

**Quality Control Guidelines for Suppliers
(for Business Partners)**

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[1.1] Purpose

- (1) These Quality Control Guidelines (hereinafter, "this document") supplement the quality control-related rules specified in the Purchase Agreement. With regard to products to be purchased by the Purchaser, this document specifies the quality control requirements to be satisfied by suppliers who design, manufacture, and/or construct purchased products (*) (such suppliers are hereinafter referred to as "the Supplier") to ensure the quality thereof.

* "Purchased products" include not only goods (including software and products listed in catalogs) but also outsourced services such as manufacture, design, construction, and maintenance. However, inspections and calibration of equipment or measuring instruments, materials for prototyping, and samples are excluded.

[1.2] Usage

- (1) The Supplier shall, to ensure the safety of delivered products (including provided services), control quality according to the requirements specified in this document.
- (2) If there is any discrepancy between this document and an individual contract or Purchase Agreement, the individual contract or Purchase Agreement shall have priority.
- (3) For requirements for green procurement, refer to the separately specified Green Procurement Guidelines.

[1.3] General requirements

The Supplier shall establish, document, and maintain its own quality management system based on this document and continually improve its effectiveness.

When the Supplier chooses to outsource part of a service of its own and control over it, the Supplier shall ensure the outsourced service is properly controlled.

[1.4] Requirements for a quality control system

- (1) In order to ensure that supply, manufacturing or part thereof, designing, construction, and maintenance of products or designing, manufacturing, testing, maintenance, and other development processes of software performed based on orders placed by the Purchaser conform to the required specifications, the Supplier shall establish and maintain a quality control system that covers all processes necessary to fulfill the contract, including designing, purchasing of materials, manufacturing/construction, shipping, delivery to customers, and measures to be taken in case of a deficiency.
- (2) This quality control system shall enable the Supplier to prevent and detect early any quality nonconformities in delivered products and take proper, timely corrective measures. Responsibilities for quality control of products delivered to the Purchaser shall be clarified in the Supplier's organization.
- (3) The Supplier shall provide the Purchaser with quality assurance system charts, complaint handling system charts, organization charts, and QC process charts (*) of the Supplier and of vendors listed in the supply chain list specified in [6.2.2].

* QC process charts: For software, the term "QC process charts" shall be replaced with "workflows."

- (4) The Purchaser shall carry out field audits based on quality assurance system charts, complaint handling system charts, organization charts, and QC process charts as needed, and shall require the Supplier to correct any deficiency pointed out in audits.
- (5) When the Supplier makes a change to a document specified in (3) after submitting it to the Purchaser, the Supplier shall report the reason for said change and submit a revised document to the Purchaser without delay.

The Supplier shall submit a design/process change application form (refer to [5.3] (2) and [7.3.1] (2)) before changing any content of a QC process chart.

(6) To maintain the aforementioned quality control system, the Supplier shall retain and control the following records. Upon the Purchaser's request, the Supplier shall submit these records.

- ① Record of management reviews
- ② Record of qualified workers
- ③ Record of changes in drawings, specifications, and other documents
- ④ Record of actions taken against deficiencies pointed out in design reviews
- ⑤ Record of serial numbers affected by design changes
- ⑥ Record of inspections on purchased products
- ⑦ Record of serial numbers affected by process changes
- ⑧ Record of on-site inspections (Minutes: Progress of rework and other measures taken against deficiencies pointed out)
- ⑨ Record of manufacturing or construction and inspection of purchased products (Record of in-process inspections and history of manufacturing and construction)
- ⑩ Record of defective products

[2.1] Responsibilities of the management

The Supplier's management shall maintain and control the quality management system and shall take full responsibility for the quality of the Supplier's products.

The Supplier's management (or those assigned its authority thereby) shall conduct management reviews at planned intervals to ensure continuing suitability, adequacy, and effectiveness of its quality management system as well as keep a record of such reviews.

[2.2] The importance of customer requirements

The Supplier shall establish, maintain, and improve a mechanism to confirm the Purchaser's required specifications for products to ensure delivery of products satisfactory to the Purchaser.

[3.1] Cooperation with the Purchaser

When the Supplier's delivered products do not satisfy the quality requirements specified by the Purchaser, the Supplier shall provide the resources (such as personnel, articles, equipment, and/or an environment) required by the Purchaser.

