- Table of Contents -

* The following forms are described in this SQAM, but not attached. The department in charge of the Company pro-vides them as required.

Form(F-QB-003-**)		File Type
01A	Quality Assurance Supervisor Notification Form (New/Updated)	Word
02A	Process Performance Control Table	Excel
03A	GR & R Study Sheet* with English and Chinese	Excel
04(A)A	FMEA Sheets (D-FMEA)	Excel
04(B)A	FMEA Sheets (P-FMEA)	Excel
05A	Bulk Material Checklist	Word
06A	Initial Inspection Application Form	Word
07A	Initial Inspection Report	Word
08A	Change Approval Application Form	Word
09A	Special Acceptance Application	Excel
10A	Corrective Action Report	Excel
11(A)A	Certificate of Material A	Excel
11(B)A	Certificate of Material B	Excel
11(C)A	Certificate of Material C	Excel
12A	Quality Abnormality Report	Excel
13A	Part Submission Warrant	Word
14A	Die/Mold Manufacturing/Repair Application	Word
15A	Appearance Approval Report	Word

1 Purpose

This document (hereinafter called "SQAM") is a summary of the quality assurance requirements MinebeaMitsumi Group companies (hereinafter called "Company"). Suppliers, who provide materials, parts, and products (hereinafter called "Parts") to the Company, are requested to understand and cooperate with this.
The Company requests Suppliers to use this SQAM to ensure "zero defective products delivered" to the Company and stable supplies of Parts.

2 Management

2.1 Position of SQAM

This SQAM supplements the quality requirements described in the Basic Transaction Agreement and the Quality Assurance Agreement (hereinafter called “QAA”) concluded between the Supplier and the Company as well as the Purchase Order for the Parts to be purchased.
This SQAM describes the concepts that the Company requests Suppliers to understand, the basic requirements for quality/environmental management system for realization and the specific methods/procedures for realizing and implementing the system.

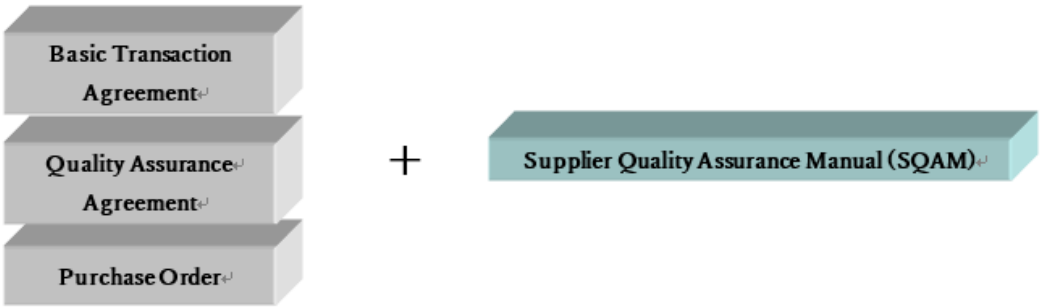


Figure 1. Position of SQAM

2.2 Scope of Application

This SQAM shall apply to suppliers of Parts the Company procures to manufacture the Company's mass-produced products. This SQAM shall also apply to trading companies, sub-suppliers, subcontractors, and the Company's in-house parts supply department (in-house department). This SQAM is written for automotive products, but the scope is not limited to them.
However, this SQAM shall not apply to suppliers who manufacture only prototypes at the time of research and development.
Contact the department in charge of The Company if applying this SQAM is not appropriate.

2.3 Operation

The department in charge of the Company, which procures the Supplier's product (Parts), individually informs the requirements for Suppliers' actual operations, so use this SQAM as a reference document for the relevant items.

2.4 Establishment, Revision and Distribution

Quality Assurance Headquarters (hereinafter called “QAHQ”) of the Company shall revise and manage this SQAM.
This SQAM will be posted on the Company website in principle.
The Company's department in charge or the contact person in the procurement department will provide the URL of the Company website or an electronic file of this SQAM for new Suppliers at the time of concluding a contract, and for existing Suppliers as appropriate.
The Company will not notify Suppliers of revising this SQAM because it is not exchanged by sig-

nature and seal.
Notify the Company's department in charge if actual individual requirements requested from the department differ the items described in this SQAM or are unclear.

2.5 Work Flow

The following flowchart is prepared to facilitate quality assurance operations between the Company and Suppliers. Use the flowchart to understand the overall flow.

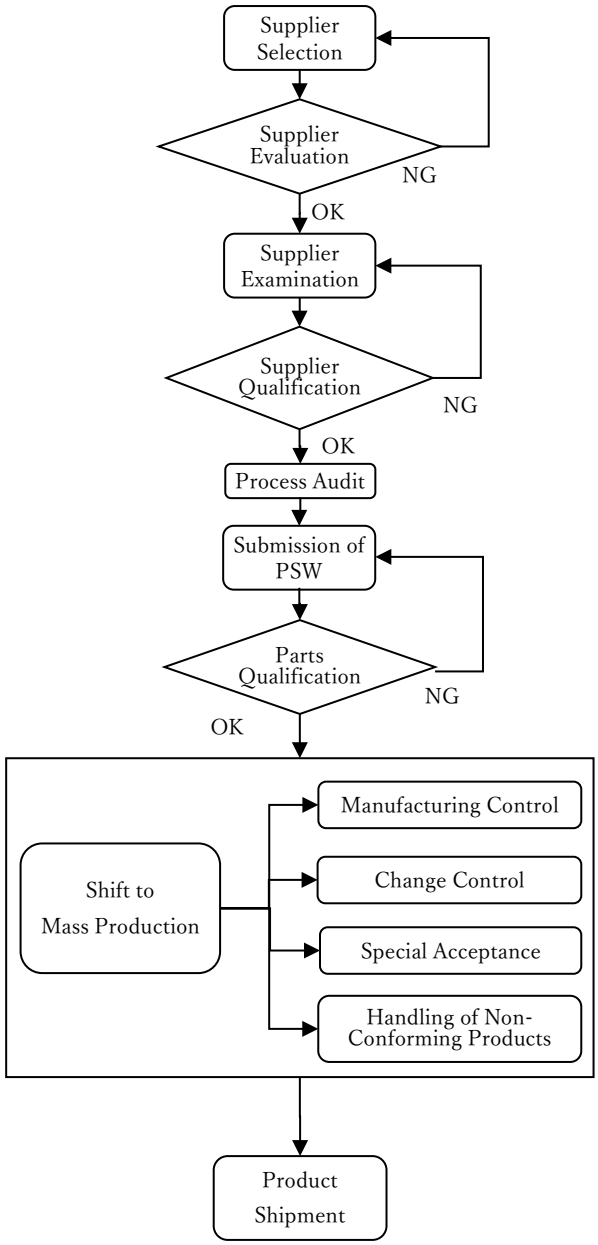
Work Description	Reference Item
	<Supplier Selection> The Company selects new Suppliers. (See Chapter 5, "Selection of New Suppliers (Approval)") <Supplier Qualification> Transaction starts after the Supplier is qualified by the Company. (See Chapter 5, "Selection of New Suppliers (Approval)") <Production Part Approval Process (PPAP)> For prototype production, check details of the specifications and submit necessary documents. The Company approves the supplier after submitting the Part Submission Warrant (PSW). (See Chapter 6 "Production Part Approval Process (PPAP)") <After shifting to mass production> Manufacturing Control: see Manufacturing Control in Chapter 7. Change Control: see Change Control in Chapter 8. Special Acceptance: see Special Acceptance in Chapter 9. Handling of Non-Conforming Products: see Chapter 10, Handling of Nonconforming Products. <Product Shipment> Package Specification: see Package Specification in Chapter 14. Shipping: see Shipping in Chapter 15

Figure 2. Work Flowchart

3 Quality Assurance for Parts

3.1 Range of Quality Assurance for Parts

As for range of Quality Assurance for Parts, see QAA.

3.2 Warranty Period for Parts

Warranty period for Parts shall be described in Table 1 unless otherwise agreed.

