Production Preparation Standard

【Core】

1 General Provisions

1.1 Purpose

Production Preparation Standard is established to facilitate smooth operation at sections related to the production preparation by stipulating basic points to be complied with by the production section and other related sections.

1.2 Scope

This standard applies to the production preparation operation of new products (including the parts. same hereafter) at a facility from the planning stage through to the early phase of mass production.

However, items to implement in the course of production preparation may be omitted for small modifications such as a minor change as required at the quality representative's discretion.

1.3 Terms

The terms and definitions used in this standard are as follows.

No.	Term	Definition
1	Production Section	A collective term for sections that conduct production preparation activities in accordance with the manufacturing control plan set forth in Article 3.9. Note, however, that the certification section is excluded.
2	Manufacturing Section	A section that is directly involved in manufacturing (molding, processing, assembly, etc.).
3	Inspection Section	A collective term for sections that conduct following inspections in accordance with G-HQS [Inspection Control Standard]. - Receiving inspection - Interprocess inspection - Final inspection
4	Critical Safety Part	A part which, if any problem exists, may cause an accident resulting in injury or death (of both driver and passenger), vehicle fire or non-conformity with regulations (domestic/overseas regulations concerning safety, environmental pollution, etc.), and is given the critical safety part rank (HS, HA or HB) on the product drawing.
5	Critical Quality Characteristics	Quality characteristics of critical safety parts which, if any problem (non-conformity with specification values) exists with a certain portion or characteristic, may cause an accident resulting in injury or death, vehicle fire or non-conformity with regulations (domestic/overseas regulations concerning safety and environmental pollution, etc.) and are given the mark (Q) on the product drawings, specifications, etc.

No.	Term	Definition
6	Critical Item	A control item among others in a manufacturing process that applies to any of the followings. (1) An item which has a mark (Q) on its product drawings, specifications, etc. (2) A control item which directly affects the inspection item with item importance A defined in the inspection criteria. (3) An item related to quality characteristics and manufacturing conditions that may result in a defect of an important function (such as running, turning, stopping, guard, insulation, protection, exhaust gas controlling or identification). (4) An item for which market action was taken against safety or pollution related issues or due to violation of regulations, etc. in the past. (5) An item for which a focused control is judged to be required based on the process capability evaluation, the past quality performance (market quality information, in-house quality information, in-process failure), the manufacturing quality criteria, etc.
7	Critical Process	A process which includes a critical item that is acknowledged by the head of the subject section to require a specific control in order to maintain the quality characteristics based on the difficulty level of operation or defect outflow prevention.
8	MTP	An abbreviation for Manufacturing Technical Proposal. A proposal of requirements made to Honda R&D Co., Ltd. (‘R&D’ hereafter) for proper manufacturing when the head of a section decides that a model description , design concept, etc., according to the evaluation of which, may affect the capital investment, productivity, quality (including past defects, etc.), etc.
9	Process Quality Control Table	A document systematically prescribing control items (such as quality characteristics and manufacturing conditions) and control methods that are essential for quality assurance in the manufacturing processes.
10	Operation Standard	A document prescribing operation procedures which serve as the standards concerning operation conditions, operation methods, control methods, materials to be used, equipment to be used, etc. considering operation safety, quality assurance and efficiency.
11	Outsourcing Assembly Drawing	A process plan [assembly chart] prepared by a facility and issued to supplier in order to specify control items, etc. to properly maintain assembly procedure and quality when outsourcing part of assembly process.
12	MQS	An abbreviation for Manufacturing Quality Standard. A standard systematically prescribing control items and controlling criteria for prevention of potential quality problems attributable to manufacture by part, process and operation based on FTA, etc. of the past quality problems and new mechanism / new technology.
13	Process Assurance Capability	Criteria for determining if the stable production of intended quality is feasible or if it has actually been executed in the process. The capability is calculated by a calculation formula (coefficient) given with respect to each manufacturing domain.
14	PAC-V	An abbreviation for Process Assurance Capability Verification. A quality improvement activity in which to confirm whether the quality requirements prescribed as control items or control standards by part, process and operation are met by verifying the process assurance capability in order to prevent potential quality problems attributable to manufacture.

2 System

2.1 Management Framework

2.1.1 The management system related to production preparation is as follows.

(1) The management system related to production preparation of automobile is in conformity to Attachment-1 “Production Preparation System (Automobile)”.

(2) The management system related to production preparation of motorcycle is in conformity to Attachment-2 “Production Preparation System (Motorcycle)”.

(3) The management system related to production preparation of power product is in conformity to Attachment-3 “Production Preparation System (Power Product)”

2.1.2 The responsible person in each operation listed in “Production Preparation System” is the head of the section in charge of the subject operation.

2.2 Quality Control Tools Relational Table

Relation among the primary quality control tools in production preparation is in conformity to Attachment-4 “Quality Control Tools Relational Table”.

2.3 Roles and Responsibilities

Basic roles and responsibilities of the related sections regarding production preparation are as follows.

(1) Sales section organizes plans for product sales and provides those to related sections.

(2) R&D issues product drawings, specifications, etc. (‘product drawings’ hereafter) to the specification control section of the facility in accordance with the development instruction.

(3) Certification section of the facility provides information on the date of certification, methods to obtain certification of the subject regulation requirements, etc., types, certified values, etc. to related sections in accordance with the plan for acquisition of certification.

(4) Production section organizes a production system that facilitates maintaining quality, production volume, delivery date, cost, etc. of a new product properly in accordance with the development instruction issued by Honda Motor Co., Ltd. or R&D, the product drawings issued by R&D, etc.

3 Planning Stage

3.1 Role Assignment for Production Preparation

The facility's new model promotion section receives development instructions for new products (including products with minor changes, etc.) from Honda Motor Co., Ltd. or R&D. and assigns and shares the roles and responsibilities of production preparation in cooperation with the new model promotion section of Honda Motor Co., Ltd.