[3.2.1] Special processes and qualifications

(1) A "special process" is a process in which it is difficult to assure quality through inspections conducted after products are finished or after construction is completed, such as welding, plating, vapor deposition, heat treatment, quenching, chemical treatment, brazing, soldering, metal bonding, and excavation.

(2) The Supplier shall establish and maintain control standards for special processes. The Supplier shall take photos or other measures to maintain evidence of work results, such as excavation, as needed.

The Supplier shall submit a list of special processes (indicating the types of special processes) and a list of qualified workers and evidence of qualification (such as standards and certificates) as required by the Purchaser.

If there is any change in the content of the list, the Supplier shall submit the revised list to the Purchaser.

(3) For workers engaged in a special process, the Supplier shall:

- ① provide the workers with education and training to maintain their skills,
- ② register qualified workers and maintain a record of them, and
- ③ confirm their qualifications before assigning them to work in a special process.

[3.2.2] Inspection processes and qualifications

(1) The Supplier shall establish and maintain control standards for inspection processes.

(2) For workers engaged in an inspection process, the Supplier shall:

- ① provide the workers with education and training to maintain their skills and determine whether their skills are being maintained,
- ② register qualified workers and maintain a record of them, and
- ③ confirm their qualifications before assigning them to work in inspection processes.

(3) The Supplier shall educate workers engaged in in-process inspections about the importance of such inspections.

[3.3] Assurance of manufacturing capacity

The Supplier shall ensure manufacturing capacity sufficient to manufacture the products to be delivered to the Purchaser.

[3.4] Work environment

(1) The Supplier shall implement 2S (*Seiri* (Separating), *Seiton* (Sorting)) 3Tei (*Tei butsu* (Designated Item), *Tei ichi* (Designated Position), *Tei ryo* (Designated Quantity)) to avoid unexpected trouble and make abnormalities transparent in the work environment.

(2) The Supplier shall ensure that the work environment does not introduce foreign parts, foreign materials, or subsidiary materials (such as lead-containing solder) into the products to be delivered to the Purchaser.

[4.1] Confirmation of order specifications (purchase specifications, quantities, delivery dates, etc.)

- (1) When the Supplier's equipment or manufacturing capacity may be unable to meet the order specifications issued by the Purchaser, the Supplier shall promptly consult the Purchaser.

When the Supplier receives order specifications from the Purchaser, the Supplier shall review the specifications, and consult the Purchaser if there is any concern or question.

- (2) When the intended use or common-sense usage of products to be delivered to the Purchaser is self-evident but not specified in order specifications, the Supplier shall include requirements for such use as designing, manufacturing, or construction requirements, and inform the Purchaser in advance.
- (3) Observance of laws and regulations: The Supplier shall ensure that the final products delivered to the Purchaser comply with applicable laws and regulations in force in the locale where the products are to be used.

When the Supplier makes a design or process change, the Supplier shall confirm that said change does not affect compliance with such laws and regulations.

Examples: PSE (Product Safety of Electrical appliance & materials), VCCI (Voluntary Control Council for Interference by Information Technology Equipment), etc. in Japan; UL (Underwriters Laboratories), etc. in the US; and CE, etc. in the EU

- (4) Green procurement

The Supplier shall follow the Green Procurement Guidelines, which specify requirements related to green procurement.

[4.2.1] Confirmation of specifications

- (1) The Supplier shall submit production drawings for approval/delivery specifications to the Purchaser promptly after receiving the purchase specifications.
- (2) The Supplier shall submit inspection procedures and other documents to the Purchaser before starting inspections.
- (3) If the Supplier or the Purchaser has any questions about the content of the purchase specifications, production drawings for approval/delivery specifications, inspection procedures, or other drawings, said party shall inform the other party of such questions and take actions according to written instructions.

[4.2.2] Control of the Supplier's drawings for internal use

- (1) The Supplier shall keep drawings, specifications, and other documents up to date so that such documents are readily available to the Supplier's departments that require them.
- (2) When the Supplier makes any change to a drawing, specifications, or other documents, the Supplier shall properly control said change to prevent use of obsolete documents.
- (3) When the Supplier makes any change to a drawing, specifications, or other documents, the Supplier shall clarify the details of said change and obtain the Purchaser's approval.

