SQSR

Supplier Quality System Requirements

Revision 7
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1.0 Introduction

1.1 Scope

The details stipulated within this manual are the minimum mandatory requirements for approved production (including aftermarket) goods and service suppliers to Meritor Inc., its subsidiaries and affiliates, irrespective of their global location. These requirements also apply to Meritor plants supplying components to other Meritor locations.

Meritor is committed to providing on time, high quality products at competitive pricing and services that meet our customers' needs, and requires a commitment from our suppliers to provide the same to us. Creating win/win relationships strengthened by success remains a cornerstone in meeting and exceeding changing customer expectations.

1.2 Purpose

The purpose of this document is to communicate Meritor's requirements with respect to the quality management system of those companies that supply production goods and/or services to Meritor.

Meritor requires that its suppliers:

a) Implement appropriate systems and controls to ensure 100% on-time delivery of conforming, defect free products to Meritor.

b) Manage facilities, processes, quality systems and personnel to consistently and cost effectively produce products and furnish services that meet the needs of Meritor and its customers.

c) Develop and implement a documented Quality System, including an Advanced Product Quality Planning process, in accordance with the requirements of ISO/TS-16949 and the AIAG Advanced Product Quality Planning and Control Plan reference manuals in order to ensure that all Meritor requirements are met.

When a Meritor supplier is deemed to be a “small” supplier or is so small as to not have adequate resources to develop a system according to ISO/TS 16949 or ISO 9001, certain specified elements may be waived by Meritor.

Note: “small” may also refer to volume supplied to the automotive industry.

ISO9001 and ISO/TS16949 contain fundamental quality management system requirements of value to any sized provider of production/ service parts/ materials. There are a number of methods to implement a compliant system, so it is recognized that a simpler Quality Management System approach could be used for the smaller suppliers of organizations to which ISO/TS16949, clause 7.4.1.2 applies.

d) Provide objective evidence that all supplied products and services satisfy AIAG Production Part Approval Process requirements including acceptable process capabilities for Special/Control Characteristics as determined necessary by Product Engineering, Quality Assurance and the Meritor facility accepting the products and services.

e) Utilize appropriate statistical techniques for on-going process control and improvement (as established in the AIAG Fundamental Statistical Process Control reference manual).

f) Continuously improve by reducing part-to-part variation and eliminating all waste.

g) Conduct its operations to ensure that all materials and products provided to Meritor meet or exceed all applicable environmental laws and regulations of the jurisdictions in which the supplier does business.
Suppliers must meet the same requirements that our customers demand of us. Also, suppliers are strongly encouraged to install environmental systems in their facilities that are compliant to ISO 14001.

Under the final “Conflict Minerals Rule” passed by the Securities and Exchange Commission (SEC) in August 2012 (Conflict Minerals Rule, Securities and Exchange Commission, Final Rule, August 22, 2012- http://www.sec.gov/rules/final/2012/34-67716.pdf), U.S. public companies, including foundries, that make use of tantalum, tin, gold, or tungsten in their products must file a new disclosure form with the SEC—and make a determination about whether those minerals are sourced from the war-torn Democratic Republic of the Congo (DRC) and nine surrounding countries (Angola, Burundi, Central African Republic, the Republic of the Congo, Rwanda, South Sudan, Tanzania, Uganda, and Zambia). If a supplier knows, or has reason to believe, that the conflict minerals used in its products originated in the DRC or a neighboring country it must exercise due diligence on the source and chain of custody of the conflict minerals and report to Meritor on the status of its findings.

In addition, any supplier who has reason to believe that any of the foregoing minerals originating in the DRC or any of the above-listed surrounding countries (unless from a scrap or recycled source) are being incorporated into any Meritor products, but have not been properly reported to Meritor, or properly disclosed by Meritor in its SEC filings, should report these concerns to Meritor at ethics.helpline@meritor.com.

h) Comply with all applicable government statutes, regulations and standards relating to motor vehicle safety or emissions within the territories of use (e.g. Including but not limited to US FMVSS safety standards, 49 USC 301, et seq., TREAD Act, EU Directives on Product Safety).

i) Meet the requirements of Meritor with regard to the use, control and supply of disposable and of returnable packaging. Suppliers are responsible for requesting any specific packaging documentation, assessment reports or written approvals directly from business unit(s), or Packaging group as required. Reference Section 2.17 Product Packaging, Identification and Traceability.

j) Be capable of receiving and sending EDI transactions (e.g., receiving Releases, sending Advanced Shipping Notices).

1.3 Background

The Meritor Supplier Quality System Requirements (SQSR) are based upon the latest edition of ISO/TS-16949 Quality System Requirements. These requirements are an integral and legally binding aspect of the Meritor Purchase Order. Although this does not alter or reduce any other requirements of the contract, it is intended to provide a concise understanding of our quality expectations.

Suppliers to Meritor aftermarket facilities must endeavor to meet requirements marked with an asterisk (*) but will not be prevented from conducting business because of a non-compliance.

This manual supersedes all previous Rockwell Automotive, Arvin Meritor Automotive, Arvin Industries and Meritor supplier quality systems requirements manuals.

The controlled copy of the Meritor Supplier Quality System Requirements manual is posted on the Meritor supplier web site at: http://www.meritor.com/suppliers/Requirements/default.aspx
2.0 Quality Systems Requirements

2.1 General Supplier Quality Systems Requirements*

All Meritor production part and genuine Meritor aftermarket suppliers are required to be ISO 9001 certified with full adherence to the latest edition of the Production Part Approval Process (PPAP).

New Suppliers:

Suppliers who are not ISO 9001 (or ISO/TS 16949) certified, excluding Aftermarket non-genuine Meritor part suppliers, must have an approved Quality Systems Certification Exemption Form (GP7.4.04 F7) approved by the Quality Director and Regional Supplier Development Manager on file at Meritor. The approved exemption will adhere to one of the following paths:

Path A: Plan to become ISO 9001 certified
- Provide a written plan with timing to obtain ISO 9001 certification
- Close all PAPA findings prior to full PPAP approval
- Full adherence to the latest edition of PPAP

Path B: Plan to become ISO 9001 compliant
- Conduct a second party ISO 9001 or Meritor PAPA audit or other equivalent (e.g. VDA 6.3)
- Close all findings from the second party ISO 9001 or Meritor PAPA audit or other equivalent
- Full adherence to the latest edition of PPAP

Path C: Full Exemption
- Provide compliance with identified minimum PAPA requirements and/or specific process control system requirements as defined by the Supplier Development Engineer and receiving site Quality.
- Close all requirements above as specified by the Supplier Development Engineer prior to full PPAP approval
- Compliance to certain elements of PPAP as defined by the Supplier Development Engineer and site Quality.