3.2 Establishment of Project Team and Confirmation of New Model's Description

3.2.1 The head of the facility appoints the project leader (E-LPL or EPL) following the establishment of the SED integrated project team to develop, produce and sell new products and the assignment of the roles, etc. set forth in Article 3.1 in accordance with the directions by the business planning section of Honda Motor Co., Ltd.

3.2.2 3.2.2 The project leader (E-LPL or EPL) establishes E new model team to promote production preparation of the new products.

3.2.3 3.2.3 The E new model team conveys the information on the model description and the design concept issued by R&D in accordance with the development instruction and the information on conformity to new regulations set out by the certification section to the production section. Related sections then confirm characteristics, productivity, etc. of the new products based on the information.

3.3 Offer of MTP

The production section offers a proposal of requirements for proper manufacturing to R&D via the new model promotion section or the quality control section when the model description, the design concept, etc., after the confirmation of which, are deemed to affect manufacturing quality (including the past problems, etc.), productivity, capital investment, etc.

3.4 Planning of Target Requirements

The E new model team formulates target requirements for the new product for the production section ("E-A00 requirements" hereafter) in accordance with the confirmation results of the target requirements, the new model description, the design concept, etc. of the new product set out by the business planning section. Note that E-A00 requirements include the following major items.

- Purpose
- Life cycle
- Manufacturing system
- Workforce
- Capital investment
- In-house / outsourced production
- Cost
- Impact on other models
- Initial cost
- Quality assurance
- E theme
- Initial parts
- Environment / recycling
- Start-up schedule

3.5 Evaluation of Target Requirement Plans in Production Section

The head of the facility or the person delegated by the head of the facility confirms and evaluates the E-A00 requirements discussed and formulated by the E new model team.

3.6 Planning Drawing Confirmation and Countermeasure Request

3.6.1 The specification control section receives the specification document on the basic specification of the product issued by R&D (“planning drawing” hereafter) and issues it to the related sections.

3.6.2 The related section checks the planning drawing for status of MTP application, characteristics, critical quality characteristics, productivity, etc. of the new product.

3.6.3 The related section submits a countermeasure request plan to the new model promotion section or the quality control section when specification improvement is deemed as necessary judging from the planning drawing confirmation results.

3.6.4 The new model promotion section or the quality control section judges the validity of the countermeasure request plan to request execution of the countermeasure to R&D when receives the specification improvement requests from the related section.

3.7 Supplier Selection, Contract, etc.

3.7.1 The purchasing section takes into account the characteristics, etc. of the new product to make a selection of suppliers (“M/L” hereafter) and to make contracts with them and informs the related section of it.
Note that procedures of supplier’s selection/contract shall be in accordance with G-HQS [Supplier’s Selection/Contract Standard].

3.7.2 Routes for delivery of planning drawing to the supplier and for processing of the countermeasure request from the supplier are as follows.

Delivery of Planning Drawing	R&D => Specification control section => Purchasing section => Supplier
Processing of Countermeasure Request	Supplier => Purchasing section => New model promotion section or quality control section => R&D

3.8 Introduction Plan of New Equipment, etc.

3.8.1 The production section confirms conformity of equipment, measuring equipment, etc. to be used in the process to specifications and applicable regulations of the new product.

3.8.2 The production section makes a plan, when modification, purchase or manufacture of equipment, measuring equipment, etc. (“new equipment, etc.” hereafter) are deemed as necessary as a result of the conformity confirmation, for implementation of those to reflect on the manufacturing control plan, etc.

3.9 Manufacturing Control Plan Designing

3.9.1 The E new model team designs a manufacturing control plan for across the production section and informs related sections of the plan.
Note that the manufacturing control plan for across the production section shall include the following major items which are required to be implemented at the production preparation stage in order to fulfill E-A00 requirements.

(1) Implementation schedule;

(2) Production arrangement plan;

(3) Quality assurance plan;

(4) Outsourcing arrangement plan (including quality maturation plan);

(5) Proficiency training plan;

(6) Investment and cost plan;

(7) Cooperation with other facilities; etc.

3.9.2 The production control section determines the volume, delivery time, etc. of the new product required by the related sections during the production preparation period to establish the production plan and informs the related sections of the plan.

3.9.3 The manufacturing and inspection sections make the implementation plan for process establishment where the manufacturing quality and the production volume are maintained properly by taking into account the planning design, sales plan, production plan, etc. based on the manufacturing control plan for across the production section while developing a process design using MQS, etc.

3.9.4 The quality control section and the receiving inspection section make the implementation plan for conformity confirmation of the performance, function, merchantability, etc. of the product based on the planning design and the manufacturing control plan for across the production section.

3.10 Issue of MQS

3.10.1 The quality control section and the related sections select the target products, parts, etc. based on the confirmation results of the planning drawing, the items of the past problems, etc. and clearly define the control items and controlling criteria in order to prepare MQS.

3.10.2 Section which issues MQS obtains approval from the responsible person to issue MQS to the related sections.
Note that the quality control section of the facility receives MQS to distribute the copies to the related sections when the new model promotion section of Honda Motor Co., Ltd. or the quality control section issues MQS.

3.11 Evaluation of Planning Stage Completion in the Production Section

3.11.1 The E new model team and the related sections undergo a validation of the plan regarding the following items to obtain approval for completion of the planning stage.

(1) Target values for E-A00 requirements;

(2) Manufacturing control plan (including quality maturation implementation plan);

(3) Tooling plan for large-sized equipment; etc.

3.11.2 The head of the facility or the person delegated by the head of the facility makes the final decision on completion of the planning stage.
Note that the items related to quality conformity shall be evaluated by the quality representative.

3.11.3 The E new model team and the related sections, based on the evaluation results, apply the target settings, the implementation methods, etc. to the manufacturing control plan in order to properly maintain the quality, production volume, schedule, etc. of the new product before shifting to the designing and development stage.

4 Designing and Development Stage

4.1 Issue of Prototype Drawing and Confirmation

4.1.1 The specification control section is notified of drawing issue from R&D to receive specification documents on detailed specification of the product (“prototype drawing” hereafter) and issue the documents to the related sections.
Note that the route of issue and delivery of the prototype drawing to the supplier is in accordance with Communication of Planning Drawing of Article 3.7.2.