[4.2.3] Control of drawings, specifications, and other documents supplied by the Purchaser

- (1) Without the Purchaser's approval, the Supplier shall not use or copy any drawings, specifications, or other documents supplied by the Purchaser for any purpose other than the intended use.
- (2) When the Purchaser makes a change to a drawing, specifications, or other documents supplied by the Purchaser, the Supplier shall use the latest drawings.
The Supplier shall revise its own drawings, specifications, and other documents affected by the Purchaser's change and use the latest drawings.
- (3) When the Supplier completes delivery of products to the Purchaser, the Supplier shall, in principle, return all supplied drawings to the Purchaser. The Supplier shall delete any electronic drawings.

The Purchaser may ask the Supplier to keep supplied drawings and replace them with revised versions if orders are expected to continue and the Purchaser gives approval for such document control. In this case, the Supplier need not return supplied drawings upon delivery.

[4.3] Handling of service parts after delivery of devices or other products

When the Supplier resumes production of service parts that were once discontinued after delivery of devices or other products upon the Purchaser's request, the Supplier shall control the quality of such service parts as it does with products.

[5.1] Design control

- (1) The Supplier shall fully grasp the Purchaser's requirements in designing products and carry out design reviews in each stage of design, manufacture, and testing as needed.

<Design reviews for hardware or software>

The design review shall cover functionality, performance, reliability, operability, maintainability, expandability, ease of manufacturing, packaging designed for transport and storage, product safety (PS), and so forth. During the design review, the Supplier shall consider feedback from deficiencies found in the past, the usage environment (including not only the normal usage environment but also harsh/hostile environments), and operation. For product safety (PS) reviews, the Supplier shall consider predictable improper use, alterations, and use of products in deteriorated or malfunctioning states.

<Design reviews for construction>

The design review shall cover not only the quality of construction but also the safety of construction; operating states at customers' sites; impact on existing equipment; move-in of equipment, materials, and construction equipment to the construction site; identification of move-in routes that distinguish between public and private land; reliability; maintainability; ease of construction; protective coverings; and disposal of construction waste.

For safety reviews, the Supplier shall consider the safety of construction, safety of nearby residents, and traffic safety.

- (2) The Supplier should desirably conduct design reviews with the Purchaser's engineers.
- (3) The Supplier shall keep a record of design reviews to enable follow-up of progress on actions taken against deficiencies pointed out. The Purchaser may require the Supplier to submit the record as needed.
- (4) After consultation with the Purchaser, the Supplier shall specify evaluation test items for products such as prototypes for which the Purchaser requires the Supplier to conduct evaluation tests, and shall submit evaluation test results to the Purchaser.

[5.2] Ensuring of reliability

- (1) The Supplier shall fully understand the Purchaser's requirements and ensure the reliability of delivered products by conducting reliability tests or by other means. The Supplier shall immediately submit evidence of reliability upon the Purchaser's request.
- (2) The Supplier shall conduct periodic reliability tests of delivered products if the Purchaser requires. If any abnormality occurs, the Supplier shall immediately inform the Purchaser of said state in writing.
- (3) The Supplier shall consider conducting the aforementioned reliability evaluation for single parts (such as electrolytic capacitors and rubber/resin parts (*)) used in the delivered products or combinations thereof (such as combinations of optical parts and adhesives) as needed.
(*) Failure mode examples of concern: reductions in the capacities of electrolytic capacitors, deterioration phenomena of rubber/resin parts (such as deterioration involving photooxidation, thermal oxidation, hydrolysis, or other chemical reactions, creep, and deterioration caused by vibrations or other physical actions)
- (4) Even if a part specified by the Purchaser is deficient, the Supplier shall cooperate with the Purchaser to solve the problem.

[5.3] Design change control

- (1) The Supplier shall properly control design changes. Design changes to the following shall be controlled:
 - ① Materials or parts (including changes to composition, suppliers, or rust-preventive/impregnating oil)
 - ② Structures, shapes, or dimensions (including plating specifications, painting specifications, wiring/connection, and substrate patterns)

- ③ Characteristics (specifications or judgment criteria) or functions
- ④ Usage environments (places of use, temperature/humidity, etc.)
- ⑤ Purposes or methods of use
- ⑥ Forms of packaging or subsidiary materials
- ⑦ Software (including interface specifications), software operating environments (OS or firmware), or development environments (compilers, test tools, and versions thereof)

(2) When the Supplier makes a design change, the Supplier shall submit a design change application form to the Purchaser before making said change.

