiatives such as cost reduction proposals and recycling programs to Detroit Manufacturing Systems.
- Suppliers will be accountable for all costs associated with an interruption in material supply to DMS resulting in a shutdown, due to labor, utility disruptions or equipment failures. All suppliers must have a contingency plan to mitigate risk.

17.0 Warranty

A primary focus of OEM Customers is expenses attributed to product performance after vehicle sale. Financial liability associated with warranty is more significant now due to consumer awareness and extended warranty coverage. Extensions of warranty periods from the traditional 12-months to 36-months and beyond have emphasized the need to deliver reliable and durable product or face warranty costs and owner dissatisfaction.

OEM's have stipulated that warranty costs will be shared with their supply base. As such, with respect to new and carryover programs, suppliers will be required to participate in warranty activities including:

- Warranty return reviews/analysis.
- Improvement actions.
- Warranty cost responsibility.

When a supplier's component is clearly implicated in a warranty issue with financial consequences, the supplier will accept these costs. Currently, purchase orders contain terms relative to warranty cost. The Statement of Work will specifically define details of the supplier participation.

18.0 Basic Working Conditions and Employment Status

18.1 **Basic Working Conditions:** When the Supplier performs work on the Goods or their component parts the Supplier will not: (a) use forced labor, regardless of its form; (b) employ any person below the age of 15, unless it is a part of a Government approved job training, apprenticeship or other program that would be clearly beneficial to its participants; or (c) engage in physically abusive disciplinary practices.

18.2 **Subcontractors:** If the Supplier retains subcontractors to perform work on the Goods or their component parts, the Supplier will use only subcontractors that will adhere to the requirements of Section 20.1. The Supplier will monitor the subcontractor's compliance.

18.3 **Adoption of Code:** The Buyer has adopted a **Code of Basic Working Conditions** that includes the requirements of Section 20.1 and other work-place practices. The Code applies to all of the Buyer's operations. The Code can be found on the Detroit Manufacturing Systems web site at www.dmsna.com or by contacting the Buyer directly. The Supplier is encouraged to adopt and enforce a similar code of practice and to have its subcontractors do so.

18.4 **Certification of Compliance:** The Supplier represents when it delivers the Goods that it has complied with the requirements of Section 20, Section 20.1, and Section 20.2. The Buyer may retain an independent third party, or request the Supplier to retain one reasonably acceptable to the Buyer, to: (a) audit the Supplier's compliance with the requirements of Section 20; and (b) provide the Supplier and the Buyer with written certification of the Supplier's compliance, including areas for potential improvement.

18.5 **Cost of Audit:** The Supplier will bear the cost of any third-party audit and certification under section 20.4, regardless of which party retained the auditor. The Buyer, at its option, may accept an audit or certification by the Supplier in lieu of a third-party certification.

18.6 **Temporary Assignment of Employees:** The temporary assignment of employees of one party to the facilities operated by the other party will not affect the status or change the employment relationship of the assigned employees.

Revisions

Revision	Section	Description	Date
Initial		Initial Release – Re-write for Revision 003a	08/28/2015
004	2.1, 2.4, 2.5, 2.8, Attachment	Revision to incorporate IATF requirements - Revision 004	02/06/2018