Note: Path C is a full exemption to ISO 9001 certification (e.g. small suppliers)

Current Suppliers:

The prioritization of current suppliers for further development depends upon, for example, the supplier’s current performance. The above supplier selection process may be applied to current suppliers if one of the following occurs:

a) You entered into step 3 or step 4 corrective action processes. (Reference section 2.23)
b) You entered the Chronic Supplier Improvement (CSI) process (Reference section 2.24)
c) You enter into a change process involving a new approved part design, manufacturing process or change of site.
d) Any supplier involving Special Characteristics (e.g. heat treat)

In that event Meritor reserves the right to treat you as a ‘new’ supplier and section 2.0 may apply and be administered by the Supplier Development group and/or Meritor site Quality.
For certified suppliers, an initial and renewal quality system certificate must be submitted to Meritor Procurement. Also, certified suppliers are required to immediately notify all Meritor receiving sites and their buyer if their registrar changes their certification status.

All suppliers are required to meet the intent of the requirements specified in the following AIAG Reference Manuals: Advanced Product Quality Planning and Control Plan (APQP), Potential Failure Mode and Effects Analysis (FMEA), Measurement Systems Analysis (MSA), and Statistical Process Control (SPC). Additional Meritor specific requirements are noted in this Supplier Quality System Requirements manual. It is the responsibility of Meritor's suppliers, both present and new, to obtain and maintain the current issue of all ISO 9001, ISO/TS 16949, AIAG related documents (see 3.2 Supporting Industry Documents for ordering information) and Meritor SQSR manual available at www.meritor.com/suppliers/requirements.

Non-Genuine Meritor Aftermarket suppliers should endeavor to meet the requirements outlined above in the AIAG manuals to the extent required by the specific Meritor aftermarket facility.

Comments or questions regarding the Meritor Supplier Quality System Requirements manual may be directed to the appropriate Meritor Plant Quality Engineer, Supplier Development Engineer or Buyer.

2.2 Advanced Product Quality Planning (APQP)*

Suppliers are required to generate an Advanced Product Quality Plan in accordance with the AIAG APQP reference manual for review by the Meritor Project Management Team or relevant Engineering group. This plan shall include, but is not limited to:

a) Notification of risks that affect product integrity or the project plan.

b) Implementation of error-proofing (poka-yoke) to achieve Zero Defects to Meritor.

c) Identification of changes needed for product or process specifications.

Suppliers designated as “critical” by Meritor will be required to utilize and submit the APQP Critical Supplier Status Report. This report is intended to track the supplier’s progress throughout the APQP and launch processes (see the APQP Critical Supplier Status Report form and instructions under the 3.1 Meritor Supporting Documents link).

2.3 Pre-Award Meeting

A Pre-Award Meeting for present and potential suppliers offering new products or services is typically required prior to Purchase Order issuance. However, in the course of business, it may be necessary to issue a Tooling PO prior to the Pre-Award meeting. When a special situation such as this occurs, the Supplier will still be expected to participate in a Pre-Award Meeting. The meeting will be used to review any technical, quality, manufacturing, engineering, purchasing, delivery or business issues, thereby providing the supplier with a thorough understanding of Meritor’s requirements. In most cases, Purchasing will schedule the meeting upon the closure of all tech review items, and either Plant Quality or Supplier Development will run it. The meeting will include cross-functional membership as appropriate. Suppliers shall meet all requirements agreed to at the Pre-Award Meeting as a condition of business award. Agreements shall be documented in the Pre-Award Meeting minutes and formally evidenced by signature on the Supplier Pre-Award Meeting Checklist (see the link under 3.1 Meritor Supporting Documents for a copy of the checklist).

Design responsible suppliers are required to comply with Meritor’s Engineering drafting standards, which can be obtained from the applicable Engineering group.
2.4 Engineering Prototype Sample Submissions

Supplier Quality Requirements for Prototypes and Low Volume Production Parts can be found in work instruction P7.01.11.F01.

Engineering prototype parts with documentation of specification conformance shall be submitted to Meritor per work instruction P7.01.11.F01 and as instructed by the Meritor Project Management Team. Each sample or prototype must be clearly labeled as such and accompanied by completed Dimensional Results, Material Test Results, and if required, Performance Test Results reports as described in the AIAG PPAP manual. Specific instructions, in addition to these stated requirements, may be agreed upon and documented by Meritor via the Pre-Award Meeting or other formal communication from site Quality.

2.5 Special Characteristics

Special Characteristics are any product or process characteristics that affect safety or compliance with regulations, fit, form, function, performance or subsequent processing of product.

In accordance with the requirements of ISO/TS-16949, Special Characteristics shall be identified and specifically addressed in the DFMEA, PFMEA, Control Plans, Process Flows, Work Instructions and other associated documents. Meritor designated Special Characteristics are identified on drawings and-supporting documentation (e.g. specifications, QCC. list). Suppliers are responsible to fully understand the usage of their product and identify Special Characteristics, consistent with Meritor definitions (see Appendix), and must fully conform to their specific requirements for control in design, manufacture, sale, or service. Suppliers are also responsible for ensuring that relevant Special Characteristics are explained, understood and controlled by their sub-suppliers. Design responsible suppliers (“black-box” designs) are not excluded from demonstrating conformity to the designation, documentation and control of defined special characteristics.
2.6 Process Capability and Control *

Suppliers are required to meet the process capability requirements as defined in the AIAG PPAP requirements manual and SPC reference manuals, unless otherwise specified by Meritor. The supplier is responsible to ensure process capability and control requirements are documented in their control plan and that capability indices are achieved and improved throughout production. All characteristics are required to be addressed in the control plan.