The design change application form shall contain the reason for the change and the results of (3) below. The Purchaser shall deliberate or audit (refer to [6.2.3]) the change and approve it if the Purchaser recognizes it to be appropriate. If there is any possibility that one or more deficiencies may occur, the Purchaser may require the Supplier to take corrective actions, such as to perform an additional evaluation. The Purchaser may require the Supplier to submit product samples for verification. The Supplier shall work on the design change for the products to be delivered after obtaining the Purchaser's approval.

(3) When making a design change, the Supplier shall:

- ① verify the adequacy of the design change and conduct a review to examine the risks caused by said change and actions to be taken against such risks (use of DRBFM as a tool to identify and respond to risks is recommended);
- ② conduct required evaluation tests (including reliability tests);
- ③ change QC process charts, inspection procedures, manufacturing standards, and other related documents; and
- ④ record the serial numbers affected by the design change.

(4) When secondary, tertiary, or further vendors make a design change, the Supplier shall be responsible for having the vendor submit a design change application form before making the change (specify this requirement in a contract or by other means to ensure that no unreported changes occur). When secondary, tertiary, or further vendors submit an application for a design change, the Supplier shall control it in the same manner as its own design changes and report said change to the Purchaser as needed at its discretion.

[6.1] Purchasing process

To ensure the products to be delivered are realized, the Supplier shall carry out the following:

- (1) The Supplier shall manage vendors and subcontractors by clarifying requirement specifications that cover manufacturing processes.
- (2) The Supplier shall evaluate the technical capabilities and supply capacities of vendors and subcontractors, and shall submit a list of vendors and subcontractors in the form of a supply chain list to the Purchaser.
- (3) The Supplier shall obtain certificates of inspection for purchased materials or outsourced products from material vendors or subcontractors. The Supplier shall confirm through inspections that purchased materials and/or outsourced products satisfy the required level of quality and shall keep a record of the results as needed.
- (4) The Supplier shall audit a new vendor or subcontractor before starting business with it, and shall continuously audit it thereafter.

[6.2.1] Order requirements

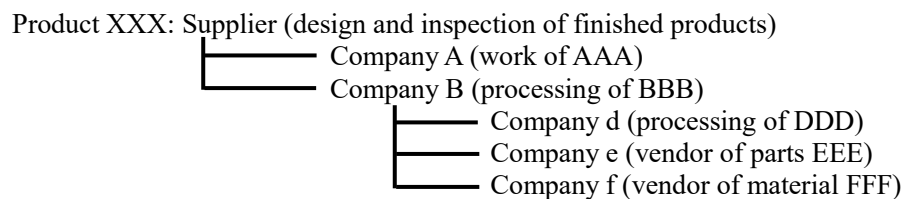
When purchasing materials or outsourcing work, the Supplier shall clarify and carry out the following:

- (1) To prevent problems from occurring, the Supplier shall verify the adequacy of purchased material specifications and outsourced work details before placing an order.
- (2) The Supplier shall determine specific order requirements and mutually confirm them with any vendors and subcontractors. The Supplier shall include manufacturing processes, the equipment to be used, and workers' qualifications (including required skills) in the order requirements as needed.

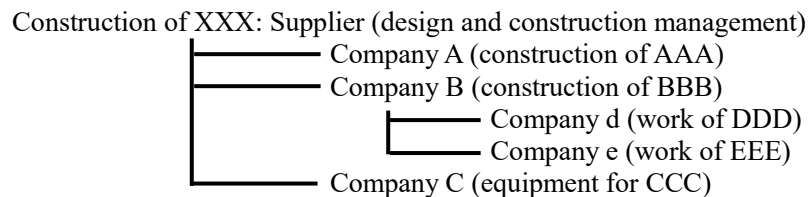
[6.2.2] Submission of a supply chain list

- (1) When the Supplier outsources manufacturing or construction of products entirely or partially to a third party, the Supplier shall submit a supply chain list. This list shall specify the details of the business to be conducted by the Supplier and the Supplier's subcontractors or vendors (hereinafter, "vendors and subcontractors") for each product or at the time of construction. It shall clarify the manufacturing or construction contractors engaged in processing and construction as well as the vendors of products listed in catalogs and materials.

① Example of outsourcing manufacturing



② Example of outsourcing construction



* The Supplier shall also submit a construction system chart and a safety management system chart.

(2) Before making any change to the supply chain list, the Supplier shall submit a change application form to the Purchaser.

Before changing any content of the supply chain list, the Supplier shall submit a change application form to the Purchaser to obtain approval. As when selecting vendors, the Supplier shall also clarify the selection criteria and provide the Purchaser with the criteria for judging vendor adequacy before starting production. The Supplier shall review adequacy as needed.

