

3M Automotive Supplier Quality Manual

Document Name: QM-06-120003

Document Title: 3M Automotive Supplier Quality Manual

Document Owner: Liang Joe, AC3XLZZ

Automotive and Aerospace Solutions

Location Name	Description
3M LIVONIA-3MUS-MI - 01KNP120	3M LIVONIA-3MUS-MI - 01KNP120: 19460 VICTOR PKWY, LIVONIA, MI, US
3M MAPLEWOOD-3MUS-MN 3M HEADQUARTERS - 01J9C020	3M MAPLEWOOD-3MUS-MN 3M HEADQUARTERS - 01J9C020: 3M CENTER, MAPLEWOOD, MN, US

Approvers:

Signer	Role	Date Signed
US321218:Jones Darcy R	Quality Manager	May 08, 2025 12:50:08 PM CDT
US282861:Peterson Mary M	Quality Manager	April 28, 2025 01:48:04 PM CDT
AC3XLZZ:Liang Joe (on behalf of Findlay Brian D)	Approver	May 08, 2025 01:22:44 PM CDT

3M Automotive Supplier Quality Manual

Quality Manual Content

1.0	Scope	4
1.1	General – 3M	4
1.2	Supplier Types and Certification Expectations	4
1.3	References	6
2.0	Terms and Definitions	6
3.0	Context of the Organization	7
3.1	Understanding the organization and its context	7
3.2	Understanding the needs and expectations of interested parties	7
3.3	Determining the scope of the quality management system	7
3.4	Quality management system and its processes	7
4.0	Leadership	7
4.1	Leadership and commitment	7
4.1.1.	General	7
4.1.2.	Customer Focus	7
4.2	Policy	7
4.2.1.	Establishing the quality policy	7
4.2.2.	Communicating the quality policy	7
4.3	Organizational roles, responsibilities, and authorities	7
5.0	Planning	7
5.1	Actions to address risks and opportunities	7
5.2	Quality objectives and planning to achieve them	8
5.3	Planning of changes	8
6.0	Support	8
6.1	Resources	8
6.1.1.	General	8
6.1.2.	People	8
6.1.3.	Infrastructure	8
6.1.4.	Environment for the operation of processes	8
6.1.5.	Monitoring and measuring resources	8
6.1.6.	Organizational knowledge	8
6.2	Competence	8
6.3	Awareness	9
6.4	Communication	9
6.5	Documented information	9
6.5.1.	General	9

3M Automotive Supplier Quality Manual

6.5.2.	Creating and updating	9
6.5.3.	Control of documented information.....	9
7.0	Operation	9
7.1	Operational planning and control	9
7.2	Requirements for products and services.....	9
7.2.1.	Customer communication	9
7.2.2.	Determining the requirements for products and services	9
7.2.3.	Reviewing the requirements for products and services.....	9
7.2.4.	Changes to requirements for products and services.....	9
7.3	Design and development of products and services	9
7.3.1.	General.....	9
7.3.2.	Design and development planning	10
7.3.3.	Design and development inputs	10
7.3.4.	Design and development controls.....	10
7.3.5.	Design and development outputs.....	11
7.3.6.	Design and development changes	11
7.4	Control of externally provided processes, products and services	11
7.4.1.	General	11
7.4.2.	Type and extent of control.....	11
7.4.3.	Information for external providers.....	11
7.5	Product and service provision	11
7.5.1.	Control of product and service provision	11
7.5.2.	Identification and traceability.....	12
7.5.3.	Property belonging to customers or external providers	12
7.5.4.	Preservation.....	12
7.5.5.	Post-delivery activities	12
7.5.6.	Control of changes	12
7.6	Release of products and services.....	12
7.7	Control of nonconforming outputs	15
8.0	Performance Evaluation	16
8.1	Monitoring, measurement, analysis and evaluation	16
8.1.1.	General	16
8.1.2.	Customer satisfaction.....	16
8.1.3.	Analysis and evaluation	16
8.2	Internal audit.....	16
8.3	Management review	16

3M Automotive Supplier Quality Manual

8.3.1.	General.....	16
8.3.2.	Management review inputs	16
8.3.3.	Management review outputs	16
9.0	Improvement.....	16
9.1	General	16
9.2	Nonconformity and corrective action	16
9.3	Continual improvement	16
10.0	Delivery	16
10.1	General	16

1.0 Scope

1.1 General – 3M

This document defines certain customer specific automotive intent product requirements for 3M Advanced Quality Market Centers (AQMC). This document is applicable to organizations supplying products and external service providers.