Table 1. Warranty Period for Parts

Parts	Warranty Period
For Automotive	The period from the date when vehicle is registered to one of the following, whichever comes first: 1) 36 months; or 2) 60,000 km;
For Non-Automotive	12 months from the date of delivery to the Company

4. Quality Management System (QMS) Requirements

"Zero Defective Products Delivered" is the quality requirements for Suppliers to achieve the Company's goals of "elimination of complaints", "100% on-time delivery" and "elimination of the amount of quality losses".

As premises for transactions, the Company requests Suppliers to acquire the following certification:

1) Suppliers handling Parts for Non-Automotive: ISO9001 or applicable standards
2) Suppliers handling Parts for Automotive: IATF16949

In principle, Suppliers shall select certification bodies for acquiring a certification from certification bodies that have been certified as IAF MLA members.

Submit a copy of the latest version of the certificate (PDF) to the department in charge of the Company.

4.1 QMS

Establish, maintain and manage the quality management system that conforms to this SQAM requirements.

Submit documents related to the quality management system of Suppliers as necessary.

4.2 Management System for Sub-Suppliers

Suppliers are responsible for the quality of Parts that Sub-Suppliers supply. Therefore, instruct Sub-Suppliers to improve inappropriate items and correct them if they are identified.

The Company may directly audit Sub-Suppliers to ensure that the entire supply chain is properly managed.

The following items are the main management items for Sub-Suppliers.

1) To implement plant audits and certification work.
2) To maintain and manage supplier lists. Such lists may be presented upon request from the Company.
3) To have the organizational system in which the quality assurance supervisor of Sub-Supplier is notified and the flowout of nonconforming products can be reported to the Company.
4) The control of environment-related chemical substances and all other materials used meet the Company's requirements.
5) Documents related to communication and instructions are thoroughly managed.
6) To have the control of products that require static electricity control.

7) To have the control that the nonconforming products are identified and not carelessly brought into the line.
8) Planned quality improvement activities, such as preventive measures, are implemented as daily management items.
9) To have an awareness of Change Control and report defined management items to the Company (see Table 9, Chapter 8).
10) To have a traceability that can narrow down the target of Shipping products.
11) To conduct activities to minimize an analysis cycle time in the event of having non-conforming products.

4.3 Development of QMS

The Company aims to establish a consistent quality management system that builds up quality requirements of the Company's customers throughout the Suppliers.
Clarify and maintain the quality contact of Suppliers, the Company and Sub-Suppliers in order to prevent communication errors such as the one accompanying various specification changes.
When the Company's customers require special requirements, the Company will contact and request to Suppliers individually, so manage the special requirement accordingly.

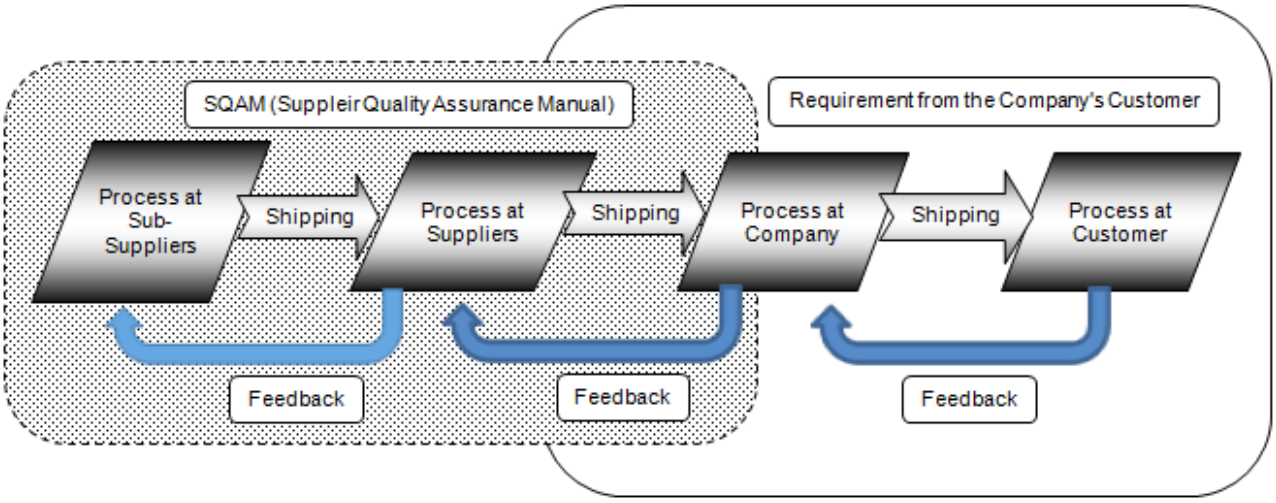


Figure 3. Development of Quality Management System

4.4 Notification of the Quality Assurance Supervisor

Appoint a person who can be fully responsible and correspond to quality (a quality assurance director or person in equivalent position) as a quality assurance supervisor and notify the Company thereof to satisfy and assure the quality that the Company requires.

4.4.1 Responsibilities of Quality Assurance Supervisor

The main responsibilities of the quality assurance supervisor are as follows.
1) To take responsibility as a responsible person for quality assurance operations at Suppliers
2) To summarize quality assurance requirements from the Company
3) To comply with laws and regulations and not to use designated hazardous substances

4.4.2 Notification of the Quality Assurance Supervisor

Enter following items in the “Quality Assurance Supervisor Notification Form” (form F-QB-003-01) or Suppliers'/the Company's own form and submit it to the department in charge of the Company upon starting transactions with the Company.
1) Company name, company seal, address, and name of representative

2) Department, title, name, telephone number, fax number, and E-mail address of the quality assurance supervisor
3) The position of the quality assurance supervisor in the organization (clarify the position of the quality assurance supervisor in the organization chart).
4) Sales Representative who can correspond to emergency
   Copy the Quality Assurance Supervisor Notification Form and submit it to the procurement department of each site (plant) if Suppliers deliver Parts to the Company's plural sites (plants).

4.4.3 Change of Quality Assurance Supervisor

Resubmit the Quality Assurance Supervisor Notification Form as soon as possible when Suppliers change the quality assurance supervisor. Also resubmit the Quality Assurance Supervisor Notification Form when there is a change in a department, title or contact information of the quality assurance supervisor.

4.5 Document Control

Manage drawings and other documents that the Company submits so that the latest version can be used when necessary. Return old drawings and other documents to the Company or dispose them by the Supplier themselves. Unless approved by the Company, do not disclose, leak or let to use these documents to any third party.

4.6 Control of Quality Records

4.6.1 Type of Quality Record

Maintain quality records related to manufacturing.

4.6.2 Maintenance Period

Maintain quality records for 15 years for Automotive related Parts (by the industry-standard) and 11 years (by the Product Liability Act) for Non-Automotive related Parts after the production of the Parts discontinued (EOL) unless otherwise agreed.

4.6.3 Submission of Quality Records

Submit quality records promptly upon request from the Company.

5 Selection of New Suppliers (Approval)

The Company requests new Suppliers to understand the basic requirements of the previous chapter and establish a QMS.

5.1 Selection

In selecting new Suppliers, the Company may ask some questions, so cooperate in answering them.

5.2 Examination of New Supplier Qualification

The Company examines new Suppliers in accordance with the supplier qualification system and certifies them as the Company's Suppliers after they pass the examination. This applies to all suppliers who deliver the Parts for the Company to purchase. For this purpose, submit the following documents for examination.

5.2.1 Documents Requested to Submit

Submit the documents listed in Table 2. The name of the documents may vary depending on the factory or product group to be handled. For details, consult the department in charge of The Company.

Table 2. Documents and Contents for Examination of New Supplier

No.	Documents to be Submitted	Contents
1	Certificate	A copy of the IATF16949, ISO9001 and ISO14001 certificate. Submit such copy of the latest. Inform the Company in case of abolishment.
2	Organization Chart	A. The organization chart should include the following. 1) Contact information and the person in charge of the Quality Assurance Division, Production Division, and Sales Division shall be clarified. 2) If Parts are manufactured at affiliates and overseas factories, the organization chart showing the relationship with the domestic divisions shall be used, and the contact and the person in charge of the Quality Assurance Division and the Production Division (especially the person in charge of delivery date) shall be clarified. B. Inform the Company promptly of any change in the organizational chart.
3	Quality Assurance System Chart	Indicates the system for quality assurance.
4	Abnormality Processing System Chart	Indicates the processing route when a quality abnormality occurs.
5	Lot Traceability System Chart	A. A system chart illustrating a management system that the Parts shipped to the Company can be identified and traced by lot number. B. Parts shall be able to be traced with lot number or production date and time, etc. upon requirement from the Company. C. Indicate the lot number, drawing number, and quantity in the minimum packaging unit (small box/bag).
6	Environmental and Quality Assurance System Audit Sheet	Based on the Environmental and Quality Assurance System Audit Sheet, the Suppliers shall audit their environmental and quality assurance system and fill out the audit results on the sheet.
7	Quality Assurance System Checklist	Based on the Quality Assurance System Checklist, the Suppliers shall audit its quality and fill out audit results on the list.