(3) The Supplier shall be responsible for leading vendors and subcontractors as well as conducting audits of them (refer to [6.2.3]) to ensure that they satisfy the quality requirements specified by the Purchaser.

The Purchaser may check the progress of audits of subcontractors conducted by the Supplier when the Purchaser audits the Supplier.

Even if the Purchaser allows the Supplier to outsource products or construction entirely or partially to a third party, the Supplier shall still be responsible for the quality of said products or construction.

[6.2.3] Quality system audits

(1) The Purchaser has the right to audit the factories and construction sites of the Supplier and its vendors as needed to evaluate and confirm whether quality control is being implemented properly by the Supplier. The Supplier shall cooperate with the Purchaser for this purpose.

① Audit timing: When adopting a new Supplier, when launching a new product, when changing a process, when defects occur frequently, when a severe defect occurs, and periodically

② The Purchaser may specially examine the state of subcontractor audits conducted by the Supplier.

(2) Before conducting an audit, the Purchaser may request the Supplier to submit materials necessary for the audit as well as the results of a self-audit by the Supplier based on the Purchaser's audit sheet.

(3) If any deficiency is pointed out in an audit, the Supplier shall immediately correct it and submit a correction report.

[6.2.4] Obligation to provide maintenance services

(1) The Supplier shall assume an obligation to provide maintenance services (repairs and delivery of products for maintenance) for as long as products are used. If it becomes difficult to continue to provide maintenance services because raw materials, parts, manufacturing equipment, or other resources become unavailable; repairs become impossible; services become unavailable; or for another reason, the Supplier shall provide a prior written notification of the reason for the situation, alternative measures, and other details to the Purchaser.

[7.1.1] Quality control prior to mass production

- (1) When deficiencies are found in a development stage, the Supplier shall adequately analyze them and take countermeasures as well as utilize acquired statistical quality control data to validate the process design and prevent the occurrence and outflow of such deficiencies in the mass production process.
- (2) In the prototype and launch stages, the Supplier shall simulate mass production manufacturing conditions to the extent possible to secure the same level of quality and production capacity as in mass production.

[7.1.2] Initial production quality control

- (1) At the start of mass production, the Supplier shall set a control period and quality target values (such as process capability indexes), and carry out initial production quality control.
- (2) If any deficient product is found during the initial production quality control period (particularly, when such deficiency could not be found during the prototype or launch stages), the Supplier shall conduct a full analysis to prevent the occurrence and outflow of such deficiency.

[7.1.3] Daily control

- (1) After initial production quality control is finished, the Supplier shall carry out daily control using quality control techniques to maintain stable quality and make efforts to improve quality through daily quality improvement activities.

[7.2] Application of manufacturing standards and work standards

- (1) The Supplier shall carry out work based on its own standards (such as manufacturing standards and work standards) in principle. The Purchaser has the right to require the Supplier to present its standards, and may examine them as needed. If any deficiency is found in such examination, the Purchaser may require the Supplier to take corrective actions.
- (2) Before performing a task not defined in the aforementioned standards or in the QC process chart, the Supplier shall analyze work risks (*), notify the Purchaser of the task, and ask for instructions.* Use of DRBFM is recommended.

[7.3.1] Process condition changes

- (1) The Supplier shall properly control process changes. The following process changes shall be controlled:
 - ① Changing the place of manufacturing (establishment of a new factory or changing to another factory)
 - ② Changing vendors (adoption of a new subcontractor, changing to another vendor, or outsourcing manufacturing of products that were previously manufactured in-house)
 - ③ Changing the Supplier's processes (introduction of new equipment; relocation or resumption of operation of existing equipment; expansion or reconstruction of a process; changing a die, molded product, or jigs and tools; or changing a production system)
Note: If there are multiple lines and/or equipment of the same type, changing from the line or equipment designated for products delivered to the Purchaser to a different one is also defined as a process change.
 - ④ Changing production methods (forging, casting, heat treatment, welding, washing, painting, processing, assembling, pressing, forming, sintering, or other methods <construction methods, procedures, auxiliary materials, process sequences, etc.>)
 - ⑤ Changing manufacturing conditions (temperature, pressure, electric power, voltage, current, speed, or other conditions)
 - ⑥ Changing subsidiary/auxiliary materials or roughly formed materials
 - ⑦ Changing inspection methods (changing inspection equipment or inspection methods)
 - ⑧ Changing software used with manufacturing equipment, inspection equipment, etc.
 - ⑨ Changing control standards, limit samples, etc.