The basis for this document is the ISO 9001:2015 standard. Supplier expectations are based upon Table 1 located in section 1.2.

Where “No additional 3M AQMC requirements” is listed indicates that 3M has no requirements above and beyond the associated ISO 9001:2015 clause. For those suppliers with the recommended certification of IATF 16949:2016, the IATF 16949:2016 requirements apply.

The English language version of this document shall be the official version for the purposes of third-party registrations.

Sanctioned translations shall:

- Be for reference only
- Reference the English language as the official version
- Include an appropriate copyright statement

1.2 Supplier Types and Certification Expectations

Depending on the products or services provided to 3M AQMC, the suppliers will be held to different levels of required certification. This expectation will be commensurate to their level of risk to 3M and our customers. Table 1 defines the recommended level of certification.

3M Automotive Supplier Quality Manual

Table 1. Supplier Type and Certification Recommendations

Supplier Type	Description	Certification Requirement
Third-Party Manufacturing (3PM)	Finished Goods Outsource Manufacturer; manufactures finished product for 3M with intended use in Automotive (“Make to Print” or “Design and Manufacture”)	IATF16949 Exceptions may be granted for suppliers with ISO 9001 who have plans in place to be IATF 16949 certified within 18 months (and/or with 3M product end use not incorporated within a vehicle or aircraft)
	Semi-finished Goods Outsource Manufacturer; manufactures or processes material on behalf of 3M which is an input to an end product with intended use in Automotive	IATF16949 Exceptions may be granted for suppliers with ISO 9001 who have plans in place to be IATF 16949 certified within 18 months (and/or with 3M product end use not incorporated within a vehicle or aircraft)
Raw Material Supplier	Manufactures, inspects, tests, and certifies conformance of Raw Material to proprietary engineering specifications	ISO 9001
External Calibration Service Provider	Provides calibration services either on or off-site	ISO/IEC 17025 ¹
External Test Laboratory Service Provider	External test facility	ISO/IEC 17025 ¹
Sorting Service	Segregates suspect or non-conforming materials or products either off or on-site (at customer locations or other designated facilities)	ISO9001
Designed Packaging	Provides packaging materials that are unique to the product (e.g., blow molded forms to retain parts during shipping) and/or impact product use (e.g., mixing and dispensing cartridges), or any other co-designed packaging that would not be off the shelf	ISO9001
Commodity Packaging	Provides material such as standard bulk type packaging, (e.g. corrugated cardboard (fiber or plastic), cores, standard 2-way and 4-way pallets, overwrap films, slip sheets, labels, etc.)	none
Distributor	Transfers/handles products between producer/manufacturer to 3M AQMC site	ISO9001 or AS9120
Importer	Brings products into a country from abroad for sale. Manages the logistics and clears customs. Must not handle the product.	None
Design Service Provider	Contracted Design Responsible Organization/Partner/Supplier Tasks Organizations	As defined by customer requirements
Direct Buy	AQMC customer-directed supplier that provides products, material, or service.	As defined by customer requirements
Indirect Suppliers ²	Provides equipment, tooling, drawings, materials or services for maintenance, or ongoing production supplies. (e.g. ink, lubricant, fasteners, etc.)	none

3M Automotive Supplier Quality Manual

Supplier Type	Description	Certification Requirement
Marketing Product/Service ²	Provides Information collateral, Display booth items, surveys, etc.	none
Transportation & Logistics Services ²	Transports goods/materials from supplier location to 3M & provides logistics services (e.g. warehousing, order process). Specialty services (e.g. climate controlled) may require certification.	none
Non-Production Service Providers ²	Provides services such as transactional software systems, janitorial, grounds keeping, etc.	none
¹ External laboratory must be accredited to ISO/IEC 17025 or its national equivalent by an accreditation body of the ILAC MRA and include the relevant inspection, test, or calibration service in the scope of the accreditation. Provided certificates of calibration or test reports must include the mark of the national accreditation body. If an accredited laboratory is not available, we need to obtain evidence that the laboratory used meets the requirements of Section 7.1.5.3.1 of IATF 16949 (i.e. for an internal Laboratory). ² Exempted from being added to ASL.		