5.2.2 Supplier Qualification Audits for Quality

The Company audits Suppliers to determine whether they have sufficient quality management systems to deal with the Company (See Chapter 12, Section 1, "Supplier Qualification Audits").

5.2.3 Qualification

The Suppliers can start transacting with the Company as its qualified supplier after the Supplier is judged to have passed the examination based on the qualification examination. Suppliers who failed to pass the examination are requested to report the improvement plans for the items that need to be corrected to the Company.

5.3 Continuous Transaction Evaluation

The Company regularly audits new Suppliers from the viewpoint of quality, price and delivery time after qualifying new Suppliers. Submit a corrective report etc. if any inadequacy is found in the evaluation. In addition, In addition, if such report is not sufficient, the Company may audit such new Suppliers based on the Company's report.

6 Production Part Approval Process (PPAP)

6.1 PPAP Submission Documents

As for production Parts for automotive, the documents submission level shall be 3, and the Company requests the Suppliers to prepare for such documents. If any document that cannot be prepared due to the type of production or transaction, the documents submission level can be changed after the department in charge of the Company approves. Refer to the PPAP manual (latest version) issued by AIAG for the levels and documents to be submitted.

6.2 Company Requirements in PPAP

6.2.1 Implementation of PPAP

Implement the PPAP when:

1) Mass producing new Parts;
2) Correcting defects in existing Parts;
3) Restarting production after the Company requested shipment suspension due to quality-related problems;
4) If any changes in Parts, materials or services that Sub-Suppliers provide;
5) Having items listed in Chapter 8 “Change Control”.

6.2.2 Condition of Applying PPAP

Manufacture the Parts and prepare documents for approval in accordance with the following conditions.

1) Manufacture under the same conditions as those at the time of mass production (manufacturing site, molds/jigs tools, gauges, process, operators, manufacturing environment, etc.).
2) Manufacture consecutively for 1 to 8 hours, or 300 or more pieces.
3) Check each line, or mold and cavity if multiple lines exist in the same product or the shape is determined by a mold.

* Consult with the department in charge of the Company if it is impossible to clarify the production conditions as described above such as bulk materials etc. Make arrangement to prevent quality problems to occur due to changes in conditions, etc.

6.2.3 Completion of PPAP

Exchange the Parts Submission Warrant (PSW) with the department in charge of the Company at each completion of the PPAP procedures.

6.3 Study of Process Performance Index

Calculate and report the Process Performance Index (Ppk) for the dimensions and characteristics at the design prototype stage according to the instructions from the department in charge of the Company. Normally, the study is conducted for the special characteristics (critical dimensions or critical characteristics) specified in the drawings and specifications.

6.3.1 Ppk Judgment and Action Criteria

As a rule, the following table will be used to determine and take action on the resulting Ppk value.

Table 3. Automotive Parts

Calculation Results	Comment
Ppk < 1.33	Process performance index is insufficient. Implement 100% inspection and prompt improvement.
1.33 ≤ Ppk ≤ 1.67	Process performance index is almost sufficient. Implement continuous improvement to reach 1.67 or more.
Ppk > 1.67	Process performance index is sufficient. Implement maintenance and sampling.

Table 4. Non-Automotive Parts

Calculation Results	Comment
Ppk < 1.00	Process performance index is insufficient. Implement 100% inspection and prompt improvement.
1.00 ≤ Ppk ≤1.33	Process performance index is almost sufficient. Implement continuous improvement to rech 1.33 or more.
Ppk > 1.33	Process performance index is sufficient. Implement maintenance and sampling.

Notes

1) Assure Ppk ≥ 1.67 for Automotive Parts and Ppk ≥ 1.33 for Non-Automotive Parts. Set individual control items and control standards after consultation with the department in charge of the Company.
2) Submit and report process capability using the Process Performance Control Chart (form F-QB-003-02) etc. to clarify calculation conditions.
3) Submit the improvement plan for items for which the Process Performance Index is judged inadequate (Free format).

6.4 Measurement System Analysis (MSA)

The purpose is to ascertain whether any problems exist in the measurement system and whether improvements are necessary or not. Analyze Parts, instruments, and human variability using GR & R (Gage Repeatability & Reproducibility). GR & R is an effective method for taking countermeasures because it can narrow down the problem areas.
For more information on MSA, refer to the relevant parts of the MSA manual (latest version) issued by AIAG.
The department in charge of the Company may request to carry out the evaluation using other evaluation methods.

6.4.1 Application of MSA

This applies to the measurement systems that indicates the measurement value.
** Cannot be applied to measurements without repeatability by nature.
The time of application shall be in accordance with 6.2.1 "Implementation of PPAP".

6.4.2 MSA Procedures

Perform MSA under the following conditions.

1) Number of samples to be measured: 10
2) Number of measurers: 2 to 3

3) Number of repeat measurements: 2 to 3 times

Refer to the GR&R Report (Form F-QB-003-03) for detailed analysis procedures.

6.4.3 Criteria for MSA

Calculate %GR & R from the measurement result and evaluate it using this calculation result.

Table 5. Measurement System Criteria

%GR & R	Evaluation
<10%	The measurement system is judged to be good. Can be used in mass production.
10~30%	Improvement is desirable. However, it can be used depending on the object.
30%>	Immediate improvement is required.

6.4.4 MSA Improvement Actions

Comparing EV values (repeatability: Equipment Variation) and AV values (reproducibility: Appraiser Variation) calculated when calculating %GR & R can provide a guidance for improvement actions.

1) When EV < AV
   Problems may exist with the measuring person. Minimize variation among inspectors by making it easier to use the instrument and retraining inspectors.
2) When EV > AV
   Problems may exist with the measuring instrument. Reduce the variation due to the equipment by reviewing the measurement conditions and checking the installation method, location, and en-vironmental impact of the measuring instrument.

6.5 Use of Failure Mode and Effects Analysis (FMEA)

In the product design and process design stages, FMEA extracts problems and removes/reduces risks that may arise problems in advance. Conduct a FMEA to prevent such problems.
Refer to the FMEA sheet (form F-QB-003-04) for detailed procedures.

6.6 Sample Product

Submit agreed quantity of Parts linked to the Suppliers' assessment results to the Company separately.

6.7 Master Samples and Boundary Samples

Store the Parts which have the best characteristic among the Parts approved through PPAP as a master sample.
Manage the appearance and color that are difficult to specify in the specifications using boundary samples with each other. For this purpose, submit a boundary sample or color sample. Samples to be submitted shall be applied after the department in charge of the Company approves.

6.7.1 Master Sample

1) Make it identifiable as a master sample, and store it after the department in charge of the Company approves.
2) Update master samples which degrade with age after department in charge of the Company approves.

6.7.2 Boundary Sample

This is used to judge the standards whether the appearance of the Parts (shape, scratch, dent, contamination, appearance, etc.) is acceptable or not.

1) In the sample, clearly indicate the boundary and the applicable portion of the boundary.
2) Boundary samples may be replaced with photos if possible.
3) Determine the expiration date of the boundary sample considering the durability of the sample.

6.7.3 Color Sample

This is used to judge whether the Parts color is acceptable or not.

1) Prepare a set of the color plates showing the standard and boundary (upper/lower boundary of the color tone).
2) If applicable, add measured value obtained from the color difference meter.
3) Store in a dark place to avoid color fading.
4) In principle, the expiry date shall be a year. Check the change of condition every year and, if no problem exists, update the expiry date after the department in charge of the Company approves.

Boundary samples and color samples shall be submitted in the required number, some of them shall be returned to Suppliers after the department in charge of the Company approves, and stored on both sides.