(2) When the Supplier makes a process change, the Supplier shall submit a process change application form to the Purchaser before making said change.

The process change application form shall contain the reason for the change and the results of (3) below. The Purchaser shall deliberate or audit (refer to [6.2.3]) the change and approve it if the Purchaser recognizes it to be appropriate. If there is any possibility that one or more deficiencies may occur, the Purchaser may require the Supplier to take corrective actions, such as to perform an additional evaluation. The Purchaser may require the Supplier to submit product samples for verification. The Supplier shall work on the process change for the products to be delivered after obtaining the Purchaser's approval.

(3) When making a process change, the Supplier shall:

- ① verify the adequacy of the process change and conduct a review to examine the risks caused by said change and actions to be taken against such risks (use of DRBFM as a tool to identify and respond to risks is recommended);
- ② conduct required evaluation tests (including reliability tests);
- ③ change QC process charts, inspection procedures, manufacturing standards, and other related documents; and
- ④ record the serial numbers affected by the process change.

(4) When secondary, tertiary, or further vendors make a process change, the Supplier shall be responsible for having the vendor submit a process change application form before making the change (specify this requirement in a contract or by other means to ensure that no unreported changes occur). When secondary, tertiary, or further vendors submit an application for a process change, the Supplier shall control it in the same manner as its own process changes and report said change to the Purchaser as needed at its discretion.

[7.3.2] Changes in managers or workers

- (1) When there is a change in the workers who handle products to be delivered to the Purchaser, the Purchaser may request that the Supplier notify the Purchaser about said change as needed. Before the Supplier makes a change that may greatly affect quality, such as a change related to inexperienced workers or a significant change in manpower, the Supplier shall notify the Purchaser of said change and obtain the Purchaser's approval.
- (2) When there is a change to the managers of design control, process control, production control, or quality control for the products to be delivered to the Purchaser, the Purchaser may request that the Supplier notify the Purchaser about the change as needed.

[7.4] Acceptance inspections by the Purchaser (including on-site inspections and construction completion inspections)

(1) Delivered products shall pass the Purchaser's acceptance inspections (including on-site inspections and construction completion inspections).

(2) On-site inspections

The Supplier shall cooperate with the Purchaser in on-site inspections. When the Purchaser conducts an on-site inspection, the Supplier shall keep a record of it (minutes, including any deficiencies pointed out) and obtain the Purchaser's approval of this record. The Purchaser shall make a pass/fail judgment as follows:

- ① For products to be delivered to the Purchaser after the on-site inspection:
The on-site inspector(s) shall make a pass/fail judgment and issue directions.
- ② Products to be delivered directly to a customer of the Purchaser:
Based on the report from the inspector(s), the Purchaser's quality assurance officer shall make a pass/fail judgment and issue directions.
- ③ If an on-site inspection reveals that a product must be reworked, the Supplier shall notify the on-site inspector(s) of the completion of rework in writing (by means of an on-site inspection record that contains a description of the completion of rework or other corrective action) and obtain the Purchaser's approval.
- ④ The Supplier shall differentiate inspected products from those that have not been inspected and products accepted as good from products rejected as defective, and manage all products so that they are not intermixed. Upon the Purchaser's request, the Supplier shall submit records of corrective actions taken for products rejected by inspection.

(3) Construction completion inspections

- ① The Purchaser shall conduct a construction completion inspection immediately after construction is completed.
- ② Before the construction completion inspection, the Supplier shall prepare a written construction completion inspection procedure based on the purchase specifications and other documents, and submit the same to the Purchaser to obtain the Purchaser's approval.
If any work remains at the time of the construction completion inspection, the Supplier shall submit a list of remaining work together with the inspection procedure.
- ③ The Supplier shall correct any deficiencies pointed out in the construction completion inspection by reworking or other means, and complete remaining work under its own responsibility. The Supplier shall notify the Purchaser upon completing the correction of deficiencies pointed out and the remaining work to obtain the Purchaser's approval.
- ④ The Supplier shall submit a certificate of inspection that proves that the construction completion inspection was passed and/or a written confirmation of the completion of construction.

[7.5] Dispatch of engineers

When a deficiency is found in an acceptance inspection or in relation to a product of the Supplier, the Purchaser may request the Supplier to dispatch the Supplier's specialized engineers to a place specified by the Purchaser to quickly resolve the problem. The details shall be determined after consultation between both parties.

