Plasan Carbon Composites Supplier Guidelines

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Introduction

Plasan Carbon Composites is committed to maintaining its position as a Global Leader within the automotive sector. We will continue to be the supplier of choice to our Customers, through continued leadership and excellence in Innovation, Technology, Cost, Quality and Delivery. 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. Those suppliers demonstrating the desire and ability to support us through the appropriate engineering, quality and manufacturing disciplines focused on effective design validation, mistake proofing, process controls, delivery, service and continuous improvement will continue to share in this partnership.

The relationship between Plasan Carbon Composites 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 upon optimization of value and sound business principles. We will not allow any undue influence or inappropriate activity to compromise those decisions. We are committed to managing our Supply Base in a manner that continues to bring shared value, growth and reward. In support of maintaining a professional business relationship with our suppliers, our senior management encourages an open door policy to facilitate discussion and resolution of issues through escalation, as appropriate.

Plasan Carbon Composites "Forever Requirements"

The foundation of a good relationship with our supply base is premised on open, effective and proactive communication. The occurrence of non-conforming product, unauthorized changes and related supply or capability issues present risk to both Plasan Carbon Composites and to our customer when not communicated and managed effectively. This risk also generates when these occurrences happen at the Tier 2, 3 or 4 suppliers or sub-contractors facilities.

Our ""Forever Requirements" are as follows:

- Proactively communicate with your Customer. Know when to raise The "red flag".
- Notify the Customer of proposed material or process changes.
- Notify the Customer of proposed manufacturing location changes.
- Watch for Divisional issues and tell your Customer about them.
- Notify the Customer of potential supply and/or capability issues.

The intent of these requirements is to eliminate surprises and special cause events that can impact upon Plasan's customer(s). The requirements apply to ALL suppliers and sub-contractors included as part of the process of manufacturing our components, and it is expected that you will manage your entire supply base with these principles.

We consider these requirements paramount in establishing a relationship of trust with our suppliers, and violation of any requirement will result in escalation to Quality and Purchasing Organizations within Plasan Carbon Composites. If deemed necessary, a Supplier's IATF/ISO Registrar will be contacted and asked to conduct the appropriate investigations and assessments, at the Supplier's expense. Continued non-compliance could lead to loss of business. If you are uncertain when or for what reason(s) Plasan Carbon Composites should be notified, you are asked to contact your Plasan Carbon Composites 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 designated Plasan Carbon Composites Buyer. Comments or concerns should be noted below prior to returning your acknowledgment sheet copy. Updates to this guideline document will be sent when updates are available.

Comments (Please Type):

Supplier Name, Address, Telephone 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 Plasan Carbon Composites master supplier file:

- ❑ Supplier Capability Survey or Supplier Profile*
- ❑ Sample Labels for Each Part Number
- ❑ ISO 9001 :2015 Certificate *
- ❑ IATF 16949 Certificate *
- ❑ Certificate of Liability Insurance
- ❑ Minority Status Certificate (if applicable)
- ❑ Duns #_____

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 copies of the certificates of registration and Supplier profile whenever there is a change in the reported information

GENERAL INFORMATION

Plasan Carbon Composites Operating Divisions	
• Plasan Carbon Composites Corporate Office	47000 Liberty Wixom, Michigan 48393 Phone: 248-924-3801 Fax: 248-773-7164
• Plasan Carbon Composites Walker	3195 Wilson Drive NW Walker, MI 49534 Phone: 616-965-9450 Fax: 616-965-3424
E-Mail Addresses are formatted:	first name.last name@plasancarbon.com
Internet Address:	www.Plasancarbon.com

Any questions or concerns with information that has been supplied by Plasan Carbon Composites should be immediately addressed with the appropriate the Plasan Carbon Composites personnel.

1.0 Communication

1.1 General Communication

An essential ingredient to a successful partnership is clear and concise communication. At Plasan Carbon Composites, our means of communicating direction, expectations, guidelines and systems include:

- Purchase Orders
- Supplier Performance Data
- Letter of Intent
- Sourcing Commitment Documents
- Statements of Work
- Regular scheduled meetings
  - Cross Functional Launch Team meetings
  - Performance Review meetings
- The Supplier Guidelines Manual

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

Although we communicate in numerous ways, Supplier Performance Ratings are indicative of a suppliers overall performance and is the main input of new business sourcing.