4.1.2 The related section checks application results of MTP and the countermeasure request, changes in the planning drawing, characteristics of the new product, critical quality characteristics, productivity, etc. against the prototype drawing to discuss quality control methods, inspection methods, etc. in mass production.
Note that confirmation of actual prototype vehicle shall be conducted as required.

4.2 Countermeasure Request Based on Confirmation of Prototype Drawing and Prototype Vehicle

4.2.1 The related section participates in the review of the prototype drawing and in processing, assembly, testing, etc. of the prototype vehicle and, when specification improvement is deemed as necessary, submits a countermeasure request plan to the new model promotion section or the quality control section.

4.2.2 The new model promotion section or the quality control section, when the specification improvement request is submitted by the related section, makes a countermeasure request to R&D upon judging the validity of the countermeasure request plan.
Note that the route for processing of the countermeasure request from the supplier is in accordance with Article 3.7.2.

4.3 Revision of MQS

The issuing section of MQS, when a proposal for MQS revision is made based on the prototype drawing review and the results of processing, assembly, testing, etc. of the prototype vehicle, negotiates the proposal for revision with the related section and revises MQS as required to issue the revised MQS to the related section.
Note that basics of the revised MQS issue are in accordance with Article 3.10.

4.4 Setting up Inspection Items for Inspection Criteria

4.4.1 The quality control section confirms the specifications of the new product, regulations for the subject certification, etc. to specify inspection items for inspection criteria, and notifies related sections of the items.
Supplies are notified of it via the purchasing section.

4.4.2 Details of setting up the inspection items for inspection criteria are described in G-HQS [Inspection Control Standard].

4.5 Process Design

4.5.1 The manufacturing section and the inspection section understand the required quality from the inspection items for inspection criteria, prototype drawing, inspection items, etc. and specify control items to properly maintain the quality.
Note that MQS, etc. shall be utilized as required upon specifying the items.

4.5.2 The manufacturing section and the inspection section utilize the methods of outflow prevention or occurrence prevention (QA matrix, FMEA, etc.) and establish methods to control the control items in the process in order to properly maintain the standard values specified in the items.
Note that the following items shall be included in the control methods in the process.

(1) Process series

(2) Equipment to be used, measuring equipment, etc.

(3) Quality characteristics

(4) Manufacturing conditions

4.5.3 The manufacturing section specifies critical items and critical processes in the control items while obtaining approval from the head of the section.
Note that the setting procedure and the control methods from the control items through to the critical process are in accordance with Attachment-5 “Setting Flow and Control Methods of Critical Items and Critical Process”.

4.5.4 The manufacturing section, when outsourcing part of assembly processes to a supplier, prepares outsourcing assembly drawings where quality assurance request items, etc. are specified to properly maintain the quality.

4.5.5 The manufacturing section issues the outsourcing assembly drawings to the supplier via the purchasing section after the drawing is reviewed by the quality control section, etc. and M/L and the cost are decided by the purchasing section.

4.5.6 The new model promotion section or the quality control section negotiates with related sections such as the manufacturing section or the purchasing section to specify the designated lot control parts and to promote improvement of the lot control system.
Note that the lot control details are in accordance with G-HQS [Lot Control Standard].

4.5.7 The receiving inspection section or the purchasing section checks the process design state at the supplier against the manufacturing control plan and the inspection items for inspection criteria, in the following cases:

- When the process has been changed significantly to affect the quality.
- When the part specification has been changed significantly to affect the process design.

4.6 Preparation of Standards

4.6.1 The manufacturing section prepares the process quality control table based on the outcome, etc. of the prototype drawing, the inspection items for inspection criteria, MQS and the process design.
Note that the standards regarded by the head of the manufacturing section as equally capable of assuring the product as the process quality control table can be used as a substitute for the table.

4.6.2 The manufacturing section and the inspection section prepare the operation standards for manufacturing, inspection, etc. by specifying the items to comply with in the process based on the following documents, etc.
Note that the head of the section shall take into account that the importance of the top event or the past problems and, at his or her discretion, the problems expected to occur when the specified items are not complied with shall be listed and the results of practical operation verified with the prototype vehicle, etc. shall be reflected in the operation standards.

(1) Prototype drawing
(2) Inspection items for inspection criteria
(3) Process quality control table (including standards regarded as equal to the process quality control table)
(4) MQS
(5) Instruction items for safety operation
(6) HES and official standards regarding new products
(7) Instruction manuals for equipments, measuring equipments, etc.
(8) Items that the head of the section specified based on the past quality performance, etc.

4.6.3 The operation standard includes protocols for equipment failure, etc. as well as the regular operations at the discretion of the head of the section.

4.6.4 The manufacturing section prescribes indication method of the critical process identification in the process quality control table, the operation standard, the factory floor, etc. and implements the method.

4.7 Process Assurance Capability Verification

The manufacturing section executes PAC-V to determine the validity of the process design in Article 4.5, and if the design has not reached the target value, it discusses a countermeasure to achieve the value and makes a countermeasure plan.

4.8 Evaluation of Preparation Commencement at Production Section

4.8.1 The production section undergoes evaluation in terms of the following items.

(1) Performance of tooling plan for new equipment, etc.
(2) Handling plan based on the process assurance capability verification results.

4.8.2 The head of the facility or the person delegated by the head of the facility determines availability of preparation commencement based on the report.
Note that quality-related items shall be evaluated by the quality representative.

4.9 Process Preparation and Inspection Preparation

4.9.1 The production section promotes manufacturing of equipments, measuring equipments, etc. used in the process and scheduling of the due date in accordance with the evaluation results and the manufacturing control plan in Article 4.8 followed by confirming conformity to the initial specifications at the time of acceptance.
Note that procedures for the time of acceptance are in accordance with G-HQS [Equipment Control Standard] and G-HQS [Measuring Equipment Control Standard].

4.9.2 The production section installs the equipments, the measuring equipments, etc. in the process to make those available for use in accordance with the manufacturing control plan.