6.8 Bulk Material Checklist

If the Company designates, submit a copy of the PSW and a bulk material request checklist at the time of individual PPAP procedures when newly delivering products, parts, and materials in accordance with the latest version of the IATF16949.

6.8.1 Examples of Bulk Materials

Examples of bulk materials include, but are not limited to:

1) Iron and non-ferrous metals (bar, sheet, ingot)
2) Resin (plastics, rubber)
3) Fats and oils (anti-rust oils, greases, etc.)
4) Films
5) Magnetic materials (magnetic powders)
6) Adhesives and solder
7) Coating materials and paints (liquids, powders)
8) Electrical wires
9) Glass

6.8.2 Bulk Material Requirement Checklist (form F-QB-003-05)

Use the bulk material requirement checklist as follows.

1) Requirement date and target date
   For each item listed in the checklist, enter the target date for completion of that element or "NR (Not Required)" if not required.
2) Responsible person - Customer
   Identified by the department of the person who confirms and approves the elements.
3) Responsible person - Suppliers (including Sub-Suppliers)
   Identified by the name or department of the person who collects the elements to be confirmed and warrants their completeness.
4) Comment/Condition
   Identify the approval information or the citation of the package insert that provides unique information about the element. (e.g. this may contain specific formats used in the design matrix or acceptable tolerances for MSA investigations)
5) Approver
   Enter the name of the authorized customer representative who checked the elements and accepted them.
6) Plan Approver
   Identify the person (the department to which the person belongs) who developed and agreed on a project plan.

7 Manufacturing Control

7.1 Maintenance of Approval Conditions

Control the mass production under the manufacturing conditions agreed with the Company at the time of PPAP.
Submit the Change Approval Application Form (form MMQS-011-08) and get approved from the Company when changing manufacturing conditions after PPAP. See Chapter 8 for details.

7.2 Statistical Process Control

To deliver stable quality-level Parts, control the process using statistical methods according to the control plan.
The control chart should be readily available to the line staff whenever needed.
Refer to the SPC (Statistical Process Control) Reference Manual that AIAG issues for the type and operation of the control chart.

7.3 Study of Process Capacity Index (Cpk)

Process capability index is calculated by calculating the standard deviation σ from the XbarR control chart in the mass production process.

7.3.1 Cpk Judgment and Action Criteria

As a rule, the following table will be used to determine and take action on the resulting Cpk value.

Table 6. Automotive Parts

Calculation Results	Comment
Cpk < 1.33	Process capability index is insufficient. Implement 100% inspection and prompt improvement.
1.33 ≤ Cpk ≤ 1.67	Process capability index is almost sufficient. Implement continuous improvement to reach 1.67 or more.
Cpk > 1.67	Process capability index is sufficient. Implement maintenance and sampling.

Table 7. Non-Automotive Parts

Calculation Results	Comment
Cpk < 1.00	Process capability index is insufficient. Implement 100% inspection and prompt improvement.
1.00 ≤ Cpk ≤ 1.33	Process capability index is almost sufficient. Implement continuous improvement to reach 1.33 or more.
Cpk > 1.33	Process capability is sufficient. Implement maintenance and sampling.

Notes
1) Target Cpk ≥ 1.67 for Automotive Parts and Cpk ≥ 1.33 for Non-Automotive Parts. Set individual control items and control standards after consultation with the department in charge of the Company.
2) Report Process Capacity Index using the Process Performance Control Table (form MMQS-011-02) etc. to clarify the calculation conditions.

7.4 Process Improvement

If the Process Capacity Index fails to meet the Company requirements, corrective action is required. Submit a process improvement plan (free format) to the Company, and implement improvement and verify results in a mutually agreed manner for the elimination of the cause of variations.

7.5 Initial Product Management

7.5.1 Definition of Initial Product

Initial Product means the Parts of the initial lot produced in the mass production process and is specified as follows.

1) Parts that will be newly ordered to or traded with the Company (even if the Parts have been used in other divisions, they will be treated as an initial product when used in a new division, except for general standard parts).
2) When the same Parts that have been suspended deliveries to the Company for more than six (6) months or the term agreed with our department in charge of the Company is resumed.
3) Parts whose designs have been changed.
4) Parts whose constructional element has been added, removed or changed.
5) Parts whose manufacturing process has been changed.

Submit the Initial Inspection Application Form (form F-QB-003-06) in case of 1) and 2). In addition to the Initial Inspection Application Form, submit the Change Approval Application Form (form F-QB-003-08) in case of 3) to 5). The department in charge of the Company informs Suppliers when to submit these forms.

7.5.2 Initial Inspection

7.5.2.1 Number of Parts Subject to Initial Inspection

Prepare 2 test pieces for general Parts, and 2 x number of cavity for the Parts manufactured with multi-cavity tools/equipment, respectively. If the Company requests the quantity of test pieces, prepare such quantity.

7.5.2.2 Timing of Submitting Samples

Unless otherwise agreed, submit samples within 7 working days before the date of the initial delivery in principle. Notify the Company if the Supplier can't submit samples by the designated date.

7.5.2.3 Initial Inspection Report

For the initial inspection at Suppliers, inspect the items agreed upon with the Company in the drawings and specifications. Submit the test result using the Initial Inspection Report (form F-QB-003-07) as a reference.

7.5.3 Indication at the Time of Initial Lot Delivery

In principle, after the initial inspection is complete, indicate that it is the initial lot, on the packing label of initial delivery of 5 lots, in order to distinguish it from the subsequent mass product. If several packing boxes exist, indicate them on the identification tag of each box. Confirm the details from the department in charge of the Company and follow the instructions, if any.

7.6 Lot Management and Traceability

For all Parts delivered to the Company, conduct lot management for each Parts for the production history and delivery records correspond to the lot identification.

If quality problems occur in the Company's or its customer's process, manage the lots so that the target lot becomes clear and minimal, including first-in, first-out (FIFO).

Manage traceability so that quality data, such as process conditions, inspection conditions, and inspection results, from acceptance of materials used for Parts to delivery of Parts, can be traced back.

7.6.1 Definition of Lot

A lot is used to determine when the relevant material, part, or product is received, processed, or assembled from its number, and the lot numbers and quantity will be agreed upon between both Parties.

7.6.2 Lot number Setting

Before delivering the Initial Samples, set the lot numbers and submit a document explaining its configuration to the department in charge of the Company.

7.6.3 Traceability

Establish a management system that can trace at least the following manufacturing history from a lot number.
If the Suppliers require Sub-Supplier's traceability, establish a management system that can trace their manufacturing history in the same way.

1) Production site and production line
2) Manufacturing date and shift
3) Inspection record
4) Work record
5) History of materials used and Parts (receipt date and production lot number)
6) Equipment, jigs, tools and measuring instruments used

7.7 Special Process Management

Processes that are difficult to verify the parts workmanship without destruction shall be a special process. In addition to setting a range of quality condition in the process considering variations in parts and process, the Company requests the Suppliers to take special management such as education and training, and skill certification for workers.

7.7.1 Special Processes

The Company defines a special process as follows. Consider the same at the Suppliers.

1) Joining processes (soldering, welding, bonding, screw tightening, etc.)
2) Painting
3) Heat treatment
4) Surface treatment (plating, etc.)
5) Molding (resins and metals)

7.7.2 Management of Special Processes

Manage as follows.

1) Clarify the quality conditions of the special process according to the control plan. Define the appearance samples and boundary samples for the acceptance/rejection criteria as necessary.
2) Appoint an instructor of a special process based on the judgment criteria such as practical experiences.
3) Instructors shall prepare an in-house education program and use it to train workers.
4) Based on the content specified in the program, the instructors shall check the workers' ability and certify them.
5) Make it possible to identify the qualified workers by having a certification etc. Do not allow any work in any special process to be conducted other than the qualified workers.

7.8 Rework Management

Do not rework the Parts in principle.
When reworking the Parts is unavoidable, specify the control procedures for the rework process, acceptance criteria and rework procedures in the control plan and procedures to ensure the same quality as the production process, and record and store the quality check results of Parts reworked.
When Parts are reworked in the production process, the risk of mixing parts, errors in work, and scattering of foreign matters becomes higher. When reworking the Parts, prepare a working environment separated from the normal process.