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. It is the suppliers' responsibility to contact the appropriate Plasan Carbon Composites personnel with any questions regarding the requirements contained within the Supplier Guidelines.

2.0 Selection and Assessment of Suppliers and Subcontractors

2.1 IATF 16949 / ISO14001 Certification

As specified by IATF 16949, Plasan Carbon Composites 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, unless otherwise authorized by the customer. The supplier is to provide Plasan Carbon Composites with current copies of their registration certificates. Additionally, the supplier is to notify Plasan Carbon Composites of any change in registration status.

Plasan Carbon Composites specific requirements will supersede the OEM requirements, if and only if the Plasan Carbon Composites requirements are more stringent or are in addition to the OEM requirements.

2.2 Potential New Suppliers/Competitive Bidding

Potential New Suppliers follow the competitive bidding process as the method for receiving business awards from Plasan Carbon Composites through initial submission of a Request for Quotation for goods or services not previously supplied to Plasan. 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 Plasan's customer for a specific part or commodity, the directed sources shall meet all requirements as specified in the Supplier Guidelines and may also undergo an assessment review.

2.4 Supplier Profile

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 in the reported information.

2.5 Approved Supplier List

An Approved Supplier List exists for production suppliers and is utilized by Plasan Carbon Composites for strategic sourcing decision-making by commodity or service performed. The listing is updated on a continuous basis in order to reflect input from the assessment, development and performance monitoring systems maintained by Plasan.

2.6 Current Suppliers

Current suppliers on the Approved Supplier List must continue to meet performance objectives of Plasan Carbon Composites. Supplier performance will be monitored as specified in the *"Supplier Performance Monitoring, Evaluation and Development"* section whereby these performance measures will serve as the basis for future sourcing decisions.

3.0 Supplier Performance Monitoring, Evaluation and Development

3.1 Monitoring Methods

Plasan Carbon Composites 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, each Plasan Carbon Composites Division will provide rating information to suppliers.

Plasan Carbon Composites also defines supplier performance requirements. Performance requirements are tracked and measured including, but not limited to indicators such as:

- Quality Performance
- Timely problem resolution
- Responsiveness
- Sample submission
- Key delivery objectives
- Cost performance
- Technical support
- Financial capability

Plasan Carbon Composites 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 suppliers or the Plasan Carbon Composites facilities, probationary status precluding new business awards, and in extreme circumstances, de-sourcing.

3.2 Supplier Ratings

Plasan Carbon Composites will provide the supplier with rating information. 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.

3.2.1 **Quality performance** will be monitored by tracking quality issues, past due actions.

3.2.2 **Delivery performance** will be monitored by tracking compliance to shipment due date(s) and quantity accuracy. Any deviations from timeliness and quantity accuracy requirements must be approved by the appropriate Plasan Carbon Composites 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.

3.2.3 **Responsiveness** will be considered in the rating when a supplier fails to respond as directed. 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 PCC. Administrative accuracy goal is 100%.

3.2.4 **The Supplier Performance Summary (SPS) Rating** will be issued each quarter to production component suppliers and sub-contractors. Other forms of communication (letters, phone calls, etc.) regarding the supplier's performance rating is optional and provided only 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 Representative within five business days of receipt; otherwise the rating will stand without review.

3.2.5 **Unsatisfactory supplier performance will be determined by the following:**

- Less than 100% on-time delivery performance, unless otherwise agreed upon by Plasan Carbon Composites.
- Noncompliance to any requirements as outlined in the Supplier Guidelines.
- Non-responsiveness to customer service request(s).

3.2.6 **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 (action plan, 8D, PPSR) requested and monitored for compliance.
- Meeting between the supplier representative(s) and the designated Buyer, Materials Representative, Director of Supply Chain, Program Manager, and/or Quality Representative(s) to develop a time-line 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 of all parts 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 Plasan Carbon Composites, approved 3rd party prior to shipment. This expense will be borne by the supplier. (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.

3.2.7 Plasan Carbon Composites will also compile an overall list of the quarterly and yearly performance of the supply base. Continued high performance levels will be strongly considered when awarding new business.