Suppliers are expected to submit a current copy of their applicable recommended certificates to 3M. Upon expiration or revocation, the supplier must immediately notify 3M.

Suppliers that do not conform to the recommended certification above are expected to continue the development of their management system to achieve the recommendation.

The following sequence should be applied to achieve this requirement:

- certification to ISO 9001 through third-party audits issued by a certification body bearing the accreditation mark or a recognized IAF MLA member;
- certification to ISO 9001 with conformance to Minimum Automotive Quality Management System Requirements for Sub-Tier Suppliers (MAQMSR) through second-party audits;
- certification to ISO 9001 with conformance to IATF 16949 through second-party audits;

certification to IATF 16949 through third-party audits issued by a certification body bearing the accreditation mark or a recognized IAF MLA member

1.3 References

- ISO 9001:2015
- IATF 16949:2016
- IATF 16949:2016 Sanctioned Interpretations
- IATF MINIMUM AUTOMOTIVE QUALITY MANAGEMENT SYSTEM REQUIREMENTS FOR SUB-TIER SUPPLIERS

2.0 Terms and Definitions

- AIAG – Automotive Industry Action Group
- Advanced Quality Market Centers – 3M cooperation between different 3M organizations which support and/or sell products intended for regulated markets (e.g. automotive, aerospace, etc.).

3M Automotive Supplier Quality Manual

- Concession – Special approval that is granted to release a non-conforming product (s) or service for used or delivery
- PPAP – Production Part Approval Process
- TQRDC – Technology Quality Responsiveness Delivery Cost

3.0 Context of the Organization

3.1 Understanding the organization and its context

No additional 3M AQMC requirements.

3.2 Understanding the needs and expectations of interested parties

No additional 3M AQMC requirements.

3.3 Determining the scope of the quality management system

No additional 3M AQMC requirements.

3.4 Quality management system and its processes

If customer specific requirements are passed down from 3M, the supplier is responsible for evaluating how their QMS is compliant with these requirements. The supplier must implement any changes needed to ensure the supplier QMS meets the customer's requirements.

4.0 Leadership

4.1 Leadership and commitment

4.1.1 General

No additional 3M AQMC requirements.

4.1.2 Customer Focus

No additional 3M AQMC requirements.

4.2 Policy

4.2.1 Establishing the quality policy

No additional 3M AQMC requirements.

4.2.2 Communicating the quality policy

No additional 3M AQMC requirements.

4.3 Organizational roles, responsibilities, and authorities

Top management shall ensure that:

- Personnel responsible for product quality shall have the authority to stop production to correct quality problems.
- Managers with responsibility and authority for corrective action shall be promptly informed of products or processes which do not conform to requirements.
- Production operations across all shifts shall be staffed with personnel in charge of, or delegated responsibly for, ensuring product quality.

5.0 Planning

5.1 Actions to address risks and opportunities

No additional 3M AQMC requirements.

3M Automotive Supplier Quality Manual

5.2 Quality objectives and planning to achieve them

Top management shall ensure that quality objectives to meet customer requirements are defined, established, and maintained for relevant functions, processes, and levels throughout the organization.

5.3 Planning of changes

No additional 3M AQMC requirements.

6.0 Support

6.1 Resources

6.1.1 General

No additional 3M AQMC requirements.

6.1.2 People

No additional 3M AQMC requirements.

6.1.3 Infrastructure

The supplier shall prepare contingency plans to satisfy 3M requirements in the event of an emergency such as utility interruptions, labor shortages, key equipment failure and field returns.

6.1.4 Environment for the operation of processes

No additional 3M AQMC requirements.

6.1.5 Monitoring and measuring resources

The organization shall have a documented process for managing calibration/verification records.