7.8.1 Definition of Rework

The following works are treated as rework, but it is not limited to them. If the Suppliers can't decide whether a work falls into the category of a rework, contact the department in charge of the Company.

1) Work to remove burrs for molded parts
2) Work to make defective parts, such as missing parts, into good parts
3) Work to extract parts that can be used from defective assemblies and reintroduce parts into new production processes

The following works are not treated as rework.

1) Work to remove solder balls
2) Rework to the extent that no change is made to products or parts
3) Work that does not involve disassembly, such as aligning, re-measuring, or readjusting parts to the jig.

7.8.2 Review and Approval of Whether Rework is Feasible or Not

If a defect occurs prior to mass production, determine whether it falls under the definition of rework. If applicable, prepare the process according to the Requirements to Rework Parts shown in Table 8 and obtain an approval from the quality assurance manager of the Suppliers.

7.8.3 Rework Record

When the Parts are reworked, record the contents of the rework, the lot, and the results of subsequent quality checks. Submit these records to the Company as appropriate.

7.8.4 Consideration Points for Rework

1) Have a work instruction always ready in the process (place) where the Parts are reworked so that workers can smoothly work.
2) To prevent foreign parts, missing parts, and unprocessed parts from flowing out, be careful not to allow the Parts under rework to be brought into the lines while they are running.
3) Regardless of whether it is inside or outside the line, always implement 5s thoroughly in a rework area and prevent reworking Parts from scratches, dents, deformation, and mixing with foreign matters in not only where reworked but also other places.
4) Confirm the consistency between the control plan created for rework and the actual operation of the work instruction.
5) Before deciding whether the reworking the Parts or not, assess risk for rework and, if necessary, test their reliability, etc.

Table 8. Requirements to Rework Parts

Item	Requirement
Workplace (excludes in-line repairs)	1. Have an exclusive workplace for rework Parts, and indicated that it is a rework site on a signboard. Rework in the Production Process shall be prohibited in principle. 2. Pre-rework, post-rework, and scrapped Parts are identified. 3. Equipment and jigs required for rework are provided. 4. Working environments such as temperature and humidity, communication lines, and static electricity management are properly provided.
Work Instructions for Repair	1. Work at the rework site is specified in the work instructions. Display the work instruction in a place where the workers can check promptly. 2. Items that can/can't be reworked are specified. 3. Work procedures and details are specified for each rework item. 4. Parts that can/can't be reintroduced are specified. 5. Control items and the acceptance criteria for reusable parts are specified. 6. Test items and the acceptance criteria after rework are specified. 7. Reintroduction rules after rework are specified. 8. Test results after rework can be distinguished from the new products. 9. Clearly states the methods to prevent problems, such as prevention from mixing when reusing the Parts etc. Include all the details in the Control Plan and it shall be submitted to the Company for a mutual agreement.
Workers	1. Special work qualifications are established for rework workers. 2. Workers work according to the work instructions. 3. Report to the process manager if any defects that do not occur during normal work occur during the rework process. Rules for irregular products are established. 4. When rework is temporarily suspended, workers understand and implement identification management.
Stratification and Aggregation	1. The part number, date, details of the work, number of units, and workers' name are described as a rework record. 2. Process defect rates for normal and rework Parts are stratified and aggregated.

7.9 Products Safety

Unless otherwise agreed between the two companies, comply with the laws and regulations of the country that imports/exports the Parts.

7.10 Environmental Quality

Comply with the European REACH Regulations, the RoHS, the WEEE Directive and other national and international chemical substances regulations in compliance with the International Standards ISO14001 and 9001.

Prepare a Chemical information SHaring and Exchange under Reporting Partnership in supply chain (chemSHERPA) and submit a certificate of non-use of hazardous/restricted substances, analytical data, and chemical composition table (or MSDS) for the Parts that the Company receives.

For details, refer to the MinebeaMitsumi Group Green Procurement Standard EM10507 and its Attachment published on the Company website.

7.11 Maintenance/Inspection of Measuring Instruments

Measurement accuracy is an important factor for assuring quality. Calibrate the measuring instruments used. Using instruments that have not been calibrated is considered a serious management failure.

1) Prepare a list of instruments to be calibrated and manage the calibration target, schedule, and results.
2) Attach a calibration label (indicating the expiration date) to the target instruments so that the user can easily understand whether calibrated or not and the expiration date.
3) For measurement instruments not calibrated (those not applicable for calibration), clearly display on them not to use in the process.

7.12 Maintenance and Management of the Company Property

If the Suppliers have supplied, lent or kept any items from the Company (materials, parts, dies/molds, gauges, measuring instruments, equipment, jigs, tools, etc.), clarify the control procedures for storage, quality maintenance, inventory, preservation, labeling, identification, etc., and maintain and manage them properly.

7.13 Storage of Parts Prior to Shipping

To prevent damage and deterioration of Parts before shipping to the Company, specify the location, method of receiving/shipping, packaging method and period, and establish a system that minimizes stocks. Inspect the stocks at appropriate intervals to detect damage or deterioration of stock items.

8 Change Control

In order to prevent problems due to changes, this chapter explains how to make an application for changes(including its plan) in advance to the Company when the Suppliers change their process. Refer to Fig. 4 for the flow.

8.1 Definition of Changes

Changes mean to change 4M (machinery, materials, people, methods) conditions and others to produce the Parts. Fully considering lessons learned and other experience, the scope of management and management methods are defined below.

8.2 Items Requiring Prior Planning and Change Applications to the Company (see Table 9)

1) Changes that can't be detected from the Parts themselves, such as inspection and measurement conditions
2) Changes that significantly affect quality characteristics, such as equipment and molds
3) Changes related to the causes of quality problems.
4) Changes in the shape of parts that Suppliers design by themselves
5) Changes in Sub-Suppliers (including changes in commercial distribution and logistics)

NOTE:

For products that have confidential information, or those much information cannot be disclosed, such as electronic devices and ICs, exchange documents with the department in charge of the Company in addition to the table below.

Table 9. Items that Requires Application for Change

Subject of Change Control				Necessity of Application	
4M	Category	Subcategory	Further Subcategory (Example)	To Manage at the Suppliers' Responsibility (Including Managing Sub-Suppliers)	
				Change Application Item	Change Notice Item
Machine	Production Location	Relocation/Transfer Outside the Plant	Relocation / Transfer to Supplier's Other Sites	○	
			Relocation / Transfer to a Consolidated Subsidiary		
			Relocation / Transfer to Other Companies Other Than the Above		
		Relocation/Transfer Within the Plant	Layout Change	○	
			Relocation of Production Lines (Including Inspection Process)		
			New Construction and Expansion of Production Lines (Including Inspection Process)		
		Change of the Process Sequence (Including Addition or Deletion)		○	

Subject of Change Control				Necessity of Application	
4M	Category	Subcategory	Further Subcategory (Example)	To Manage at the Suppliers' Responsibility (Including Managing Sub-Suppliers)	
				Change Application Item	Change Notice Item
	Facility and Equipment (Including Inspection Equipment) in the Manufacturing Process	New Introduction		○	
		Addition/Update		○	
		Conditions and Parameters of the Manufacturing and Inspection Equipment (Excluding Routine Adjustments)		○	
		Modifications (Reconstruction according to Application)		○	
		Repairs (Unplanned Repairs and Improvements from time to time)			○
		Systematic Maintenance			○
	Die/Mold (Casting Press, Mold)	Addition/Update		○	
		Modifications (Reconstruction according to Application)		○	
		Repairs (Unplanned Repairs and Improvements from time to time)			○
		Systematic Maintenance			○
	Jigs and Tools	Addition/Update		○	
		Modifications (Reconstruction according to Application)		○	
		Repairs (Unplanned Repairs and Improvements from time to time)			○
		Systematic Maintenance			○
	Measurement Instruments for Inspection	Addition, Update, or Modification of Dedicated Measuring Instruments/Gauges		○	
		Addition, Update, or Modification of Generic Measuring Instruments/Gauges			○
		Repairs (Unplanned Repairs and Improvements from time to time)			○
		Systematic Maintenance			○
Method	Working Method	Production/Construction Method (Welding, Surface treatment, Heat treatment, Assembly, etc.)		○	
		Inspection Method	Improvement or Deletion of Inspection Process (Including Specification Change)	○	
		In-Plant Transport Method			○
		Storage Method	Parts, Work in Process, Components and Raw Materials		○
	Transportation Method	Means of Transport (Ship, Air, Car), Transit Place, and Contractor's Name			○
	Warehouse	Storage Location (Including Storage Environment) for Parts in Warehouses Existence of Work Methods in Warehouses			○
Material	Main Material Bulk Material (Other than those confirmed in the test)	Change of Material Name, Grade, and Composition (Including Cleaning Materials, Degreasing Agents, etc.)		○	
		Change of Sub-Suppliers and Manufacturers (Including Manufacturing Locations)		○	
Man	Newly Employed Workers				○
	Support, Relocation of Workers, and Returned Workers				○
	Qualified Worker	Qualified Worker the Customer Designates			○
		Qualified Worker Based on the Supplier's Own Standards			○

8.3 Implementation Method

8.3.1 Submission of Change Plan Document and Change Application Form

When changes are planned, submit a Plan Document to the Company and consult with the department in charge, including the submission deadline, by referring to Table 10 below. If a change is needed, submit a Change Application Form.