3.3 New Business Hold

3.3.1 Suppliers may be placed on New Business Hold (NBH) for any one, or 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 Purchasing discretion)

3.3.1 The New Business Hold (NBH) process is as follows:

- Plasan Carbon Composites Purchasing and/or Quality will review the supplier's performance and initiate the NBH process.
- Plasan Carbon Composites Purchasing representative will notify the supplier in writing of their New Business Hold (NBH) status via the NBH letter. The supplier's quality system registrar may also be contacted regarding Controlled Shipping or NBH status.
- Purchasing and/or Quality will develop and review the improvement expectations and exit criteria with the supplier.
- Purchasing and/or Quality will monitor the supplier's progress to 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 (as applicable) and removed the NBH status (for the affected supplier Duns location) from the Supplier Performance Rating System.

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 Plasan Carbon Composites 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 Plasan Carbon Composites, 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 Plasan Carbon Composites personnel.

4.4 Record Retention

Suppliers are expected to maintain applicable retention periods as specified in the latest released edition of the IATF 16949 standard and OEM Specific Requirements when applicable, unless otherwise specified by Plasan Carbon Composites. 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 Plasan Carbon Composites Supplied/Owned Equipment

5.2.1 All equipment provided by, and/or property of, Plasan Carbon Composites 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 Plasan Carbon Composites 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 Plasan Carbon Composites 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 Plasan Carbon Composites 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 in accordance with IATF standards.

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 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:

- Unique identifier
- Revision level (when applicable)
- The calibration date and the next calibration due date.
- 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: Plasan Carbon Composites must be notified if suspect or discrepant product has been shipped as a result of out calibration gages, fixtures, measuring or test equipment.

6.0 Packaging

6.1 Packaging Suitability

It is the supplier's responsibility to provide any product sold to Plasan Carbon Composites in approved packaging as determined by Plasan's APQP process. The criteria necessary to determine suitability may include:

- Robustness to ensure integrity of product
- Compliance with health and safety guidelines
- Compliance to Plasan Carbon Composites Operations requirements
- Compliance to AIAG standard guidelines
- All expendable packaging should be recyclable.

6.2 Initial Packaging Approval/Change Requests

6.2.1 Plasan Carbon Composites 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. 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 Plasan Carbon Composites 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 Plasan Carbon Composites 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, Plasan Carbon Composites may assess current production part packaging feasibility using returnable containers. Suppliers are encouraged to consider conversion to reusable containers.

Plasan Carbon Composites 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 Plasan Carbon Composites 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 shall is responsible for all maintenance and logistical tracking of the returnable. The supplier shall notify Plasan Carbon Composites when repairs are necessary.

6.3.3 Financing of returnable packaging will comply to mutually agreed 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.

7.0 Labeling

7.1 Container Label Requirements

7.1.1 All materials for prototype or production consumption, shipped to Plasan Carbon Composites, 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
- primary metals labels and
- part labels when specified by design records, specifications, or other written requirements

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

7.1.3 Characters and symbols shall comply with the Plasan Carbon Composites requirements of the AIAG, B-8 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-3 standard – Parts Shipping Label. Custom formats may be specified by a Plasan Carbon Composites via a Customer Compliance Specification Sheet.

7.1.5 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.

7.1.6 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.

7.1.7 Labels will include the following information:

- 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 (UOM)).

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 Plasan Carbon Composites.

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 Plasan Carbon Composites materials person 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 Plasan Carbon Composites 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 PCC for approval.

7.3 Label Approval

Suppliers must obtain approval of newly introduced label formats from Plasan Carbon Composites prior to implementation.

8.0 Transportation

It is important that Plasan Carbon Composites ' suppliers are aware of transportation and delivery requirements, as it is one of the key performance metrics upon which they will be assessed. Plasan Carbon Composites 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 location, 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 Plasan Carbon Composites Routing Instructions.

8.1.3 Any changes to carrier or delivery frequency must be approved in writing by the applicable Plasan Carbon Composites 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 in writing or similar document used by Plasan Carbon Composites. Plasan Carbon Composites 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.

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 requirements may differ by program, 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
- Quantity ordered and Quantity shipped of each part
- Number of cartons/skids/containers/weight per part

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.

8.4 Advance Shipping Notice (ASN)

8.4.1 The ASN must be sent within 1 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 Plasan Carbon Composites materials person 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 Plasan Carbon Composites 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 Plasan Carbon Composites 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 Plasan Carbon Composites.