Records of the calibration/verification activity for all gauges and measuring and test equipment needed to provide evidence of conformity to internal requirements, legislative and regulatory requirements, and customer-defined requirements must be retained.

The documented information must contain:

- Any out-of-specification readings as received for calibration/verification
- When a piece of inspection measurement and test equipment is found to be out of calibration or defective, assessment of validity of previous measurement results obtained with this piece of equipment

Third-party accreditation to ISO/IEC 17025 (or equivalent) is required for the calibration of gauges and measuring and test equipment for any measurements that are considered special/critical characteristics and any data being reported to the customer to show that specifications/requirements are being met (e.g. dimensional measurements on a PPAP). If ISO/IEC 17025 (or equivalent) is not available, a waiver must be obtained from 3M.

6.1.6 Organizational knowledge

No additional 3M AQMC requirements.

6.2 Competence

The supplier shall establish and maintain documented procedures for identifying training needs and achieving competence of all personnel who perform activities affecting product quality. The supplier shall provide on-the-job training for personnel in any new or modified job affecting product quality.

3M Automotive Supplier Quality Manual

6.3 Awareness

No additional 3M AQMC requirements.

6.4 Communication

No additional 3M AQMC requirements.

6.5 Documented information**6.5.1. General**

No additional 3M AQMC requirements.

6.5.2. Creating and updating

No additional 3M AQMC requirements.

6.5.3. Control of documented information

The supplier's records shall be retained for longer than internal requirements if mandated by the customer specific requirements passed down by 3M.

7.0 Operation**7.1 Operational planning and control**

No additional 3M AQMC requirements.

7.2 Requirements for products and services**7.2.1. Customer communication**

No additional 3M AQMC requirements.

7.2.2. Determining the requirements for products and services

No additional 3M AQMC requirements.

7.2.3. Reviewing the requirements for products and services**7.2.3.1. Special characteristics**

The supplier shall conform to 3M/customer specific pass-through requirements for the designation, approval documentation, and control of special characteristics.

7.2.3.2. Manufacturing feasibility

The supplier shall utilize a multi-disciplinary approach to investigate, confirm and document the manufacturing feasibility of the proposed products and processes during the contract review process, using a document method, such as "Team Feasibility Commitment." The analysis must include if the processes are capable of consistently producing product that meets all engineering and capacity requirements. The supplier must retain documented information on the results of the review.

7.2.4. Changes to requirements for products and services

No additional 3M AQMC requirements.

7.3 Design and development of products and services**7.3.1. General**

No additional 3M AQMC requirements.

3M Automotive Supplier Quality Manual

7.3.2. Design and development planning

The supplier shall ensure that the design and development planning includes a multidisciplinary approach. Areas for using such an approach can include, but are not limited to: flow plans, FMEAs, control plans, error proofing, and work instructions.

3M recommends the use of the Advanced Product Quality Planning (APQP) Process to document these reviews.

7.3.3. Design and development inputs

The supplier shall identify, document, and review product and manufacturing process input requirements using a multidisciplinary approach. Input requirements include but are not limited to the following:

- Product specifications, including special characteristics
- Product output data
- Identification, traceability, and packaging
- Assessment of risks with the input requirements and the organization's ability to mitigate/manage the risks, including from the feasibility analysis
- Targets for conformity to product requirements including preservation, reliability, durability, serviceability, health, safety, environmental, development timing, and cost
- Applicable statutory and regulatory requirements
- Targets for productivity, process capability, timing, and cost
- Manufacturing technology alternatives
- Customer requirements
- Experience from previous developments
- New materials
- Product handling and ergonomic requirements
- Design for manufacturing and design for assembly

The manufacturing process design shall include the use of error-proofing methods to a degree appropriate to the magnitude of the problem(s) and commensurate with the risks encountered.

7.3.4. Design and development controls

When required by 3M, measurements of the product and process development activity shall be reported to 3M at stages as specified or agreed.

7.3.4.1. Prototype program

When required by 3M, the supplier shall have a prototype program and control plan. The supplier shall use, whenever possible, the same input suppliers, tooling, and manufacturing processes as will be used in production.