SPECIAL CHARACTERISTICS MANAGEMENT FOR DIMENSIONAL AND ASSEMBLY OPERATIONS

For special characteristics, the following requirement applies:

<table>
<thead>
<tr>
<th>Dimensional Features:</th>
<th>Safety Critical Characteristics</th>
<th>Major Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process under control, normally distributed</td>
<td>$C_{pk} \geq 1.67$</td>
<td>$C_{pk} \geq 1.33$</td>
</tr>
<tr>
<td>AND Production followed up with SPC (Statistical Process Control)</td>
<td></td>
<td>AND Characteristic checked regularly (frequency in accordance to capabilities studies)</td>
</tr>
<tr>
<td>Preferred Alternative</td>
<td>• Poka Yoke (Effectiveness verified once per shift)</td>
<td>• Poka Yoke (Effectiveness verified once per shift)</td>
</tr>
<tr>
<td>Accepted Alternative</td>
<td>• Process 100% automatic check</td>
<td>• Process 100% automatic check</td>
</tr>
<tr>
<td></td>
<td>• 100% control / inspection</td>
<td>• 100% control / inspection</td>
</tr>
<tr>
<td></td>
<td>• Full traceability</td>
<td>• Full traceability</td>
</tr>
<tr>
<td>Non normally distributed population (e.g. Surface Finish)</td>
<td>• Meritor shall determine with the supplier representative alternative acceptance criteria for processes with one-sided specifications or non-normal distributions.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Refer to AIAG SPC Manual for Additional information and Guidelines</td>
<td></td>
</tr>
<tr>
<td>Material /Heat Treat/Process Characteristics:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>For all safety and major characteristics related to Material, Heat Treat, or Process Parameters. Normally distributed populations and non-normally distributed populations.</td>
<td>• Meritor approved control plan</td>
<td>• Meritor approved Raw Material Sources (e.g. Steel Mills)</td>
</tr>
<tr>
<td></td>
<td>• Enhanced traceability of raw material lot and process controls required.</td>
<td>• Design of Experiment (DOE) recommended for the establishment of process parameter control limits and assignable causes of variation.</td>
</tr>
</tbody>
</table>
2.7 Sub-Supplier Control

Each Meritor supplier is responsible for the control and continuous improvement efforts of its suppliers. However, Meritor reserves the right to verify compliance of sub-suppliers. Verification actions including, but not limited to documentation review and site visits to the sub-supplier.

Meritor suppliers shall require their suppliers of production goods and services to conform to the requirements specified herein and must implement and document appropriate controls.

2.8 Supplier Tooling, Gaging and Returnable Containers

All tooling (dies, patterns, molds, special tooling) and gaging shall be permanently marked with a unique serial number and company name so that the ownership of each item can be easily identified. Returnable containers shall be permanently marked with the company name of ownership. For Meritor or OEM owned tooling, a Meritor or OEM asset tag may also be required.

The supplier shall establish preventive/predictive maintenance procedures on all tooling. Evidence of procedure execution shall be made available upon request. Preventive/predictive maintenance schedules and tool history records shall be documented and available for review.

No tooling used in the production of Meritor parts, shall be sold or consigned to another entity without proper notification and written consent from Meritor. In such cases, or in case of tooling relocation to an alternate supplier location or facility, it is the supplier’s responsibility to contact Meritor regarding potential re-PPAP requirements prior to moving the tool.

Supplier is responsible for managing the returnable containers to ensure there are no delivery shortages by monitoring cycle counts and proactively managing shortages. Supplier is also responsible for maintenance and cleaning of supplier owned containers and must dispose of bad containers or repair damaged containers.

2.9 Early Production and Pilot Part Requirements *

Suppliers are required to meet Meritor’s Early Production/Pilot Part requirements. These requirements will be documented by Meritor via the Pre-Award Meeting or other formal communication.

Suppliers are expected to clearly identify “early production” or “pilot parts” to ensure that the Meritor receiving site does not mix such parts with “regular” production parts. Suppliers are also expected to work closely with Meritor plant Scheduling and Material Control personnel to minimize unnecessary obsolescence.

(For shipping methods and labelling requirements please reference Sections 4.0 and 4.1 in the Supplier Requirements for Prototypes and Low Volume Production Parts work instructions.)

Labelling must be done per Meritor receiving site requirements and shall be differentiated from regular production shipping labels, unless the parts are already PPAP approved. In particular, the Supplier Identification, Part Number, Engineering Level, and Quantity must be clearly displayed on the part-packaging label to ensure easy, visible segregation of containers/parts.

In addition, a brightly colored sheet of paper, at least 8 inches by 11 inches in size (A5 or greater), must be attached to at least 4 sides of the container or material. In the special instructions/notes section, state one of the following:

- Pre-Production Materials
- Pre-Production Parts
- Pilot Materials
- Pilot Parts

Suppliers not adhering to the above requirements may be placed on Containment, which is discussed in Section 2.25.
2.10 Manufacturing Process Review

A systematic review of a supplier's manufacturing process may be conducted at the supplier’s facility prior to or after AIAG PPAP submission. This process may be a Meritor or Meritor customer specified process (e.g., PSO, PAPA, Run at Rate).

2.11 Production Part Approval Process (PPAP)

All production part sample submissions shall be in accordance with the AIAG PPAP manual requirements as stipulated by the Meritor Project Management Team or receiving site Quality department. Level 3 PPAP, supplied electronically, is the default submission level unless otherwise agreed upon with the relevant receiving site Quality department. Supplier PPAP packages shall include all component (internal and sub-supplier) PSWs at a minimum and may require additional PPAP documentation as per the receiving site Quality department.

PPAPs shall be submitted to lead Meritor receiving site Quality department and any associated PPAP sample parts shall be clearly labeled as such.

Full or interim approved PPAP is required prior to shipping parts to Meritor for production. Any production shipments received by Meritor prior to obtaining this approval will be rejected. Any exceptions must be documented and approved on a Meritor deviation.

2.12 Changes to Approved Product and Processes

Suppliers and sub-suppliers are not to make any unauthorized changes to a product (e.g., material, component, subassembly, etc.) or the process used to produce a product that has been previously PPAP approved by Meritor. This includes changes to Process Control Plans.