4.10 Package Specification Arrangement

The material service section negotiates quality loss prevention of parts, equipments, etc. at the time of delivery, storage, etc. and package specifications, etc. with which the handling is easy with the manufacturing section, the receiving inspection section, the quality control section, the supplier, etc. for the arrangement.

4.11 Evaluation of Transition to Production Preparation Stage at Production Section

4.11.1 The production section undergoes evaluation in terms of the following items for approval for transition to the production preparation stage (completion of designing and development stage).

(1) Achievement to the target value in terms of E-A00 requirement

(2) Progress of the manufacturing control plan

4.11.2 The approval for the transition to the production preparation stage is given by the head of the facility or the person delegated by the head of the facility.
Note that quality-related items shall be evaluated by the quality representative.

4.11.3 The production section improves the process, quality control methods, etc. in order for the quality, production volume, scheduling, etc. of the new product to properly be maintained based on the evaluation results.

5 Production Preparation Stage

5.1 Development Completion Specification Confirmation

5.1.1 The specification control section, upon receipt of drawing issuance notification from R&D, receives specification documents for detailed specifications of products (final prototype drawing, mass production drawing, parts list, etc. for the motorcycle and the automobile, and development completion prototype drawing, parts list, etc. for the power product; “development completion specification document” hereafter) for which development is completed, and requests related sections to determine the application.

5.1.2 The related section checks application results of MTP and the countermeasure request, changes in the prototype drawing, characteristics of the new product, critical quality characteristics, productivity, etc. against the development completion specification document.

5.1.3 The quality control section comprehensively determines the availability of application to the production preparation lot (refer to Article 5.4) in accordance with the confirmation results from the related section and notifies the specification control section of it upon obtaining approval from the head of the quality control section.

5.1.4 The specification control section, based on the decision of application availability made by the quality control section, prescribes the application period of the specification documents to be newly issued and gives instructions of specification application to the related section.
Note that the routes for issue and delivery of the development completion specification document to the supplier are in accordance with Delivery of Planning Drawing in Article 3.7.2.

5.2 Production Planning of Production Preparation Lot and Parts Order

5.2.1 The production control section, in accordance with the production plan for the production preparation lot based on the request from the related section, determines a daily production plan where production line, order of processing, model, type, options, color (interior / exterior), quantity, etc. are clearly listed to issue the production instruction to the related section.

5.2.2 The purchasing section, based on the production instruction given by the production control section, specifies the delivery date, delivery quantity, etc. of parts to be purchased from the supplier to place part order to the supplier.

5.3 Stamping Form Fixing and Stamping Instructions

5.3.1 The stamping form fixing section, based on the type notification, etc. from the certification section, fixes the stamping form to give instructions to the related section.

5.3.2 Details for the stamping form fixing and stamping instructions are in accordance with G-HQS [Stamping Control Standard].

5.4 Education / Training

5.4.1 The manufacturing section conducts education and training for the operators in terms of the following respects.

- Regarding specific techniques such as processing, assembly procedure, equipment operation procedure, etc.
- Regarding control techniques such as preparation, etc. of operation record or quality record.

Note that the operator to be allocated to a critical process shall be educated and trained upon prescribing the requirements, etc. for proficiency in the subject process.

5.4.2 The inspection section conducts education and training for the inspectors on the mechanism of the completed product, equipment or part, and handling procedures, etc. of the measuring equipment.
Note that the procedure of education and training for the inspectors is in accordance with G-HQS [Inspector Training Standard].

5.5 Parts Inspection of Production Preparation Lot

5.5.1 The receiving inspection section conducts receiving inspection of new parts, etc. of the supplier in accordance with the product drawing and the inspection items for inspection criteria to confirm the conformity in terms of the quality and the specifications.

5.5.2 The receiving inspection section gives instruction to the suppler to implement measures when problems are found on new parts, etc.

5.6 Processing / Assembly of Production Preparation Lot

5.6.1 The manufacturing section processes and assembles new products in the conditions equivalent to mass production (according to the purpose of each trial/confirmation lot) based on the production plan and confirms the conformity of the quality to the inspection items for inspection criteria, operation standard, etc.
Note that the main purposes of respective production preparation lots are as follows.

(1) Tooling Trial Lot

- To properly comprehend the mass production ability (to confirm the validity of equipment ability, process layout and standards).
- To confirm other control items and degree of maturity of the production system.

(2) Quality Confirmation Lot

- To confirm the degree of quality maturity.
- To establish the mass production system (to establish the process layout and standards).

(3) Pre-production Trial Lot

- To confirm the quality and productivity in the production line flow equivalent to that of mass production.
- To establish reliability of the equipments.

5.6.2 The manufacturing section implements measures when problems are found on new products it processed and assembled.

5.7 Final Inspection of Production Preparation Lot

5.7.1 The final inspection section inspects the completed products processed and assembled in the production preparation lot in accordance with the inspection items for inspection criteria and confirms conformity in terms of the quality and equipment specifications.

5.7.2 The final inspection section gives instruction to the related section to implement measures when problems are found in completed products.

5.8 Conformity Confirmation of New Products

5.8.1 The quality control section confirms conformity of the new products produced in the production preparation lot in terms of performance, function, merchantability, etc. in accordance with the plan in Article 3.9.4.

5.8.2 The quality control section conducts analysis and implements measures when nonconformity is found in completed products.

5.9 Comprehension and Confirmation of Current Status of Production Preparation Lot Quality

5.9.1 The manufacturing section and the inspection section comprehend the current status of the quality in terms of the critical items, inspection items for inspection criteria, etc. specified in the process design by utilizing quality data, PAC-V, etc. and confirm conformity with the quality target. If the target is yet to be achieved, those sections conduct the quality improvement activity.

5.9.2 The receiving inspection section comprehends the current status of the quality from the results of receiving inspection, etc. and confirms conformity with the quality target. If the target is yet to be achieved, the section conducts the quality improvement activity.

5.9.3 The quality control section obtains the results of the quality level investigation in terms of the inspection items from the inspection section to utilize those in establishing the inspection criteria.