Prototypes and pre-production material may only be produced and shipped with a "3M Prototype/Sample Requisition." Specific instructions of the prototype requirements will be included in the requisition and may reference other documents, such as prints or product standards. Product must be produced and shipped in accordance with these requirements. If no labelling or packaging requirements are specified, the packaging, at a minimum, must be clearly

3M Automotive Supplier Quality Manual

labeled with the prototype/sample requisition number and indicate the product is a sample or prototype.

7.3.4.2. Product approval process

The supplier shall comply with the AIAG Production Part Approval Process (PPAP) manual (or equivalent), 3M requirements, and customer specific requirements. PPAP(s) must be submitted to 3M for applicable changes or upon request from 3M.

The supplier must obtain documented product approval prior to shipment, if required by 3M.

7.3.5. Design and development outputs

PFMEAs and control plans are required for prototype, pre-launch, and production phases.

7.3.6. Design and development changes

All changes, including those proposed by the supplier, shall have written approval by the authorized 3M representative, or a waiver of such approval, prior to production implementation (See 8.3.4.2). Changes can include, but are not limited to:

- Use of other construction or material that was not previously approved during the PPAP
- Production from new or modified tools, dies, molds, patterns, etc.
- Production following an upgrade or rearrangement of existing tooling or equipment
- Production from tooling and equipment from a different plant site
- Change of supplier for parts, non-equivalent materials, or services
- Product produced after tooling has been inactive for more than 12 months
- Change in test/inspection method – new technique or reducing inspection criteria

It is recommended that notification be made to 3M as early as possible to determine what requirements need to be met.

7.4 Control of externally provided processes, products and services

7.4.1. General

Supplier is expected to have a process to manage all sub-suppliers, including directed sources of supply. All requirements of ISO 9001:2015 Section 8.4 are applicable to the directed sources of supply. Use of 3M directed sources of supply does not absolve supplier of ensuring quality of incoming materials.

7.4.2. Type and extent of control

Supplier shall ensure that purchased products, processes, and services conform to the 3M and customer requirements. This includes materials supplied by 3M and 3M/customer-directed sources.

7.4.3. Information for external providers

Supplier is responsible to cascade down all applicable statutory and regulatory requirements, special characteristics, and customer specific requirements throughout the supply chain.

7.5 Product and service provision

7.5.1. Control of product and service provision

The supplier shall develop flow plans, FMEAs, and control plans, and update such documents when changes occur, including corrective actions from internal or external failures.

3M Automotive Supplier Quality Manual

- The supplier shall prepare documented work instructions for all employees who have responsibilities for the operations of processes that impact product quality. They shall be derived from the control plan.

7.5.2. Identification and traceability

The supplier shall use an inventory management system to optimize inventory turns over time and assure stock rotation, such as a FIFO system.

Supplier must maintain material and lot traceability throughout the production process.

7.5.3. Property belonging to customers or external providers

Supplier shall develop a system to inventory, track, and maintain 3M and customer owned tools, equipment, training aids and supplies. Supplier is required to gain 3M approval for the disposal of all 3M and customer supplied tools, equipment, training aids and supplies.

7.5.4. Preservation

No additional 3M AQMC requirements.

7.5.5. Post-delivery activities

No additional 3M AQMC requirements.

7.5.6. Control of changes

No changes in approved product formulation, raw materials, basic methods of manufacture or plant site shall be made without notification in writing. Requalification of the revised material may be required, and a revised supplier designation may be requested.

7.6 Release of products and services

The supplier shall complete the 3M AQMC Raw Material Information Form (RMIF). The supplier is required to return the completed RMIF document to 3M for the EHS&R team to review.