Table 10. Timing to Submit Plan Document/Change Application Form

Parts	Timing to Submit Plan Document	Timing to Submit Change Application Form
Automotive Parts	When the plan occurs	360 Days Before
Non-Automotive Parts	Same as above	180 Days Before

Notes

1) If processing by the due date is judged to be difficult due to the requirement from the Company's customer, the department in charge of the Company shall notify the Supplier thereof. Based on the request from the Company (customer's requirement), establish the subsequent procedures and implement the change procedures.
2) The department in charge of the Company may check the performance related to changes, so provide test Parts.

8.3.2 Application Destination

Submit a Plan Document and Change Application Form to the department in charge of the Company. Free format for a Plan Document and use the Change Approval Application Form (form F-QB-003-08) for a Change Application.

8.3.3 Items to Be Confirmed Prior to Application

Confirm the effect of the change and evaluate the risk by referring to the following.

1) Has the purpose and effect of change been confirmed?
2) Isn't anything in the item to confirm the effectiveness of the change omitted?
3) Do the Suppliers consider not only the advantages but also the disadvantages?
4) Do any other properties and Parts affected exist?
5) Do any effects on other functions or shapes exist?
6) Are safety and reliability confirmed?
7) Do any problems exist when introducing into the process?
8) Do any problems with processing methods exist?

8.3.4 Change Approval from the Company

1) The department in charge of the Company shall examine the change and, if no problem exists, notify the Suppliers of its approval in writing.
2) Be sure to obtain the Company's approval and implement the change.
3) Note that some of the contents may be handled as unchangeable.

8.3.5 Delivery of Parts Approved for Change

Deliver the Parts changed in accordance with 7.5 "Initial Product Management".

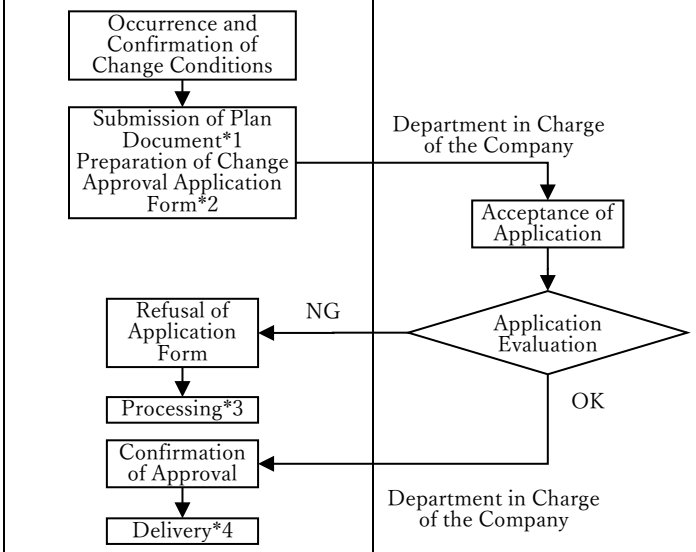
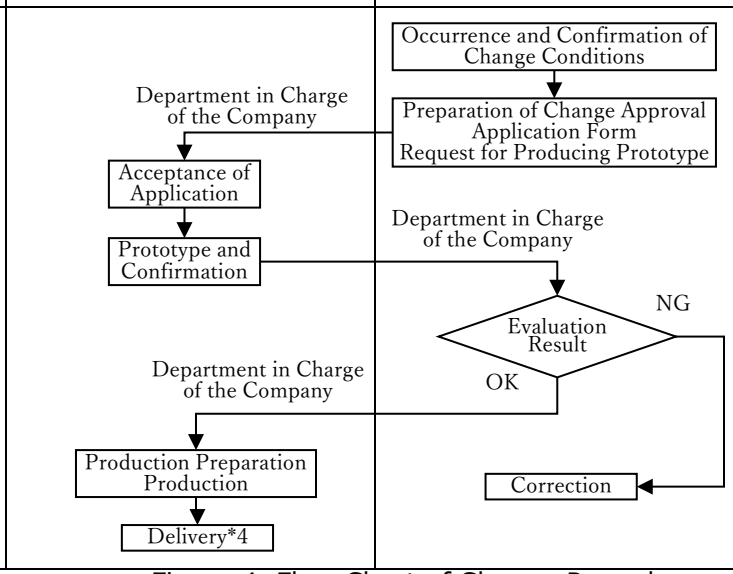
Work Description	Process at the Suppliers	Process at the Company	Remarks
Change Control 1 [Requests from the Supplier]			When planning a change, submit the Plan Document to the Company, consult with the department in charge, and if the change is needed, prepare and submit the Change Approval Application Form (form F-QB-003-08). Submit the Change Approval Application Form with reference data 360 days before the desired date in the case of automotive parts and 180 days before in the case of the non-automotive parts as a standard. The Company distributes the Change Approval Application Form to its related departments (and its customer, if necessary) for their examination. If the Suppliers cannot report by the above deadline due to the supplier evaluation period, the Company will consult about how to respond.
Change Control 2 [Requests from the Company]			Occurrence and Confirmation of Changes When requesting a change by the Company's requirement, the Company will issue an application form. Acceptance of Application Because mutually discuss in advance, application that the Supplier can not correspond to won't be issued. Receipt and Notification of Results The form shall be free. Enter the opinions of the supplier in the form of a report.

Figure 4. Flow Chart of Change Procedures

*1: The Plan Document form shall be free.
*2: The Suppliers do not have to enter what is marked with a circle in the category of "Necessity of Application" in Ta-ble 9, Items that Requires Application for Change, into the application form, but inform the Company.
*3: Prevent the Parts manufactured with a changed specification from mixing and carry out disposal.
*4: Implement Initial Product Management and deliver Parts with identification.

9 Special Acceptance

Special Acceptance means to specially accept the Parts that deviate from drawings and specifications when the Company judges that remedying the Suppliers is advisable and that the Company can use the Parts from the viewpoint of the delivery date and economic aspect based on the application from the Suppliers.

9.1 Application for Special Acceptance

When applying Special Acceptance, fill out the specified "Special Acceptance Application" (form F-QB-003-09) and submit the samples of Special Acceptance to the department in charge of the Company before delivering the lot. In principle, Special Acceptance for critical control dimensions and critical control characteristics (special characteristics) cannot be approved.

9.2 Approval of Special Acceptance

After the required discussion and approval, the Company shall inform the Suppliers whether Special Acceptance is acceptable or not, and the conditions associated with it. Deliver the Parts according to the conditions.

9.3 Delivery of Specially Accepted Parts

When delivering the specially accepted Parts, ship them by clearly indicating that they are specially accepted Parts in the Identification tag.

9.4 Restrictions on Special Acceptance

The number of Parts is limited per Application for Special Acceptance, and the Supplier cannot continuously apply for Special Acceptance.

9.5 Correction after Approval of Special Acceptance

Prepare and submit the Corrective Action Report (form F-QB-003-10) for non-conformance at the time of applying for Special Acceptance. Correct after the Company approves.