[7.6] Quality assurance for delivered products

The Supplier shall manufacture products and perform construction based on its own work standards, inspect the products and construction according to the inspection procedures approved by the Purchaser, and deliver products and construction that have passed said inspection.

If any deficiency is found in a product after it has been accepted by the Purchaser and such deficiency is obviously attributable to the Supplier, the Supplier shall rework the product free of charge or manufacture a new product immediately according to the Purchaser's instructions.

[7.7] Quality control records (manufacturing history and quality states)

(1) Control of manufacturing history

The Supplier shall control the products to be delivered to the Purchaser by assigning a lot number or serial number to each product to ensure that each product's manufacturing history is traceable. (For products that due to their nature cannot be controlled by assigning a lot number or serial number, the Supplier shall consult the Purchaser about the control method.)

* Example of manufacturing history (including manufacturing at the Supplier's vendors):
Place of manufacturing, date and time of manufacturing, workers and inspectors, important processes, manufacturing conditions and quality records, quality records for materials and parts used in the product, manufacturing equipment, jigs and tools, etc.

The Supplier shall control the manufacturing history of delivered products and keep it ready for submission at the Purchaser's request.

* For example, if any deficiency occurs, the Purchaser may require the Supplier to submit the manufacturing history for the range of time related to the deficiency.

(2) Submission of reports on quality states

The Supplier shall quantitatively grasp the state of quality for products (for example, the quality state in acceptance inspections for parts or materials and the defect state in processes) and periodically report said states to the Purchaser for products continuously ordered by the Purchaser. (The interval should be 6 months in principle, but may be determined after consultation.)

[7.8] Control of goods supplied or loaned by the Purchaser

- (1) The Purchaser may supply the Supplier with materials, parts, software, and other goods necessary for it to manufacture the products to be delivered.
- (2) When the Supplier receives materials, parts, or other goods supplied by the Purchaser, the Supplier shall submit a receipt to the Purchaser, and check the model, quantity, state of

appearance, and other pertinent points. If the Supplier finds any abnormality, the Supplier shall notify the Purchaser immediately and receive instructions from the Purchaser.

- (3) The Supplier shall properly identify and store materials and parts supplied by the Purchaser and take measures to prevent damage and deterioration. The Supplier shall not use other materials or parts as substitutes for materials or parts supplied by the Purchaser without the Purchaser's approval. The Supplier shall not use materials or parts supplied by the Purchaser for any products other than the products to be delivered to the Purchaser.
- (4) The Supplier shall treat intellectual property (including software) supplied by the Purchaser as confidential to prevent leakage to third parties.
- (5) The Supplier shall handle loaned goods in the manner specified in (2) to (4).

[7.9] Control of products in stock

- (1) The Supplier shall control the quality of products in stock, including parts and half-finished products, by using proper methods for identification (product type and traceability) and storage, setting the storage life, and conducting periodic inspections during storage.
- (2) When the Supplier delivers products in stock to the Purchaser, the Supplier shall reinspect them to confirm that they are still of good quality and have not deteriorated prior to delivery.
- (3) The Supplier shall set a limited storage life for parts that chemically change or deteriorate during storage (such as electrolytic capacitors, plated parts, rubber parts, and metal parts that develop rust) and shall dispose of such products or otherwise handle them after said period has expired.
- (4) If multiple parts have similar appearance, model numbers, or other characteristics, the Supplier shall control them so that they do not become intermixed. (For example, the Supplier may control their locations on storage shelves, use color-coded labels or bags, or introduce a system that automatically detects them by appearance or model number.)

[7.10] Packaging, rust prevention, shipping, and transportation

- (1) The Supplier shall carry out necessary quality control to ensure that requirements for rust prevention, packaging, shipping, and transportation are fully satisfied.
- (2) Even if there is no particular specification required by the Purchaser, the Supplier shall establish packaging standards so that purchased products arrive at the Purchaser in good condition.