The RMIF must contain:

1. Contact information for the Supplier Regulatory or Health/Safety representative and contact information for the Supplier Representative that signs off on the material specification.
2. 100% composition of the intentionally added components in the supplier's material
3. Complete chemical inventories declaration section, including Toxic Substances Control Act (TSCA) regulated status, and quality certifications
4. Complete declarations for Substances of Concern (SoCs), Global Automotive Declarable Substance List (GADSL), and Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) Candidate Substance of Very High Concern (SVHC) List
5. Complete declaration for Conflict Minerals

In addition to the completed 3M RMIF document, the supplier shall provide the following:

- Globally Harmonized System (GHS) compliant safety data sheet (SDS) for chemicals and hazardous articles. For non-hazardous articles, an SDS shall be provided if available
- Provide a copy of Certificate of Analysis (CofA) or Certificate of Conformance (CofC) (note this can be provided after the 3M raw material number has been issued) (see section 8.3.3 for additional details)
- A current copy of the supplier's Quality Certificate if certified (ex ISO, IATF)

The supplier may provide the following information if it is available:

- Technical Data Sheet
- Any additional product testing. If available, include test methods

3M Automotive Supplier Quality Manual

- Any additional regulatory information and/or other declarations

For Hardware (or hard-good parts), the supplier shall fill out and return to 3M the 3M Hard-good Material Information Form (HMIF) in place of the RMIF. If the supplier has access to International Material Data System (IMDS), the supplier of the hard-good part is to submit an IMDS entry for the hardware part entry to 3M at the IMDS Org. I.D. # 3377. The supplier shall communicate the IMDS I.D. number of the part entry submission for review/release by 3M. In the event the hardware supplier does not have IMDS access, then they are to solely provide 3M the completed 3M HMIF document.

Supplier providing 3M with Heat Treated, Plated, Soldered, Molded. and Plated product/material shall meet requirements of AIAG CQI. Records of these assessments including corrective actions required for conformance shall be maintained and made available upon request by 3M.

- CQI-9 Heat Treat Assessment
- CQI-17 Soldering System Assessment
- CQI-23 Molding System Assessment
- CQI-11 Plating System Assessment

The supplier may be required to submit a Level 3 PPAP as defined in lastest edition of AIAG PPAP Manual. 3M reserves the right to change the PPAP submission level on individual submittals. Any modifications to part, process or facility must be communicated and acknowledged by 3M after PPAP submittal prior to commencement of activity. As a supplier of product and/or services that affect customer requirements, you shall ensure that all your sub-suppliers meet all requirements of the latest revision of the AIAG-PPAP Manual. 3M reserves the right to requires inclusion of the sub supplier's PPAP within the supplier's PPAP submission. You shall retain PPAP packages and samples and make them readily available to 3M within 24 hours of request.

Requirements for PPAP Bulk Materials

1. Bulk Materials include, but not limited to the following:
 - Adhesives and sealants - solders, elastomers
 - Chemicals – resins, polishes, additives treatments, colors
 - Coatings – topcoats, undercoats, primers phosphates
 - Film and film laminates
 - Ferrous and non-ferrous metals – bulk steel, aluminum, coils, ingots
 - Monomers, prepolymers and polymers – rubber, plastic, resin
2. PPAP submission and approval is required for:
 - Bulk Material processing technologies that are new to suppliers and have not been previously used for this application
 - Suppliers that are starting to sell new product for a new application
 - Any part that would normally be expected to influence the part and material formulation
3. In addition to the above PPAP requirements, 3M may require suppliers to provide the following data with every shipment:
 - Material certifications tested per required specification
 - Color plaques or numeric color values, if applicable
 - On-going SPC data, if specified

3M Automotive Supplier Quality Manual

3M may require a Safe Launch Plan (SLP) to be implemented to verify process stability and product compliance with stated standards and specifications in an organized manner. 3M may require an SLP when supplier or commodity is deemed to high risk or when there is a complex or long-distance supply chain. The intent is minimizing the risk of non-conforming parts being introduced into the production process.

3M may require analysis of supplier's capacity. Verification of capacity is an integral and mandatory part of APQP.

3M requires that the supplier can identify a specific lot or batch of material through all states of production, packaging and delivery. This must include any out-sourced operation. Injection molded product must have cavity identification.

The supplier must record the raw material/component lot/batch number assigned by the sub-supplier that is used to produce each specific lot/batch of final product.