Work Description	Process at the Suppliers	Process at the Company	Remarks
Special Acceptance	Occurrence and Confirmation of Special Acceptance Items ↓ Preparation of Special Acceptance Application	Department in Charge of the Company Application Evaluation NG OK	Prepare and submit the Special Acceptance Application (format F-QB-003-09). Submit samples of Special Acceptance and reference data well in advance from the scheduled date of delivery. However, the duration may vary depending on the content, so consult with the Company's contact person. The Company distributes the Special Acceptance Application to its related departments and examines it. The Company may have to obtain its customers approval. If the Suppliers cannot report by the above deadline due to the supplier evaluation period, the Company will inform how to respond.
	Refusal of Application Form ↓ Treatment of Defectives*1		
	Return of Application Form (Permission for Special Acceptance)*2 ↓ Shipping (with Identification)	Department in Charge of the Company	

Figure 5. Flowchart of the Process for Special Acceptance

*1: Prevent the Parts rejected as Special Acceptance from mixing and carry out disposal.
*2: When Special Acceptance is permitted, submit the Corrective Action Report (form F-QB-003-10) separately and ship the regular Parts after the Company approves.

10 Handling of Non-Conforming Parts

If non-conforming Parts are found in incoming inspections at the Company, production lines, or at the Company's customers or in the market, the Company shall issue Quality Abnormality Report (Form F-QB-003-12).
Complete and submit the Quality Abnormality Report by the designated date.
Take emergency response if the abnormality is serious and may cause the Company or its customers to shut down their production lines.

10.1 Deadline of Submitting Report (Standard Schedule)

The Company shall specify the submission deadline for the Quality Abnormality Report or Corrective Action Report for each case according to the circumstance of the situation, but the standard schedule is shown in the following table.

Table 11. Deadline of Submitting the report

Document Contents	Deadline	Reporting Method
Interim Containment Actions(~D3) and to report Influence Range	Within 24 Hours	Submit a report to the person in charge of the Company
Permanent Measures Plan (~D5)	Within 5 Working Days	Submit the schedule to the person in charge of the Company
Implementation of Permanent Measures (~D6)	Within 7 Working Days	Submit a report to the person in charge of the Company
Confirmation and Report the Effects of Permanent Measures (~D7)	Within 14 Working Days	As a general rule, the deadline shall be within 14 working days, and it shall be changed according to the contents of the above report.

10.2 Report Content and Form

Include the following in the Corrective Action Report. Use the Corrective Action Report (Form F-QB-003-10) or the form the department in charge of the Company specifies. If the Supplier wants to use its own form, obtain the agreement from the department in charge of the Company.

1) Supplier's Response Team (if 8D)
2) Details of Non-conformance (Check Results of Actual Parts at Suppliers and information the Company provides)
3) Interim Containment Actions and its Scope of Application
4) Root Cause (Method to seek the true cause with 5 whys)
5) Permanent Corrective Actions
6) Confirmation of the Effectiveness of Permanent Corrective Actions
7) Preventive Measures for Recurrence (to be applied to the same type of Parts)
8) Completion Check (if 8D)

10.3 Emergency Response

If the non-conformance is serious, correspond to it quicker than the schedule described in Table 11. If such non-conformance occurs, take action in a short time, covering a wide range, including the market, the Company's customer's inventory, in-transportation, finished products in the factory, work-in-process, inventory, and the Suppliers' inventory. If such non-conformance occurs, cooperate fully to resolve the problem.

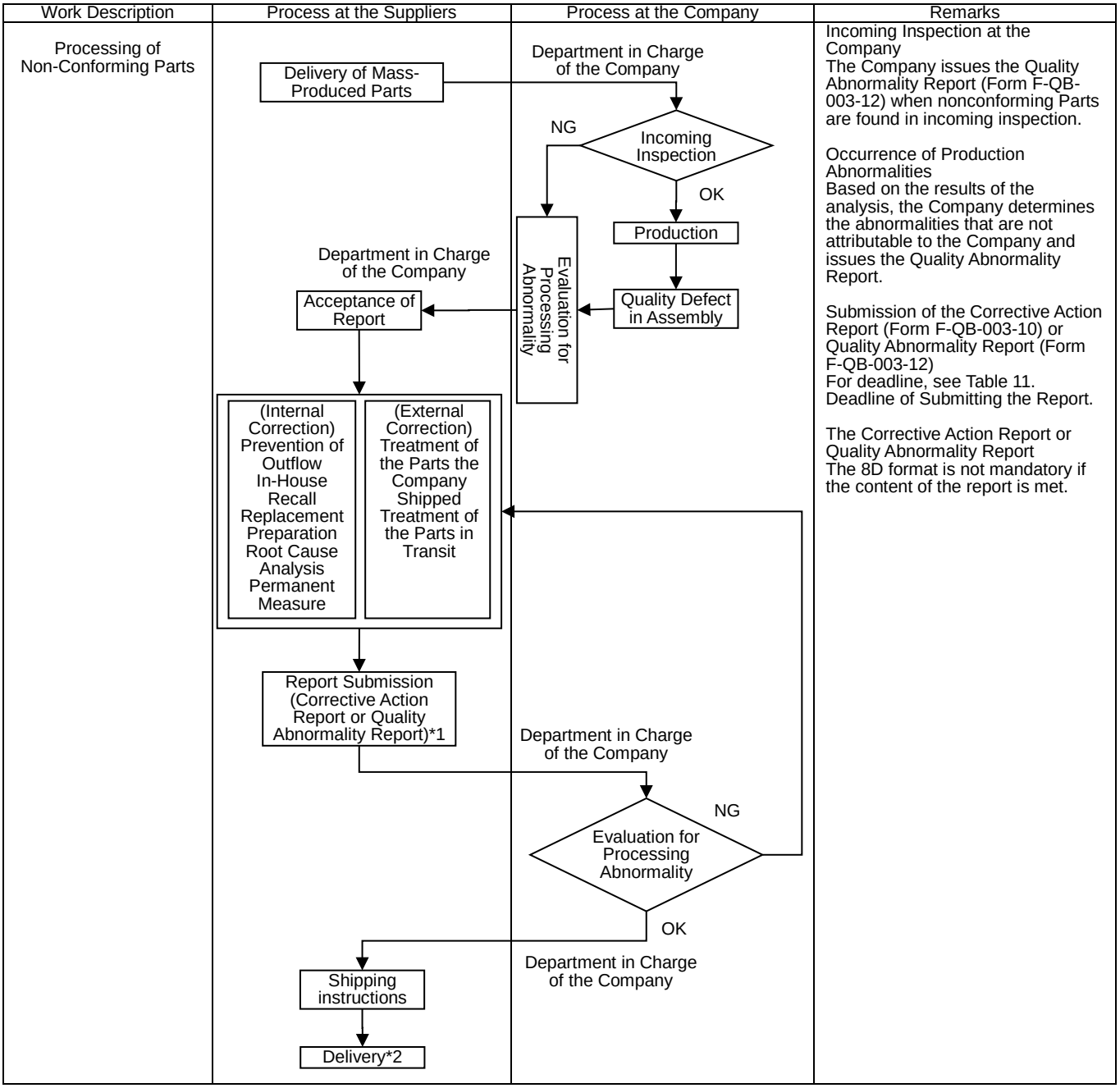


Figure 6. Procedure for Processing Non-Conforming Parts

*1: If the Supplier wants to use its own form, obtain the agreement from the department in charge of the Company.
*2: Implement Initial Product Management and deliver Parts with identification.

11 Quality Report

If necessary, report the quality status to the Company.
The contents of the report are described below, but the department in charge of the Company will re-quest separately.

(1) Process Performance Index (Ppk) and Process Capacity Index (Cpk) for Critical Control Items and Critical Control Characteristics. Improvement methods and plans when these do not meet the Company's requirements.
(2) Improvement plan and schedule for high-ranked defect items.
(3) Data supporting (2) (presentation of XbarR control chart, P control chart, etc.)
(4) Status of countermeasures identified as non-conforming items in the Quality Abnormality Report (especially after permanent countermeasures)

12 Quality Audit

To maintain Parts quality, the Company may enter the Supplier’s manufacturing processes and audit them. The company will audit the Suppliers with prior consent in writing.