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

1) Compliance with all relevant local, provincial, state and federal government legislation with special emphasis on hazardous waste and other environmental requirements
2) The Purchase Order terms and conditions
3) Requirements as stated in the Supplier Guidelines
4) Letter of Intent
5) 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

Plasan Carbon Composites will issue purchase orders to suppliers for awarded programs. In advance of receipt of purchase orders, suppliers to Plasan Carbon Composites 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 Plasan Carbon Composites that the supplier be the product supplier for the related program provided the supplier meets commercial, design, program support, quality, and delivery requirements. Where Plasan Carbon Composites 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 Plasan Carbon Composites and/or OEM tooling documentation and audit requirements. Plasan Carbon Composites 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 Plasan Carbon Composites Bailee Bond, and the applicable Statement of Work, if so requested.

9.2.2 **Statement of Work**

The supplier may 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 Plasan Carbon Composites and reflect a cascading of these expectations to Tier II suppliers.

9.2.3 **Product / Program Changes**

Plasan Carbon Composites 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 Plasan Carbon Composites or the applicable OEM. If Plasan Carbon Composites initiates product/program changes that result in reduced production tooling or manufacturing costs, Plasan Carbon Composites 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 Plasan Carbon Composites is considering a product or program change, an RFQ (Request for Quote) may 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 Plasan Carbon Composites 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 Plasan Carbon Composites.

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 Plasan Carbon Composites 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 sign off approval is achieved.

It is the responsibility of the supplier to submit PPAP documentation for review and approval prior to shipping products to Plasan Carbon Composites.

9.5 APQP Kick-Off

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.

9.6 Duration of Supply

The supplier must meet program commercial, design, support, quality, and delivery requirements to be selected as Plasan Carbon Composites ' 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 should have EDI (Electronic Data Interchange) capability.

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 E-mail or EDI. Plasan Carbon Composites will dictate the method of communication.

10.1.3 It is the supplier's responsibility to contact the Material Planner or appropriate 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 Plasan Carbon Composites unless supported by a specific purchase order.

10.2.2 The supplier must maintain the ability to absorb a 5% volume increase at all times. Additionally, the ability to accommodate a 15% increase within 24 hours notice without expenditure to plant or equipment is also required.

10.2.3 Material authorization will typically include three to six weeks (combined finished goods, work in process and raw material) and is determined by Plasan Carbon Composites. In any case, additional material lead times require specific approval from the 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 Plasan Carbon Composites, in the event of utility disruption, labor disruption and/or equipment failure. The intent of the contingency plan is to reasonably protect PCC 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, emails, or other forms of communication 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 Plasan Carbon Composites 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 4 weeks. Exceptions to these authorizations require written approval by the appropriate Materials Representative.

10.4.5 Plasan Carbon Composites will not be responsible for material beyond the cums as authorized above. Quantities on release beyond the RAW cum are for planning purposes only.

Plasan’s release requirements may change on a daily basis due to fluctuations of customer requirements. Plasan Carbon Composites is committed to meeting these requirements without exception or assistance from our customer. Excess freight or labor costs incurred by Plasan Carbon Composites 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 Nonconformances

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.
- 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, Plasan Carbon Composites 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 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 are determined by the applicable Plasan Carbon Composites location. Charges that may be applied as applicable are as follows:

- Sort of supplier product on or off line to support production schedules.
- Production line shutdown.
- 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 Plasan Carbon Composites for customer sort, rework, and/or line disruptions.
- Administrative costs.

11.1.5 All anticipated supplier charges will be discussed and mutually agreed upon by Quality Representatives at PCC and the designated Supplier Representative. If agreement cannot be reached, the issue will be forwarded to the appropriate Plasan Carbon Composites Purchasing Representative within 30 days of final notice issuance.

11.1.6 It is the responsibility of the supplier to notify the affected Plasan Carbon Composites 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 Plasan Carbon Composites 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. Plasan Carbon Composites' customer may accompany Plasan Carbon Composites Representatives if so requested.

11.2 Controlled Shipping

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 Plasan Carbon Composites' 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, Plasan's customer and/or the supplier's quality system registrar may be notified of Controlled Shipping Level 2 as deemed necessary.
- Plasan Carbon Composites Purchasing, Supplier Development and/or Quality will develop and review the Controlled Shipping expectations and exit criteria with the supplier.
- Plasan Carbon Composites 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. Plasan Carbon Composites' 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 Plasan Carbon Composites Division must meet released quantities without supply interruption.

11.2.5 The supplier and Plasan Carbon Composites will mutually define the certified material identification requirements.

11.3 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 Plasan Carbon Composites 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)

11.4 Downtime Costs

The supplier is responsible for all costs associated with downtime at Plasan Carbon Composites and/or downtime costs billed to Plasan Carbon Composites 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.