Meritor notification and submission requirements are clearly outlined in Appendix H of the AIAG PPAP manual. The appropriate Meritor Procurement and receiving site Quality representative shall be notified of intentions to change a product or process prior to making any changes. The supplier must submit a Supplier Request for Product or Process Change (see 3.1 Meritor Supporting Documents for a link to the form) and receive written authorization to proceed with the change from the Meritor’s receiving site Quality department prior to change implementation.

Any such change made without prior written approval by Meritor would not only constitute a breach of Meritor’s purchase order terms and conditions, but would also be a serious breach of standard automotive practice. Suppliers who do not adhere to this requirement will be held responsible for all damages, losses and liabilities attributable to any unapproved change made by it or one of its suppliers (e.g., customer rejections, customer line stoppage penalty fees, field failure costs, warranty expenses). In addition the supplier may be placed on New Business Hold until the systemic issue is addressed.

2.13 Annual Verification and Validation

Suppliers must have on file for Meritor review, annual verification of conformance for all parts that are Safety Related Characteristic (SRC) components.

Should annual test validation be required, the supplier will be informed of this requirement at Pre-Award or in writing by Meritor. If annual test validation is required, documentation shall be on file at the supplier and available to Meritor upon request.
If a nonconformance is found during the annual verification or test validation, the supplier must notify the Meritor using plant Quality Department immediately so that appropriate action can be determined and implemented.

Whenever Meritor is required to submit PPAP to its customer, suppliers with PPAP documentation over one year old may be required to re-PPAP as directed by the Meritor receiving site Quality Department. PPAP level will be communicated by Meritor site Quality at that time.

2.14 Certificates of Conformance

A signed certificate of conformance will be maintained on file at the supplier and may be required to accompany each shipment of specified components or materials. The certificate of conformance must contain the actual results of physical testing, measurements and/or analysis specified by the contract confirming compliance with all identified requirements. The Meritor receiving site and/or Meritor Project Management Team will give specific instructions during the Pre-Award Meeting or other formal communications.

The supplier should have a system capable of retrieving and submitting the requested Certificate of Conformance within 24 hours of Meritor’s request.

2.15 European ELV Directive and IMDS Requirements

The European End-of-Life-Vehicles (ELV) Directive 2000/53EC that was entered into force on October 21, 2000, imposes specific rules for materials used in cars. All suppliers of Meritor are responsible to ensure that the ELV-Directive is fulfilled, and need to inform Meritor about the contents of every part you deliver to Meritor through the IMDS.

In order to ensure regulatory compliance to the ELV-Directive and any applicable substance regulations over time, it is necessary to document the material and substance composition of the entire vehicle. IMDS (International Material Data System) allows the OEM’s and suppliers to collect and to manage the information regarding the material and substance composition of all the components of a vehicle so that compliance to the ELV-Directive is documented. Meritor suppliers are required to report the contents of the products they supply to Meritor in the IMDS under IMDS ID Number 21999.

IMDS is a requirement of PPAP for all Meritor, Inc. suppliers. To assure PPAP approval, IMDS submissions must be submitted at a minimum of 28 days prior to the PPAP due date. This allows adequate time for all submissions to be thoroughly reviewed, resubmitted if necessary and accepted.

Refer to the following links for more information:

- **IMDS**: [http://www.mdsystem.com](http://www.mdsystem.com)
- **Global Automotive Declarable Substance List (GADSL)**: [www.gadsl.org](http://www.gadsl.org)

Liability rests with the supplier in the event that components being supplied to Meritor do not conform to the relevant statutory requirements. Any and all costs incurred in such instances will be borne to their full extent by the supplier, not by Meritor.

Information regarding Meritor’s environmental policies and/or International Material Data System (IMDS) requirements may be obtained upon request by contacting Corporate Environmental Management (see 3.1 Meritor Supporting Documentation link for additional information).
2.16 Verification Reviews of Purchased Product

The supplier shall allow Meritor, an approved 3rd party representative or Meritor’s customers the right to verify, at the supplier’s premises that the product and subcontracted product(s) conform to specified requirements. Prior to conducting such verification reviews, the responsible Meritor contact shall specify both the arrangements and method of performing the reviews.

2.17 Product Packaging, Identification and Traceability

All the interested parties must comply with the rules and specifications provided by the Meritor packaging group. CVA suppliers shall refer to TP02100 Packaging and Shipping Guide. CVS suppliers shall refer to The Packaging Playbook. Unique requirements will be identified and documented by Meritor, assessed by the Packaging Group, and acknowledged at the Pre-Award Meeting or other formal communication.

To identify any typical containing unit, pallet, skid, bulk, set, box, basket, tub or rack, labeling must be done per Meritor receiving site requirements following AIAG’s B-10 Trading Partner Labels Implementation Guideline. At a minimum, the Supplier Identification, Part Number, Engineering Level, Quantity, Batch/Lot Number and Serial Number must be clearly legible in both human readable and bar coded form. Code 39 is preferred as the standard bar code symbology. All bar codes must be scanned by the supplier to verify readability and be tested by the receiving site to acknowledge appropriate function.

* Identification shall permit traceability back to the specific supplier raw material lot numbers, as well as the manufacturing, inspection and test records. The supplier shall also be able to trace where products made under similar conditions were shipped (same raw material lot, same heat treat lot, same manufacturing line/batch, etc.). Suppliers are required to utilize and ship material on a first in first out basis. Sequence of batches must be identified on the packaging label by either a date code or batch/lot number. Mixing of Heat Lots/heat treatment batches is not allowed. Heat Lots/heat treatment batches must not be mixed within a single Package or Container. Safety related identification criteria shall conform to all government regulatory and Meritor requirements. No exceptions to this requirement shall be permitted unless acknowledged in writing by Meritor.

Where applicable suppliers shall ensure their products are transported and secured in a manner that prevents damage or deterioration to the product. Suppliers shall maintain documentation detailing proper packaging, cleanliness level, and storage and shipping instructions of its products. These instructions must conform to the Meritor receiving site requirements.