12.1 Supplier Qualification Audit

“Supplier Qualification Audit” is to confirm that the Suppliers have a system and process to suffi-ciently respond to the Company's requirements. By passing the Supplier Qualification Audit, the Company will register the Suppliers as the Company's Supplier.

12.2 Regular Audit

12.2.1 First Party Audit (Internal Audit)

Plan and implement an internal audit at least once a year to maintain and improve Suppliers' quality. Internal audit shall include QMS Audit, Manufacturing Process Audit, and Product Audit.

12.2.1.1 QMS Audit

QMS Audit confirms that the QMS meets the requirements of international standards (ISO9001, IATF16949, etc.).

12.2.1.2 Manufacturing Process Audit

Manufacturing Process Audit confirms that the manufacturing process is consistent with the control plan and is functioning effectively.

12.2.1.3 Product Audit

Product Audit confirms that the product meets the requirements such as product dimensions, functions, packaging, labeling, etc.

12.2.2 Second Party Audit (External Audit)

Normally, the Company does not audit the Suppliers regularly, but will do if the Company determines that improvements are required due to the quality status of the Parts delivered and the results of an internal audit by the Suppliers.

12.2.3 Third Party Audit (ISO Certification Audit, Renewal Audit)

Third Party Audit is an audit conducted when the Suppliers plan to obtain certification of international standards or update a certification.

12.3 Emergency Audit

Emergency Audit is an audit the Company conducts when:

1) Emergency investigation or improvement is required in connection with a quality problem that occurs suddenly.
2) Quality problems occur frequently
3) Serious change exists

12.4 Audits of Sub-Suppliers

Audit the Suppliers' Sub-Suppliers. Examples of audit items are as follows.

1) Quality of the goods delivered
2) Quality assurance system for Parts
3) Manufacturing process of Parts
4) Parts specifications
5) Sub-Suppliers' responsibilities for returned products after Shipping
6) Delivery performance (including premium freight cost and its frequency)

Prepare and maintain a supply chain chart (SCC) that indicates Suppliers' Sub-Suppliers.

12.5 Follow-up Audit

Follow-up audit is an audit that verifies improvement status with regard to problems the Company pointed out in the audit.

13 Die/Mold Management

When using a die/mold, record production history, such as the total number of shots and maintenance, and submit such history as soon as possible if the Company requires.
Before reporting, identify the dimensions determined by the die/mold and the dimensions determined by the additional work, and specify the identified points in the drawings, specifications, etc.

13.1 Application for Manufacturing and Reparing Die/Mold

When adding, repairing, or renewing a die/mold, submit the Die/Mold Manufacturing/Repair Application (form MMQS-011-14) to the department in charge of the Company in advance.
The Company will determine whether such application is acceptable or not with a report. Add, repair, or renew the die/mold after the Company's confirmation.
Also, inspect the Initial Parts in accordance with 7.5 Initial Product Management.

13.2 Storage, Management and Identification of Die/Mold

Store and manage dies/molds strictly complying the following.

1) The storage area of the dies/molds shall be specified.
2) Dies/Molds shall be maintained (e.g. rust prevention) in a condition ready for production.
3) The name plate shall be attached so that the production items can be identified from the die/mold.
4) For molded dies/molds, the cavity number shall be marked.

Report the number of shots depending on the Parts. The department in charge of the Company will separately request the detail.

14 Packaging Specification

Pack the Parts in a way that they can be protected during transportation. To achieve reuse of packaging materials and optimal transportation costs for environmental protection, optimize the number of packages, weight, and transportation methods. Exchange a Packing specification that describes the packaging form, quantity, labeling methods, etc. to be used for shipping in advance.

15 Shipping

Ship the Parts in accordance with the following.
Ship the Parts in compliance with the delivery date the Company specifies in Purchase Order or instructs in the Delivery Instruction.
If on-time delivery rate is low, the Company may request to improve it.
* On-time delivery rate = (Number of deliveries complied with / number of deliveries)

15.1 Attachment of Identification Tag

Attach an Identification Tag to the place specified in the Packaging Specification. In principle, describe the following in the Identification tag.

1) Supplier's Name
2) Invoice Number
3) Products Name
4) Order Number
5) The Company's Product Number (Part Number)
6) Packaging Quantity per Box / Total Delivery Quantity
7) Lot Number.
8) Ship Date
9) Number of Containers to Be Delivered (Box Number / Total Number of Boxes)

15.2 Submission of Shipping Lot Test Report

Submit a Shipping test report for each Shipping lot.

1) Use the form agreed with the Company.
2) Enter identification information such as the Company's part number and Supplier's lot number.
3) If packaged with a Shipping product, place a label that can be checked from the outside such as "Test report is included" on the packaging box to be shipped.

In some cases, submit data on other quality, such as testing and process capability.

15.3 Measures for Shipping Critical Safety Parts

If the Parts to be shipped to the Company are specified as Critical Safety Parts, some evidence may be required.
For example, in the case of UL-approved resin materials, submit a certificate of materials describing the following items for each delivery lot.
Pay close attention to material management not to violate laws and regulations. Refer to the Company's Certificate of Materials (Form F-QB-003-11(A)~(C)).

1) Parts Name, Trade Name, and Quantity
2) Manufacturer of Material, Material Generic Name, Material Name, and Material Lot Number
3) UL Grade and UL File Number
4) Supplier's Name and Seal/Signature of Person responsible for Issuance

16 Emergency Response

Analyze the internal and external risks of Suppliers, identify what kind of risks exist, and prepare an emergency response plan to respond to those risks. Implement simulations, etc. to check regularly to see if any problems exist in the emergency response plan.

17 Definition

APQP	Advanced Product Quality Planning The procedures and schedules for product realization from product development to mass production
Cpk	Process Capacity Index This applies when the manufacturing process is expected to be controlled and in a stable state. e.g. applied during mass production
DFMEA	(Design FMEA) Design Failure Modes and Effects Analysis
FIFO	First In, First Out To ship the previously manufactured products first
FMEA	Potential Failure Mode and Effects Analysis Analytical methods used to ensure that potential problems are considered and addressed throughout the product and process development process
GR & R	Gage Repeatability & Reproducibility
IATF 16949	Standard for quality management systems based on ISO9001 and which defines specific requirements for automotive production and relevant service parts organizations.
IMDS	International Material Data System
MSA	Measurement System Analysis Statistical studies to analyze the variability in the results of various tests/measurements and the measurement of the test equipment system.
PFMEA	(Process FMEA) Process Failure Modes and Effects Analysis
PSW	Part Submission Warrant A warrant that the Suppliers prove that the inspection and test results for the Initial parts conform to the requirements for the new model, specification or process change part, quality improvement, or other (prepared for each the Company's parts number).
PPAP	Production Part Approval Process A process to be exchanged with customers before producing/delivering the product.
Ppk	Process Performance Index This applies when it is unsure that the manufacturing process is stable. e.g. applied at the time of new product development or change verification
Ppm	Parts Per Million
QA	Quality Assurance
QMS	Quality Management System
SCR	Supplier Change Request
SOP	Start of Production
SPC	Statistical Process Control One of the IATF 16949's core tools. Statistical method using process performance index, process capability index, control chart, etc. to reduce variation and waste in production processes
4M change	Change of Man, Machine, Material and Method
8D	8 Disciplines of Problem Solving
Control Plan	Documents for controlling parts and processes (process control chart that certainly reflect FMEA results that processes, quality characteristics, control points, conditions, etc. are clearly filled out)
Special Process	Process whose results cannot be confirmed in the post-process and can only be judged based on the results of the parts being used in the manufacturing process
Master Sample	Actual sample that indicates and used for verifying the quality of the first approved part if any quality problem occurs after mass production.

Revision History

Drafted by Quality Assurance Headquarters, Quality System Division

MMQS-011

Enacted on	Rev.	Details and Reasons to Revise	Approve	Review	Draft
2019/04/01	–	Newly issued	Ishihara	Sugiura	Kume

MMQB-003

Enacted on	Rev.	Details and Reasons to Revise	Approve	Review	Draft
2020/06/26	A	The document number was revised because the system of documents issued by the Quality Assurance Headquarters was reviewed. (MMQS-011 => MMQB-003)	Seno	Ishihrara	Sugiura