5.10 Occasional Audit

The primary control section of occasional audit selects the section and the supplier subject to occasional audit based on the results of parts inspection, final inspection and comprehension of current status of the quality, etc. and audits the production preparation condition.
Note that the procedure of the occasional audit is in accordance with G-HQS [Internal Quality Audit Standard] and G-HQS [Supplier’s Quality Audit Standard].

5.11 Countermeasure Request

5.11.1 The related section submits the countermeasure request to the new model promotion section or the quality control section when specification improvement is deemed as necessary judging from the results of confirmation of the final prototype drawing, mass production drawing, etc. and of processing, assembly, inspection, etc. of the production preparation lot.

5.11.2 The new model promotion section or the quality control section judges the validity of the request to request execution of the countermeasure to R&D when receives the specification improvement requests from the related section.

Note that the route for processing the countermeasure request form the supplier is in accordance with Article 3.7.2.

5.12 Revision of MQS

The issuing section of MQS, when a proposal for MQS revision is made based on the results of confirmation of the final prototype drawing, mass production drawing, etc. and of processing, assembly, inspection, etc. of the production preparation lot, revises MQS in accordance with the judgment of the representative of the issuing section of MQS to issue the revised MQS to the related section.

Note that basics of the issuing section of MQS revision are in accordance with Article 3.10.

5.13 Establishment of Inspection Criteria

The quality control section takes into account the confirmation results of the current status of quality, certified value (specification), etc. of the production preparation lot to establish the inspection criteria and issues it to the related section.

Note that details of inspection criteria establishment are in accordance with G-HQS [Inspection Control Criteria].

5.14 Establishment of Standards

5.14.1 The manufacturing section and the inspection section confirm whether or not there is any item to reflect on standards based on the MQS revised, inspection criteria established, etc. as a result of the process improvement at the production preparation stage to improve the standards such as the process quality control table and the operation standard.

5.14.2 The head of the manufacturing section checks the process quality control table for appropriateness of the description before establishing the table.

5.14.3 The heads of the manufacturing section and the inspection section check the operation standards of the respective sections for appropriateness of the description before establishing the standards.

Note that the operation standard shall be established after checking with the operator whether the described operation can be maintained (workability, safety, quality stability, etc.).

5.14.4 The inspection section (excluding the receiving inspection section) and the receiving inspection section may request submission of the process quality control table respectively to the manufacturing section and the supplier taking into account the critical quality characteristics, inspection items, etc.

Note, as for the supplier, that the standards regarded as equally capable of assuring the assigned product, etc. to the process quality control table by the head of the receiving inspection section can be used as a substitute for the table.

5.14.5 The inspection section checks the submitted process quality control table for appropriateness of the descriptions of the items in terms of the critical quality characteristics, the inspection criteria, etc.

5.15 Evaluation of Production Preparation Completion at Production Section

5.15.1 The production section undergoes the evaluation of conformity of the following items with the target for approval for production preparation completion (transition to the production stage).

(1) Achievement in terms of E-A00 requirement;

(2) Performance of the manufacturing control plan;

(3) Performance of the quality maturation implementation; etc.

5.15.2 The head of the facility or the person delegated by the head of the facility makes the final decision on production preparation completion.

Note that the items related to quality conformity shall be evaluated by the quality representative.

6 Production Stage

6.1 Shipping Evaluation

The quality representative checks the completion inspection results and the outcome of the new products at an early phase of mass production to evaluate whether the products are suitable for shipping.

6.2 Confirmation of Quality Level at an Early Phase of Mass Production

6.2.1 The production section properly comprehends whether the specified control items and the controlling criteria are maintained and the validity of the setting by monitoring the market quality information, the in-house quality information, etc. for three months from the mass production commencement.

6.2.2 The manufacturing section gives instruction to improve the process with PAC-V, etc. based on the decision made by the head of the section in accordance with the monitoring results set forth in Article 6.2.1.

6.2.3 The receiving inspection section conducts the quality improvement activity for the supplier based on the decision made by the head of the section in accordance with the monitoring results set forth in Article 6.2.1.

6.2.4 The quality control section, when a proposal for MQS revision is made in accordance with the monitoring results set forth in Article 6.2.1, revises MQS based on the decision made by the head of the section to issue the revised MQS to the related section.

6.3 Evaluation of Mass Production Performance

6.3.1 The production section undergoes the evaluation in terms of the following items to determine whether the performance for three months from the mass production commencement of the new product has achieved the target.

(1) Performance in terms of E-A00 requirement;

(2) Status of market quality information, in-house quality information, etc. and problem handling;

(3) Proposal of items to apply to the next model; etc.

6.3.2 The head of the facility or the person delegated by the head of the facility makes the final decision on mass production performance.
Note that the items related to quality conformity shall be evaluated by the quality representative.

7 Supplementary Provision

7.1 Application of Standard

Items regarding establishment, revision and use of this standard are in conformity to G-HQS [Honda Quality Standards Control Standard].

Production Preparation System (Automobile)