For further information, refer to the applicable specifications located at:

http://www.meritor.com/suppliers/ECommerce/default.aspx

CVA suppliers shall refer to TP02100 Packaging and Shipping Guide at:


CVS suppliers shall refer to The Packaging Playbook at:

2.18 Delivery Performance and EDI Requirements

The supplier shall provide 100% conformance to the delivery requirements as specified by the Meritor receiving site. Costs incurred by Meritor as a result of a delivery nonconformance caused by a supplier shall be the responsibility of the supplier.

Upon request, suppliers shall submit corrective action plans for delivery nonconformances. For further information on Delivery and EDI requirements, refer to the applicable specifications located at:

http://supplier.meritor.com/documents/TE_docs/edi/CVS%20files.htm

2.19 Contingency Plans

Suppliers are required to prepare contingency plans (e.g. for utility interruptions, labor shortages, key equipment failure and field returns) to reasonably protect Meritor’s supply of product in the event of an emergency, excluding natural disasters and acts of God.

2.20 Continuous Improvement

The supplier shall continually improve quality, delivery, cost and other aspects of its performance. To aid in fulfillment of this requirement the supplier’s organization shall establish, monitor, prioritize, and act upon key performance objectives and targets. The objectives and targets should be established based upon (at a minimum) business plans, management systems, product quality, process capability, and customer satisfaction goals. Actions taken to regain previously sustained levels of performance are corrective actions, not continuous improvement.

Meritor reserves the right to visit any supplier site to assess its continuous improvement programs and lean manufacturing practices, and make recommendations for improvement. In addition, Meritor may deploy personnel to focus on specific improvement issues.

2.21 Supplier Problem Solving and Avoidance

Suppliers shall have trained (preferably certified) personnel with the ability to quickly and permanently resolve product and process issues using data driven problem resolution tools and techniques. Problem resolution must be conducted using a defined, structured process like the 8-Discipline process, Six Sigma DMAIC (Define, Measure, Analyze, Improve, Control) or any other process that includes verification of the root cause and validation of corrective action effectiveness. Data and results should be reported out in Meritor’s QRCM workbook.

Data driven techniques should also be used during the process design, verification and validation phases of the APQP process in order to prevent problems with new or changing products and processes. These data driven tools and techniques include but are not limited to: Failure Mode and Effects Analysis (FMEA), Measurement System Analysis (MSA), Statistical Process Control (SPC), Design of Experiments (DOE) and Taguchi Methods.*

Product design responsible suppliers must use reliability methods during the product design, verification and validation phases of the APQP process in order to ensure the robustness and durability of their product design for the intended application or as specified by Meritor.*

2.22 Supplier Performance Ratings

Meritor production suppliers are required to monitor their performance monthly on the Meritor Supplier Performance Rating (SPR) website located at:
In order to monitor performance, a supplier must first:

1. Register with Dunn & Bradstreet to obtain a DUNS Number. This registration is free of charge and must be done by each supplier’s site that ship to Meritor. The Dunn & Bradstreet registration site is located at: http://www.dnb.com/us/
2. Begin shipping Production Product to Meritor.
3. Register for Meritor’s Supplier Performance Rating website. When registering a particular supplier site in SPR, be sure to note all Meritor plants that the registering site supplies along with the vendor code found on the PO for each Meritor site.

Once registration is complete, the supplier will receive a confirming email that it is registered and can begin to monitor its performance on a monthly basis. New monthly SPR data is updated on the 15th of each month (for example, June’s data will not show up in the system until July 15). However, once in the system, the data is refreshed daily. The supplier should report any errors in the data to the appropriate Meritor plant so that they can be corrected. This is important since the SPR system is utilized by Procurement when determining placement of new business.

In the individual metric reports, the Meritor Division’s supplier performance target for that metric is noted. Comparison of a supplier’s performance to these targets is one method used by Meritor’s plants to determine if a supplier should be invited to an IQ meeting, Super IQ meeting or placed on New Business Hold (see Steps 3 and 4 below). Meeting these targets does not relieve the supplier of the responsibility for 100% on-time delivery of defect free parts.

2.23 Supplier 4-Step Incoming Quality Process

Meritor utilizes a 4-Step Incoming Quality Process to resolve supplier performance issues (e.g., quality, delivery, etc.). The four basic steps are shown in the diagram below:

![4 Step Diagram](image-url)
Step 1 – Remedial Communication

A nonconformance report (e.g. NCR, DMN, QPR, Inspection Report) is issued when a Meritor receiving site receives material or service that fails to conform to applicable quality and delivery specifications. Within 24 hours of receipt of the nonconformance report, the supplier is required to submit a formal, interim QRCM Problem Solving Report (see 3.1 Meritor Supporting Documents for a link to the QRCM (8D) report) to the Meritor receiving plant quality department. At a minimum, this corrective action shall identify the problem, the immediate containment actions (including notifying all Meritor receiving plants) that have been implemented to ensure nonconforming product is not shipped to Meritor, and the potential root cause(s) of the problem. Containment must comply with Section 2.24 of this manual. For nonconformances related to Motor Vehicle or Environmental Safety or which cause a major disruption (e.g., stop shipment, line shutdown, yard holds), an action plan is required immediately after notification.

A completed QRCM Problem Solving Report (8D and workbook) shall be submitted no later than twenty (20) calendar days after receipt of the nonconformance report, unless otherwise specified by Meritor.

Costs and charges incurred by Meritor associated with shipping, handling, processing, reworking, inspecting, engineering verification and replacing supplier responsible defective material including the costs of value-added operations prior to its discovery are the responsibility of the supplier.

Step 2 – Working Meeting

A working meeting is a Meritor plant led activity which is held at the receiving Meritor site. The working meeting is to address specific supplier performance issues not resolved in a timely fashion at Step 1. Working meetings focus on the development of an action plan to prevent or eliminate the root cause of the issue. The supplier is expected to submit periodic updates until the issue is resolved.