[7.11] Measuring instruments and testing devices used for inspection

- (1) The Supplier shall obtain and keep in good condition the measuring instruments and testing devices necessary to inspect the products to be delivered.
The Supplier and the Purchaser must agree on the determined limit sample for inspection. The Supplier and the Purchaser must also agree on the setting values for measuring instruments, testing devices, and jigs and tools (e.g., measurement accuracy or field of vision).
- (2) The Supplier shall properly calibrate and inspect the measuring instruments and testing devices.
- (3) The Supplier shall confirm the functionality, accuracy, and other conditions of jigs and tools as well as the inspection software prior to use in inspections.
- (4) If any deficiency is found with a calibration or inspection (daily inspection, inspection at the start of work, or a periodic inspection) of measuring instruments, testing devices, jigs and tools, or inspection software, the Supplier shall confirm whether said deficiency has affected any products delivered after the previous calibration or inspection (checking of delivered products inspected with the deficient measuring instrument), report the result to the Purchaser, and receive the Purchaser's instructions.
- (5) If measuring instruments, testing devices, or jigs and tools contain consumables, the Supplier shall control these consumables properly by, for example, periodically replacing them (e.g., contact parts (connectors) and contact-type gauges).
- (6) The Supplier shall also control the measuring instruments, testing devices, jigs and tools, and inspection software supplied by the Purchaser in accordance with the items above.
- (7) When the Supplier modifies measuring instruments, testing devices, jigs and tools, or inspection software, the Supplier shall do so carefully according to the process change procedure in [7.3.1].

[8.1] Internal and vendor audits by the Supplier

- (1) The Supplier shall carry out periodic audits to ensure that the Supplier is capable of providing products that meet the Purchaser's requirements.
- (2) The Supplier shall take corrective actions without fail if evaluation or audit results indicate it is necessary to do so.
- (3) The Supplier shall include vendors (secondary, tertiary, and further vendors as needed) as audit targets.

[8.2] Treatment and control of deficient products

- (1) The Supplier shall identify deficient products found in its processes by marking them and indicate the details of said deficiencies to prevent them from being intermixed with good-quality products.
- (2) The Supplier shall rework or repair deficient products or nonconforming construction works properly by establishing procedures for rework and repair.
- (3) When reworking deficient products, the Supplier shall record the work done and properly control said products.

[8.3] Corrective actions

- (1) For deficiencies found in the Supplier's processes:

When the Supplier finds any state that may cause a deficiency of semi-finished products in processes, parts, purchased goods, or construction, the Supplier shall immediately check for delivery to the Purchaser of any products affected by said state, and make a report to the Purchaser if it finds that such products have been delivered. The Supplier shall take corrective actions and measures against outflow, then confirm their effects. The Supplier shall also prepare a deficiency report to keep a record of root sharing to treat the deficiency, the details of said deficiency, the causes of occurrence and outflow, the scope of influence, corrective actions, recurrence prevention measures, and the effects of implemented measures.

- (2) For deficiencies found after delivery to the Purchaser:

If any deficiency is found in delivered products by the Purchaser or a customer of the Purchaser, the Supplier shall immediately take proper actions to eliminate the cause and report the progress and results of such actions to the Purchaser. The Supplier shall submit a correction report describing root sharing to treat the deficiency, the details of said deficiency, the causes of occurrence and outflow, the scope of influence, corrective actions, recurrence prevention measures, and the effects of implemented measures.

- (3) The Supplier shall determine not only the causes of deficiencies but also the true causes of deficiencies (causes related to specific techniques and management techniques). The Supplier shall then take recurrence prevention measures, including preventive actions.

[8.4] Feed forward of quality issued at the suppliers

If any deficiency occurred in a product, whether it is for the Purchaser or for other companies, the Supplier shall determine whether the same deficiency occurs in other products delivered to the Purchaser. If so, the Supplier shall immediately notify the Purchaser of said deficiency and take countermeasures against it.

— History of revisions —

Version	Date of revision	Details	Revised by
First edition	2010/10/01	The first edition is established.	Subcommittee for subcontracted and purchased products
Edition A	2014/08/04	<ul style="list-style-type: none"> • Deleted the requirements of JIS Q 9001(2008). • Changed item numbers to ones that did not take into consideration ISO 9001 numbering. • Added detailed descriptions based on past problem cases. • Corrected other phrases. 	Subcommittee for subcontracted and purchased products
Edition B	2017/06/20	<ul style="list-style-type: none"> • As measures against serious complaints, added detailed descriptions of measures against silent changes (to require submission of a supply chain list, submission of a design/process change application form, and control of design/process changes made by secondary, tertiary, and further vendors) and included products listed in catalogs on the list of products to be controlled. • Changed the wording to be as simple/plain as possible to make this document easier for suppliers and subcontractors to use and understand. 	Quality Management Division, WG on Quality Control for Outsourcing