: Lead Section

	New Model Flow	R&D	Honda Motor Co., Ltd.			Facility						Supplier (reference)
			Business Planning/ Sales	Certification Section (※1:Cert. Sec of facility)	New Model Promotion Section	New Model Promotion Section	Production Control Section (※2: Spec Control Sec.)	Quality Control Section	Manufacturing Section	Inspection Section	Purchasing Section	
Planning Stage	P0 Evaluation (Dvlpmnt Target Evaluation)	Model development Model description Planning DWG	Development Order Sales plan/ Prod. plan	※1 Cert. gen. plan	Allocate roles for operations Check (To P0 Evaluation)	Project Team Establishment and New Model Description Confirmation Compile the proposal MTP Proposal Plan target req.(E-A00) and evaluate (E planning 0)	※2 Receipt &Issue				Convey M/L / spec.	Develop prod. prep. practice. ・Check spec. ・C/M Request ・Mfg control plan ・Develop Process Design ・Process setup
						Check Planning DWG and request C/M		Compile C/M request			Receive C/M Request	
					Check Draw up Mfg Control Plan (full version) Issue MQS	Mfg control plan (full version)	Draw up introduction plan of new facilities, etc. Establish manufacturing control plan	Check MQS Issue MQS				
									Develop Process Design			
	P2 (Planning stage completion evaluation)	Prototype DWG issue Mfg prototype unit			(To P2 Evaluation)	Evaluate completion of planning stage (E planning)	※2 Receipt & Issue				Convey spec	・Check spec. ・C/M Request ・Process design ・Process setup ・Prep std doc ・Training ・Process, assy ・Inspection
						Check prototype DWG and prototype unit, and request C/M		Compile C/M request			Receive C/M Request	
Design and Development Stage					Check Update MQS			Update MQS Check MQS				
				※1. Update certification. plan				Setup insp. items			Convey	
								Check assy DWG for outsourced process	Process Design Prep assy dwg for outsourced process		Convey	
									Prep std doc Perform PAC-V, etc.			
	QDG (Preparation start-up evaluation)				(To QDG)	Preparation Commencement Evaluation (E0)						
									Process/ facility setup	Inspection setup		
									Decide delivery form			
	D1 (Dvlpmnt completion evaluation)	Final Prototype DWG Issue M/P DWG Issue			(To D1 Evaluation)	Evaluation of Transition to Pre-Production Stage (E1)	※2 Receipt & Issue					
						Check final prototype DWG and M/P DWG					Convey spec	
		Spec change DWG					Decide Mfg plan		Check production plan			・Training ・Process, assy ・Inspection ・Study quality status
				Decide type			Decide & instruct stamping form		Training		Order	
									Process/assy/ stamp prod. prep lots	Parts insp. Completion inspection		
				※1 Legality compliance Check					Study/ check/ improve quality status(w/ PAC-V, quality data)			
								Check Compliance		Occasional Audit		
									Occasional Audit			
						Countermeasure Request		Compile C/M Request			Receive C/M Request	・C/M request ・Process, assy ・Inspection ・Est. standard documents.
								Update MQS	Check MQS			
				Final spec to submit. ※1 Apply for Cert				Est. Insp. Criteria		Check std doc.	Convey	
				※1 Gain Cert.					Est. std doc			
Production Preparation Stage	E2 (Prod prep stage completion evaluation)			(E2 Evaluation		Prod. Prep Completion Evaluation (E2)						
									Process/assy MP product	Parts insp. Completion inspection		
							Shipping Evaluation					
									Check quality level at early M/P stage (PAC-V, etc.)			
								Update MQS	Check MQS			
						Mass Production Performance Evaluation (E3)						

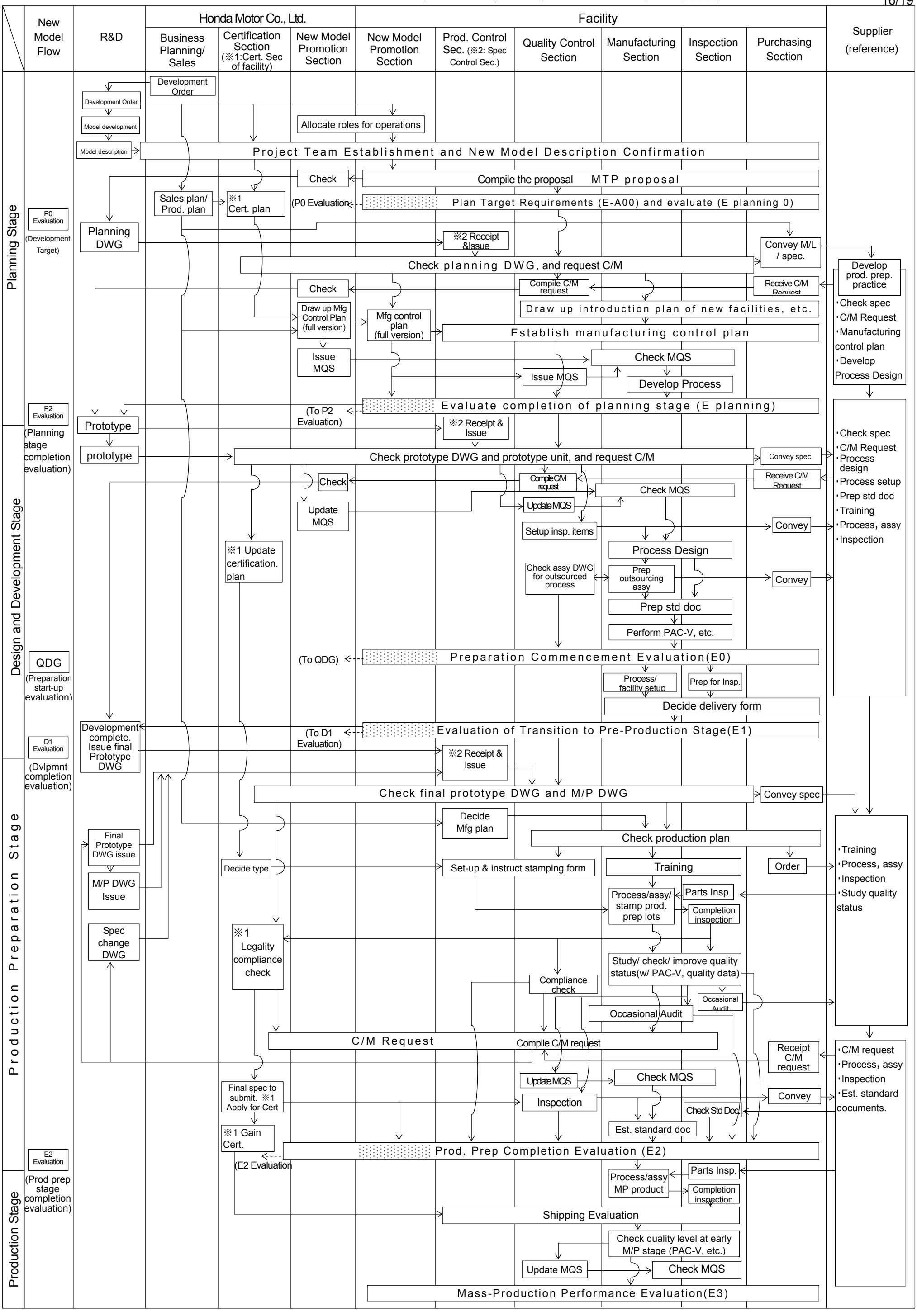
Production Preparation System (Motorcycle)