Step 3 – Incoming Quality (IQ) Meeting

An IQ meeting is a formal executive management level meeting led by and held at the receiving Meritor site. The IQ meeting is to address supplier performance issues not resolved in a timely fashion at Step 2. The purpose of the IQ Meeting is to identify, and mutually agree to, all actions required for the permanent resolution of the systemic and particular issues that led to the Supplier’s unsatisfactory performance. The supplier shall come prepared to address the following:

- Summary of events relating to the Supplier’s performance concerns.
- Completed QRCM Problem Solving Report (8D) including containment actions, root cause analysis, corrective action and verification data and status.
- Preventive action plans and status to address systemic root cause(s)
- Strategic improvement plans

At the IQ meeting, Meritor and the Supplier must agree on the Exit Criteria. In addition, action plans that exceed 90 days duration may require supplier justification and may warrant interim IQ meeting reviews. The supplier is expected to submit periodic updates until the issue is resolved.

Step 4 – Super IQ Meeting

A Super IQ meeting is a corporate led activity involving the Executive Management of both Meritor and the supplier. The meeting addresses issues not resolved in a timely fashion during Step 3. This meeting will likely result in New Business Hold.

The supplier may be prohibited from bidding on new business and/or may be in jeopardy of losing current business at this stage of the 4 Step process. Suppliers who do not show improvement within 3 months of a Super IQ Meeting are automatically placed on New Business Hold. For suppliers that are placed on New
Business Hold, their product must conform to specifications for six consecutive months in order to be removed from New Business Hold. Suppliers will be formally notified by their Meritor buyer when they are placed on or removed off of New Business Hold.

Meritor may request an extra audit from the supplier’s registrar in cases of on-going performance issues. The cost of the audit will be the responsibility of the supplier.

2.24 Chronic Supplier Improvement (CSI) Program

Meritor suppliers that are deemed to have Chronic Delivery or Quality issues may be added to the Chronic Supplier Improvement (CSI) Program. Supplier Development leads the CSI Programs with support as needed from all functional areas of Meritor including Quality, Material Control, Purchasing and Engineering.

The focus of the CSI Program is to affect systemic change at the supplier, including Management Involvement, to resolve issues that are causing the Delivery/Quality problems.

The CSI Program status is reviewed with Meritor senior management at report-out meetings which are held on a regular cadence.

Candidates for the CSI Program are determined based on their performance to Meritor Quality/Delivery indicators.

The CSI expectation for the supplier is that their management team is driving systemic changes to eliminate the cause(s) and improve the Meritor performance indicators on a timely basis. Management’s accountability and success in implementing the improvements to chronic Delivery/Quality issues is critical to exiting the CSI Program.

For issues related to Quality, assignment to the CSI Program can occur at any step of the Supplier 4-Step Quality Process (Section 2.23).

2.25 Containment Requirements

Containment for New Production Parts

a) Containment of new production parts starts with Pre-Production builds and continues through the first 90 days of production after PPAP approval or as agreed to with the receiving Meritor location.

b) New Production Containment requirements will be documented by the supplier in their Pre-Production Control Plan and must be reviewed by the Meritor receiving site quality engineer for concurrence prior to any Pre-Production builds. Concurrence from Meritor does not relieve the supplier of any responsibility or accountability to deliver 100% conforming product to Meritor.

c) Suppliers may exit new production containment if they have achieved zero defects at the point of containment for 90 days after PPAP approval unless otherwise specified by Meritor. If defects are found at containment during this time the counter is reset and 90 clean days must be achieved from that point.

d) Meritor may require suppliers to perform off-line new production containment.

e) Suppliers are required to submit inspection data with each lot shipped to the receiving Meritor plant. This should include variable measurement data, where applicable.

f) Suppliers shall develop action plans to address missed failure modes or capability improvement needs.

Containment for Nonconforming Parts

Suppliers shall implement Level I Containment immediately upon notification by Meritor of a nonconformance. Level I Containment shall include at a minimum:
a) Submission of a documented action plan for the containment of all parts within the supply chain. This includes, but is not limited to, parts at the supplier, in transit and at the Meritor receiving plant. The plan will include a containment data sheet, PPM per batch, PPM per defect and an action plan to resolve the issues detected during the containment activity.
b) Regular communication of the containment results to Meritor.
c) Communication of the manner in which product will be identified as quality assured/inspected by container or individual product.
d) On-site support to Meritor and, in conjunction with Meritor personnel, to Meritor's customers as required.
e) Utilization of a third party inspection service when circumstances prevent the supplier from providing expedient and efficient containment.

Suppliers, whose containment actions have been ineffective, may be placed on Meritor Level II Containment. Level II includes all of Level I, with the added inspection by an Meritor approved 3rd party. The approved 3rd party will be contracted and paid for by the supplier. Based on the severity of the issue, Meritor may elect to have the supplier go directly to Level II Containment.

Supplier shall remain in containment (either Level I or Level II) until permanent corrective action has been implemented and its effectiveness validated. Suppliers may exit from Level I or Level II containment when the following criteria have been met:

a) 30 days of production have shown zero defects at the point of containment unless otherwise specified by Meritor. If a defect is found at containment during this time the counter is reset and 30 clean days must be achieved from that point.
b) A full QRCM Problem Solving Report (8D), with supporting evidence, for the concern that caused the containment to be initiated has been submitted to the Meritor Receiving site and closure has been agreed upon.

Suppliers are required to accept all costs and charges incurred by Meritor associated with the containment activity such as shipping, handling, processing, reworking, inspecting, and replacing defective material including the costs of value-added operations prior to the discovery of the nonconformance, as well as third party inspection costs.

2.26 Product or Process Deviations

It is the policy of Meritor not to accept product that does not meet the requirements of the applicable drawings and specifications. Requests for deviations on nonconforming product shall be submitted to the Meritor receiving plant for review and approval and to obtain Meritor customer approval, as required, prior to shipment. Deviations shall be approved only for a specific time period or quantity of parts. No permanent deviations are permitted.

A deviation request shall be accompanied by a QRCM Problem Solving Report (see 3.1 Meritor Supporting Documents for a link to the QRCM (8D) report). This report shall include the identification of a clean point and the manner in which product will be identified, including how traceability will be maintained.

2.27 Warranty and Cost Recovery

Requirements for warranty and cost recovery are identified on Meritor Purchase Orders. Meritor may identify other specific warranty requirements at the Pre-Award Meeting. In some cases, a separate warranty sharing agreement may be required by Procurement and/or the Business Unit.