12.0 Engineering Changes

12.1 Plasan Carbon Composites and Customer 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 Plasan Carbon Composites Engineering Change Request Review (CRR) procedures. Documentation for approved engineering changes will be forwarded to the supplier for execution as defined in the Plasan Carbon Composites CRR procedures. All changes are required to be approved in accordance to the AIAG PPAP requirements before production implementation.

The supplier is required to:

- Respond to CCR/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 the AIAG Production Part Approval Process (PPAP) manual requirements prior to production implementation. Report Tier 3 changes as part of the PPAP process.

12.2 Supplier Proposed Engineering Changes

Supplier proposed changes must be submitted for approval consideration via the Plasan Carbon Composites Engineering Change Request review 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 CRR 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.

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 AIAG Production Part Approval Process (PPAP) manual 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 Plasan Carbon Composites Quality Engineer or other authorized Plasan Carbon Composites Representative. Subsequent shipments may also require engineering change identification when deemed necessary by Plasan. 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 charge back.

12.5 Product Obsolescence

Suppliers must submit obsolescence claims resulting from engineering changes within 30 days of the change implementation date. Suppliers must use the Obsolescence Claim form posted on Supply Web, and submit via email to the appropriate Plasan Carbon Composites Material Planner. Claims received outside of the 30 days will not be processed.

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 Plasan Carbon Composites) 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 Plasan Carbon Composites specific requirements are to be on file and available for review upon request.

13.2.5 Suppliers are responsible for costs incurred by Plasan Carbon Composites resulting from late or incomplete submissions.

13.3 Specific Sample Submission Requirements

13.3.1 When requested, PPAP submissions must be made in accordance with OEM specific requirements

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), ISO/IEC 17025, and A2L2). 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 and must be statistically controlled, per AIAG SPC manual.

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 Plasan Carbon Composites 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 Materials Data System (MDS) unless another system or method is pre-approved by Plasan Carbon Composites authorized personnel.

Note: MDS is available through mdsystem.com.

13.5 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 Plasan Carbon Composites Quality either verbally or in writing, prior to shipment. The supplier is to use the appropriate program documentation to note discrepancies.

13.5.1 **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

13.6 Product Submission Disposition Status

13.6.1 FULL Approval

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

13.6.2 **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.

13.6.3 **REJECTED**

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

14.0 Lot Traceability

All material received by Plasan Carbon Composites 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 Plasan.

The supplier shall communicate, to Plasan, 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 recommendation 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 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.

- All suppliers are to conform to all Statutory and Regulatory requirements as outlined in IATF 16949; as well as the Minimum Automotive Quality Management System requirements for Sub-Tier Suppliers (MAQMSR).

- Plasan Carbon Composites and its customers expect to have access to Plasan’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 Plasan Carbon Composites 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 Plasan Carbon Composites requirements, consistent with goals of long-term financial viability.

- Suppliers must be willing to extend the benefits of cost reduction efforts with Plasan Carbon Composites.
- It is expected that a target for compliance of zero discrepancies be set for all goods and services to be supplied to Plasan Carbon Composites.
- Warrants and certification requirements will be stated on Plasan Carbon Composites purchase orders. Annual validations for raw material are to be carried out by an independent accredited testing when required by Plasan.
- Suppliers will be held accountable for warranty costs due to negligence, process and supplier design issues.
- Products/processes that are jointly developed between Plasan Carbon Composites and its suppliers will be considered to have co-ownership and be royalties free unless otherwise negotiated.
- Suppliers must provide Country of Origin Certification, Certificate of Analysis 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 Plasan Carbon Composites 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 Plasan Carbon Composites 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 Plasan Carbon Composites.
- Suppliers will be accountable for all costs associated with an interruption in material supply to Plasan Carbon Composites resulting in a shutdown, due to labor, utility disruptions or equipment failures. All suppliers must have a contingency plan to mitigate risk.

16.0 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.

Revisions

Revision Date	Description	Approved By;
20DEC2016	Implemented Supplier Quality Manual for Walker/Wixom Facility	Jack Turner, Director of Quality and Supply Chain
27JUL2017	Updated per IATF Requirements	Jack Turner, Director of Quality and Supply Chain
03OCT2017	Updated the following sections: minor changes Monitoring Methods, Quality Performance, Supplier Performance, Scheduling & Releases	Dan Hartzler, VP Engineering, Supply Chain and Quality