: Lead Section

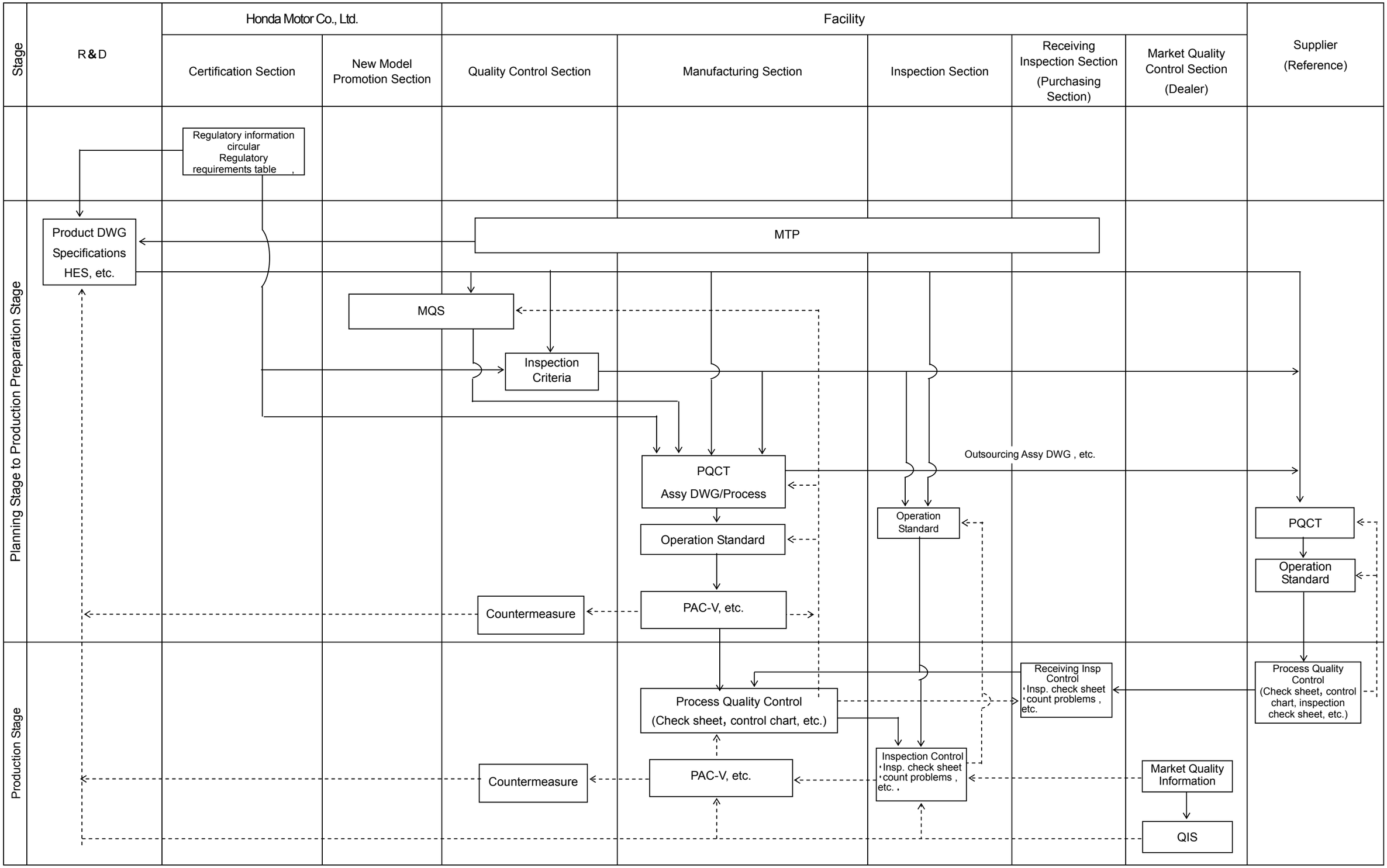
	New Model Flow	R&D	Honda Motor Co., Ltd.			Facility						Supplier (reference)
			Business Planning/ Sales	Certification Section (※1:Cert. Sec of facility)	New Model Promotion	New Model Promotion	Prod. Control Sec. (※2: Spec Control Sec.)	Quality Control Section	Manufacturing Section	Inspection Section	Purchasing Section	
Planning Stage	P0 Evaluation (Dvlpmnt Target Evaluation)	Development Order Model development Model description Planning DWG	Development Order Sales plan/ Prod. plan	※1 cert. plan	Allocate roles for operations Check (To P0 Evaluation)	Project Team Establishment and New Model Description Confirmation Compile the proposal MTP proposal Plan Target Requirements (E-A00) and evaluate (E-P0)	※2 Receipt &Issue				Convey M/L & Spec	Develop prod. prep. practice ・Check spec ・C/M Request ・Manufacturing control plan ・Develop Process Design ・Process setup
						Check planning DWG and request C/M						
					Check Draw up Mfg Control Plan (full version)	Mfg control plan (full version)		Compile C/M request Draw up introduction plan of new facilities, etc.			Countermeas	
					Issue MQS			Establish manufacturing control plan Check MQS Issue MQS Develop Process Design				
	P2 Evaluation (Planning stage completion evaluation)	Prototype prototype			(To P2 Evaluation)	Evaluate completion of planning stage(E-P2)	※2 Receipt &Issue					・Check spec. ・C/M Request ・Process design ・Process setup ・Prep std doc. ・Training ・Process, assy ・Inspection
Design and Development Stage				※1. Update certification. plan	Update MQS	Check prototype DWG and prototype unit and request C/M		Compile C/M request Check Update MQS Setup insp. items	Check MQS Process Design Prep Outsourcing Assy DWG Prep std doc Perform PAC-V, etc.		Convey spec Receive C/M Request Convey Convey	
						Check outsourcing Assy DWG						
						Preparation Commencement Evaluation (QDG)			Process/ facility setup Inspection setup Decide delivery form			
	D1 Evaluation (Dvlpmnt completion evaluation)	Final Prototype M/P DWG Issue Spec change DWG			(D1 Evaluation)	Evaluation of Transition to Pre-Production Stage (E-D1)	※2 Receipt & Issue					
						Final Prototype DWG・MP DWG check					Convey Spec.	
				Decide type		Decide & instruct stamping form	Decide Mfg plan	Check production plan	Training		Order	・Training ・Process, assy ・Inspection ・Study actual quality status
									Prod. prep lot process・assy・ Completion inspection	Parts insp		
Production Preparation Stage		※1 Legality compliance check						Check compliance	Study/ check/ improve quality status(w/ PAC-V, quality data)	Occasional Audit	Occasional Audit	
						Countermeasure Request		Countermeasure			Receipt C/M Request	・C/M Request ・Process. assy ・Inspection ・Est. standard documents.
		Final spec to submit. ※1 Apply for Cert ※1 Gain Cert.						Update MQS Est. Insp. Criteria	Check MQS Est Std docs	Check Std doc	Convey	
	E2 Evaluation (Prod prep stage completion evaluation)	(E2 Evaluation				Prod. prep completion evaluation(E-E2Ⅱ)			Process/assy M/P products Complete	Parts insp.		
Production Stage						Shipping Evaluation						
								Update MQS	Check quality level at early M/P stage (PAC-V, etc.) Check MQS			
						Mass-Production Performance Evaluation (E-E3)						