2.28 Product Safety and Compliance Requirements

Advance Notification of Potential Safety Nonconformities: The Supplier must notify Meritor as soon as reasonably practicable, after discovering any nonconformity relating to the performance of the product, that
may cause or contribute to a risk of death, injury or property damage, because of the product’s design, construction, or performance. This communication must be in the form of a written notice. Meritor and the Supplier will cooperate fully using Meritor’s Product Safety and Compliance (PSAC) process to identify the cause of the nonconformity and develop a plan for the prompt resolution of the nonconformity.

Regulatory Compliance: The Supplier must comply with applicable government statues, regulations and standards relating to motor vehicle safety (e.g. 49 USC 301, et seq., TREAD Act, EU Directives on Product Safety) within the territories of use.

Regulatory Notice: The Supplier must provide Meritor copies of any data, materials or information provided to a government entity relating to the products supplied (See note 1 below) to Meritor, including any test, manufacturing, field performance or warranty data. The Supplier must provide the information within 10 business days from the date of submission to the government entity.

NOTE 1: The Supplier must promptly notify Meritor, if it has provided information to a government, concerning recall of products that are Identical or Substantially Similar (See Note 2 below), regardless of whether such recall was voluntary or government mandated.

NOTE 2: Identical Or Substantially Similar Motor Vehicle Equipment as defined by NHTSA regulation means an item of motor vehicle equipment sold or in use outside the United States [and its Territories] is identical or substantially similar to equipment sold or offered for sale in the United States [and its Territories] if such equipment and the equipment sold or offered for sale in the United States [and its Territories] have one or more components or systems that are the same, and the component or system performs the same function in vehicles or equipment sold or offered for sale in the United States [and its Territories], regardless of whether the part numbers are identical.

2.29 Charges for Supplier Responsible Nonconformances

An appropriate charge may be imposed by Meritor including but not limited to the following reasons:

a) Nonconformance Report (e.g. DMN, QPR) or Nonconforming Service.
b) Nonconforming Product Deviation Requests
c) Nonconformance to the stated lead time for containment and corrective action implementation.
d) PPAP submission rejections, delays or shipments of unapproved product.
e) Delivery Performance Failures (in addition to any specific costs incurred by Meritor associated with the failure).
f) Warranty Obligations.
g) Product Safety and Compliance (PSAC) Obligations. Relating to extraordinary field action.

A supplier, who causes a Meritor line shutdown, may be required to reimburse Meritor for the full cost of production downtime, as well as any OEM imposed charges.

If a supplier believes that it has been unfairly charged for administrative fees, it shall contact its Procurement representative to initiate a dispute resolution process. Note: Dispute resolution regarding actual nonconformances should be handled through the plant Quality representative.

2.30 Record Retention

Suppliers are required to maintain production part approval process (PPAP) packages, annual layout and validation records, tooling records, traceability records, engineering records, purchase orders and amendments for the length of time that the part (or part family) is active for production and service requirements plus one calendar year or a minimum of 10 years whichever is longer, unless otherwise specified by Meritor. Corrective Action records are to be retained for 5 years. Quality performance records such as control charts, inspection and test results are to be retained for 10 years.
The above time periods are considered “minimum”. All retention times shall meet or exceed the above requirements and any governmental requirements.

2.31 Supplier Scorecards

A Supplier Scorecard will be created for Suppliers with at least $1M spend annually. Meritor Procurement will notify suppliers in writing if they are classified as a Partner Supplier. Partner Suppliers are required to review their Supplier Scorecard performance with the buyer in annual partnership meetings. Scorecard ratings are completed annually by the Partner Supplier and are based on the supplier’s performance during each Meritor fiscal year (October through September). Each Scorecard rates the Supplier based on key attributes which are typically Quality Performance, Delivery Performance and Year over Year Cost Savings Performance. Unsatisfactory ratings may result in one or more of the supplier’s sites being placed on New Business Hold. Contact your lead buyer for further information and to review your company’s current Scorecard.

2.32 Supplier Diversity Requirements (Certified Supplier Only)

All certified Minority Business Enterprises (MBE), Women Business Enterprises (WBE), Service Disabled Veteran-Owned Small Business Enterprise (SDVOSB) and Veteran-Owned Small Business Enterprises (VOSB) are required to submit their initial and renewal certifications to Meritor Procurement within 30 days of receiving them from National Minority Supplier Development Council (NMSDC), Women’s Business Enterprise National Council (WBENC), Small Business Administration (SBA) or one of their affiliate certifying bodies.

2.33 Tier II Minority Purchase Reporting (United States Suppliers only)

United States Suppliers are required to report their U.S. Minority Purchases on Meritor’s Supplier Diversity Exchange Website. Purchases reported must be from a certified Minority Business Enterprise. Refer to the following link for reporting and further instruction:

http://www.meritor.com/suppliers/diversityexchange/default.aspx

U.S. Suppliers who do not report their U.S. minority purchases may be considered in breach of their contract and may be placed on New Business Hold. Non-reporting U.S. Suppliers will also not be eligible for Meritor’s Supplier Achievement Awards.
3.0 Supporting Documents

3.1 Meritor Supporting Documents

For these and other Meritor supporting documents, please refer to the appropriate item at the following link:
http://www.meritor.com/suppliers/Requirements/default.aspx

- Acronyms and Definitions
- APQP Critical Supplier Status Report
- QRCM Problem Solving Report (8D)
- Supplier Pre-Award Meeting Checklist
- Supplier Request for Product or Process Change

3.2 Supporting Industry Documents

The following publications are available from the Automotive Industry Action Group (AIAG). These documents contain information that is mandatory for suppliers to Meritor:

- Quality System Requirements ISO/TS-16949
- Quality System Assessment (QSA)
- Production Part Approval Process (PPAP)
- Advanced Product Quality Planning and Control Plan (APQP)
- Potential Failure Modes and Effects Analysis (FMEA)
- Measurement Systems Analysis (MSA)
- Fundamental Statistical Process Control (SPC)
- Tooling & Equipment Assessment (QSA-TE)
- The TC-5 TREAD ACT Reporting Kit

These documents can be purchased from:

**Canada/United States**
Automotive Industry Action Group
26200 Lahser Road, Suite 200
Southfield, MI 48034
United States of America
Phone: (248) 358-3570/3003
Fax: (248) 358-3253
Web: www.aiag.org

**Brazil**
IQA-Instituto de Qualidade Automotiva
Alameda dos Aicas, 95.
Indianapolis, Sao Paulo, Brazil CEP 04086-000.
Phone/Fax: 55-11-5051-8971
Email: webmaster@iqa.org.br

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Unit 1 Trade Link,
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Fax: 44 (0) 1708 867 941
Web: http://www.carwin.co.uk/qs

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## 4.0 Revision Record and Approvals

<table>
<thead>
<tr>
<th>Rev. #</th>
<th>Date</th>
<th>Revision Change</th>
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<tbody>
<tr>
<td>Previous Issues</td>
<td>Various</td>
<td>See Rev 4 of the SQSR Manual</td>
</tr>
<tr>
<td>4</td>
<td>July 1, 2001</td>
<td>Changed from Meritor to Meritor and Product Development Team to Meritor Project Management Team throughout document. Page 2 updated to new quality policy and clarified; Page 3 – Table of Content; changed section titles 2.3 Pre-Award Meeting; section 2.4 Special Characteristics; 3.2 Nonconformance Report; 3.5 Nonconforming Product Deviations…; Appendix C Supplier Request…; eliminated appendix D, changed Appendix D to E, Appendix F to E. Page 4 – Purpose clarified; Page 6 – section 2.1 revised; section 2.2 revised and added; section 2.4 clarified and added; section 2.5, 2.6, 2.7 clarified; section 2.10 revised; section 3.2 updated; section 3.3 clarified; section 3.4 clarified and updated; section 3.5 clarified and modified; section 3.6 clarified and updated; section 3.8 clarified and updated; section 3.9 &amp; 3.10 updated. Appendix A - changed Meritor website address; Appendix C modified; Appendix D &amp; E updated.</td>
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<td>5</td>
<td>October 18, 2004</td>
<td>Updated, clarified and reordered entire document and added ISO/TS-16949 references (updates noted in blue text). Added the following sections: 2.9 Early Production and Pilot Part Requirements, 2.15 European ELV Directive and IMDS Requirements, 2.19 Contingency Plans, 2.20 Continuous Improvement; 2.21 Supplier Problem Solving &amp; Avoidance, 2.22 Supplier Performance Ratings, 2.27 Product Safety and Compliance Requirements, 2.29 Record Retention, 2.30 Key Supplier Scorecards, 2.31 Minority Supplier Requirements, and 2.32 Tier II Minority Purchase Reporting. Also released a QRCCM Problem Solving Report and APQP Critical Supplier Status Report as a Supporting Document. Updated Supplier Pre-Award Meeting Checklist, Updated Acronym and Definitions and made both a Supporting Document. Added a Supplier 4-Step Diagram. Revised approval sheet to reflect organizational changes.</td>
</tr>
<tr>
<td>5a</td>
<td>April 10, 2006</td>
<td>Maintenance update, removed references to QS-9000 in 2.1, removed ARM Quality Policy, removed obsolete signatures.</td>
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<tr>
<td>6</td>
<td>August 06, 2013</td>
<td>Changed Arvin Meritor Inc. to Meritor throughout entire document.</td>
</tr>
<tr>
<td>6a</td>
<td>August 06, 2013</td>
<td>Updated document by removing LVS titles, responsible persons names and updated to current individuals and positions.</td>
</tr>
<tr>
<td>7</td>
<td>December 15, 2014</td>
<td>Updated, clarified and reviewed entire document. 1.2 c) added “small supplier” note, 1.2 g) added “Conflict Minerals”, 1.3 updated link meritor.com/suppliers..., 2.1 General Supplier Quality Systems Requirements, 2.6 Process Capability and Control – Added requirements table updated, 2.13 Annual Verification and Validation, 2.15 European ELV Directive and IMDS Requirements, 2.17 Product Packaging, Identification and Traceability – updated links. 2.18 Delivery Performance and EDI Requirements – updated link. 2.22 Supplier Performance Ratings-updated link, 2.24 Chronic Supplier Improvement (CSI) Program – section added, Numbering changes to sections 2.25 thru 2.33 due to addition of section 2.4.</td>
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**Document Approvals:**

<table>
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<tr>
<th>Joe Elbehairy</th>
<th>12/18/2014</th>
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<tbody>
<tr>
<td>Vice-President, Engineering &amp; Quality</td>
<td>Date Approved</td>
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<table>
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<tr>
<th>Rob Speed</th>
<th>12/18/2014</th>
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<tr>
<td>Vice President, Procurement</td>
<td>Date Approved</td>
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**APPENDIX**

**Special Characteristics**

A Special Characteristic, also referred to as QCC or control characteristic, is either a Safety Related Characteristic (SRC) or a Major Characteristic of any component or assembly which requires particular attention on the part of the manufacturer to ensure conformance to specification. Special characteristics are designated by the accepted design control authority through:

- The application of special symbols on engineering drawings;
- Materials and process specifications;
- Appearance on a control characteristics list;
- Characteristics deemed major due to the supplier’s manufacturing process;

All Special Characteristics require demonstrated production capability as described in the AIAG PPAP manual and SQSR sections 2.5 and 2.6.

Definitions of Special Characteristics and their Meritor symbols are as follows:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Classification</th>
<th>Definition</th>
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</table>
| ![Major Characteristic](symbol.png) | Major Characteristic | A dimensional, material, process performance specification or standard which if violated, may cause a failure or malfunction resulting in:  
  - A major repair  
  - An inability to manufacture or assemble the product properly  
  - A significant customer complaint |
| ![Safety Related Characteristic](symbol.png) | Safety Related Characteristic | A dimensional, material, process performance specification or standard which if violated, may cause a failure or malfunction resulting in:  
  - An unreasonable risk of personal injury or death, or  
  - A condition of non-compliance with a Federal Regulation |
| ![S.R.C.](symbol.png) | Safety Related Component | Any part, component, assembly or system which contains one or more Safety Related Characteristics. Includes Meritor-owned designs and supplier designs developed exclusively for Meritor |