The specific lot/batch number shall be recorded on all documentation pertaining to delivered product. This document may include:

- Material lot number
- Job set-up sheet
- Production log
- Inspection/testing methods
- Control charts
- Traveler tags

If requested, the supplier shall provide evidence of control of on-going capability as required for submitting PPAP revalidation. SPC monitoring is required where applicable for prototype, preproduction trials run, PPAP and continuous improvement monitoring. Minimum capability values are Ppk of 1.67 or pre-production trial runs and Cpk 1.33 for PPAP per AIAG guidelines. Evidence of control and on-going capability may be required for submittal on a regular basis. Summaries of SPC data are acceptable, when requested.

Supplier are required to adhere to Packaging Guidelines as defined by AIAG Standards and Global Reach requirements. In some situations, 3M has defined specific packaging requirements in support of automated assembly and manufacturing processes. Special packaging and labeling requirements, in support of specific Product Launch activity, may be requested by a division. In the event that special packaging is required, design and approval will be managed as part of our overall APQP program delivery process

All materials for prototype or production consumption, shipped to 3M, must be identified with labeling containing both human-readable text/graphics and machine- readable bar-coded symbols.

These materials shall contain, as applicable: container labels, master label, mixed load labels. Primary metal labels and part labels if specified by design records or specifications. All labels must be legible and able to be scanned in compliance with AIAG Standards or standards designated by 3M.

Characters and symbols shall comply with the requirements of AIAG, B-8 standard – Quality Assurance Guide for Shipping Labels and Other Bar Code Applications.

Parts Shipping labels (container, master and mixed load), shall comply with layout formats defined in the AIAG, B-3 Standard- Parts Shipping Label. Customer formats may be specified. Primary Metal labels shall comply with layout format defined in the AOAG, B-5 Standard – Primary Metals.

Part labels shall comply with the requirement defined in the AIAG, B-4 Standard-Parts Identification and Tracking Application Standard, unless otherwise specified by design records or 3M requirements.

Label placement, orientation, quality and quantities shall follow the guidelines contained in the AIAG, B-10 Standard Trading Partners Implementation Guide, unless otherwise specified by 3M specific requirements. Barcodes shall conform to the standards published by AIAG, B-10 – Label.

3M Automotive Supplier Quality Manual

7.7 Control of nonconforming outputs

This system is designed to prevent the use of suspect and/or nonconforming purchased material. Purchased components found to be nonconforming through line rejections, mis-labeling, mispackaging, testing failures, failed inspection results, customer concerns, warranty and/or customer returns, receipt of obsolete material or material certification or other failure mode are handled through following procedure:

- a) Supplier will be notified of the concern. All relevant containment actions must be initiated immediately and remain in place until corrective action has been reviewed and approved by 3M
- b) Upon notification, the supplier will be issued a Supplier Corrective Action Request (SCAR). The initial SCAR response detailing containment and temporary corrective action must be submitted to 3M within 5 working days. Verification and closure will be determined by 3M Quality Department.

At the discretion of 3M, suppliers may incur costs for non-conformance issues based on (but not limited) the following criteria:

- Division sort of supplier production line
- Production line shutdown
- Finished product sort and/or scrap of material
- Any material transfer of nonconforming supplier product
- Quality Department time for problem investigation
- Testing if required
- Any sort/rework charges incurred by Division
- Related transportation expenses
- Any costs incurred by 3M for disruption of our customers
- Costs associated with the disposition/return of unapproved or unauthorized material sent by the supplier
- Costs incurred by 3M associated with customer recalls or product failures, caused by non-conformance

When direct by 3M, suppliers may need to certify product after a lot rejection has occurred. Usually, two types of controlled shipping actions are employed when this situation occurs:

- Supplier conducted sort and certification of subsequent part shipments
- Third-party sorting and certification
- 3M sorting and certification

All controlled shipping actions are the responsibility of the supplier to coordinate and manage. Any third-party arrangements, not specifically directed by 3M, must be reviewed and approved by 3M. Continued part supply to 3M must meet released quantities and without supply interruption.

The supplier and 3M will agree on the method to be used to identify all certified material.

Supplier who are under controlled shipping or containment conducted by a third part or external source, must notify 3M ship product to of the containment activity.