Production Preparation System (Power Product)

: Lead Section

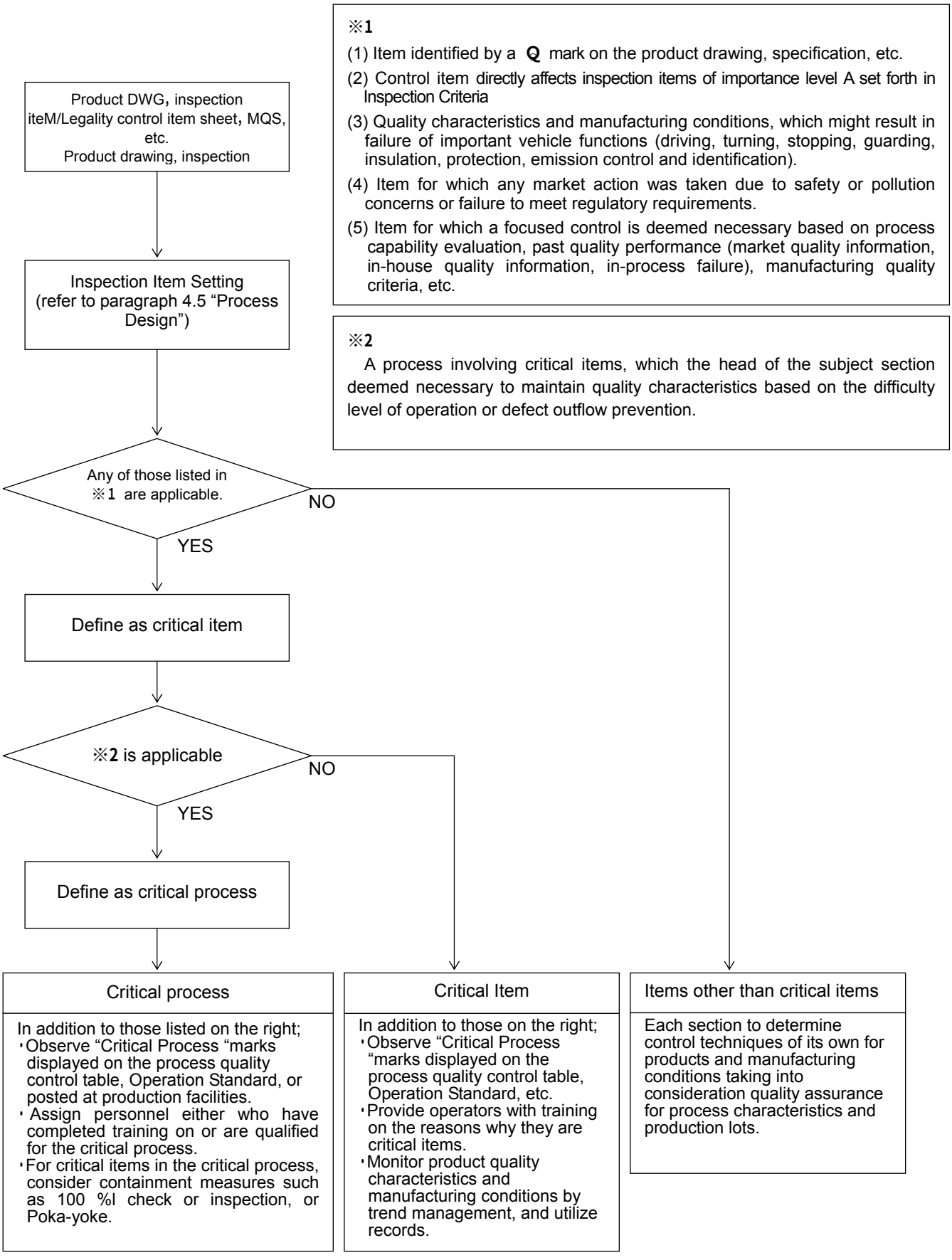


Quality Control Tools Relational Table



Attachment -5 (paragraph 4.5)

Setting Flow and Control Methods for Critical Items and Critical Process



Establishment and Revision

Date of Establishment, Revision or Enactment (MM/DD/YYYY)			Description (MM/DD/YYYY)	Approved by:
0	Est. Enact.	03/26/2010 04/01/2010	First issue. This document becomes effective as of 04/01/2010.	Y.Otobe (Signed on original)