It is the policy of 3M not to accept product that does not meeting the requirements of the applicable drawings and specifications. Requests for concessions on non-conforming product or service shall be submitted to 3M user plant and Supplier Quality for review to obtain Customer approval, as required, prior to shipment. Any such requests shall be accompanied by a thorough explanation of the root cause for the non-conformance, the actions taken to eliminate these root causes and to prevent re-occurrence, and the date of quality assured product availability together with confirmation of it traceability and the manner of identification.

3M Automotive Supplier Quality Manual

8.0 Performance Evaluation**8.1 Monitoring, measurement, analysis and evaluation****8.1.1 General**

3M, or 3M's customer, reserves the right to perform inspections at supplier facility and expedite material or product from supplier's facility when necessary. All materials or services are subjected to final inspection and acceptance by 3M at destination, notwithstanding any prior payment or inspection at seller's source and inspection shall be made within a reasonable time after delivery or completion of work. Also, 3M, or 3M's customer, reserves the right to person a 2nd party audit of supplier facility and QMS system

8.1.2 Customer satisfaction

No additional 3M requirements

8.1.3 Analysis and evaluation

No additional 3M requirements

8.2 Internal audit

No additional 3M requirements

8.3 Management review

No additional 3M requirements

8.3.1 General

No additional 3M requirements

8.3.2 Management review inputs

No additional 3M requirements

8.3.3 Management review outputs

No additional 3M requirements

9.0 Improvement**9.1 General**

No additional 3M requirements

9.2 Nonconformity and corrective action

No additional 3M requirements

9.3 Continual improvement

No additional 3M requirements

10.0 Delivery**10.1 General**

Supplier will be expected to pay expediting fees if they fail to ship on time and order was placed within the specified lead-time. Supplier, upon request from 3M, shall travel to 3M's customer to perform emergency response actions, including reworking and sorting to contain impact of quality problems and associated costs on 3M and 3M's customer. Supplier shall reimburse 3M any and all billed 3M by 3M's customer, as a result of quality of delivery problems, where Supplier is deemed fully responsible.

3M Automotive Supplier Quality Manual

You must immediately contact 3M if a required quality cannot be shipped.

If 3M incurs excess freight charges due to the fault of the supplier, the supplier will be responsible for these excess charges.

3M expects 100% on-time and in-full delivery.

Supplier need to maintain an effective contingency plan, in order to mitigate undue risk to 3M, in the event of a supplier's utility or labor disruption, equipment or logistics failure. The intent of the contingency plan is to reasonably protect from disruption of supply in the event of an emergency. Suppliers who are shipping from a unionized facility are required to submit a strike plan at least 3 months (unless otherwise stipulated by 3M) prior to contract expiry, detailing plans to meet material commitments in the event of a labor disruption.

Suppliers with production contracts with 3M, must maintain the ability to provide after-market and service components for a period of 15 years following the end of programs or production for individual components or assemblies, or for such longer or shorter period as stipulated by respective OEM customer for the program as communicated to the supplier. The supplier has the responsibility to maintain any tooling and/or assembly equipment in condition sufficient to support service requirements. Service schedules and pricing shall be determined in negotiation.

Revision History

Revision History Table		
Revision	State	Reason for Change
8	Release	Update to new template format. Updated the supplier type table to match GCS/SOP for Supplier Management. Removed the "3M Confidential" in the header for public viewing on 3M Supplier Direct website. Removed references to aero and AS9100.
7	History	Fixed the table of content and updated the supplier type table
6	History	Removed outdated information. Added requirement statement for suppliers to notify AASD for product/process changes.
5	History	Administration changes - Moved to new TEGB Business Group template and corrected internal document references for correct Business Group naming convention (changed -04- to -06-).
4	History	Administration changes - updated Header and Footer to align with new Business Group (removed reference to previous Business Group, updated controlled copies statement).
More than 5 Revisions exist for this document. All Revisions are located in the PLM Object's Revisions section.		

References and Attachments

Supporting Documents, as attached to this procedure (if blank, then N/A)

<<Files>>

3M Automotive Supplier Quality Manual

PLM Related Documents

Documents		
Type	Name	Description
Procedure	SOP-06-120010	Global AASD SOP for Supplier Management - External Provider Management (EPM)