〔Inspection Control Standard〕

【Core】

1 General Provisions

1.1 Purpose

This standard is established to ensure conformity to specifications relating to structure and performance of products (completed products and components, parts) by defining basic requirements relating to inspection.

1.2 Scope

This standard applies to inspection of completed products and component, parts that constitute the completed products.

Inspections below, however, are exempted from this standard.

(1) Inspection for initial product parts defined in G-HQS [Initial Production Parts Control]

(2) Inspection for confirming quality of manufacturing process defined in G-HQS [Process Quality Control Standard]

(3) Inspection relating to quality of products (fit and finish, usability, etc.)

For (3), apply this standard or comply with the usage of the production facility.

1.3 Definition of Terms

1.3.1 Definitions of terms used in this standard are as follow:

No.	Term	Definition
1	inspection	To judge the completed products, component, parts as either accepted or rejected by comparing its measured, tested, inspected, etc. results to the quality judgement criteria. Application scope of inspections specified in this standard is described in paragraph 1.2
2	completed product	Refers to a completed motorcycle, automobile and power products
3	component, parts	Refers to the product unit structuring the completed product
4	control plan	Refers to a plan prepared and submitted when applying for certification by the production facility of the complete products, based on requests from Authority of Europe, China, etc. It controls the consistency of legality of the completed products and the contents applied for certification. Example: Europe, China- Conformity of Production Control Plan
5	legality mass production control sheet	The sheet which the production facility reflects in the Inspection Criteria Sheet, control plan, etc. to control mass production. It defines the methods, specified by Honda, in order to assure regulatory requirements related to completed products through manufacturing process, inspection, etc. Details of issuance and usage are to be defined after beginning its use.

1.3.2 Categories and definitions of inspection criteria used in this standard are as follow:

No.	Inspection Criteria Category	Definition
1	Completion Inspection Criteria	Criteria applicable to inspections of completed products
2	component, parts inspection criteria	Criteria applicable to inspection of component, parts unit constituting a product

1.3.3 Categories and definitions of inspection methods used in this standard are as follow:

No.	Inspection Method Category	Definition
1	100% inspection	To conduct inspection on all subject units. inspection units in the inspection lot.
2	Sampling inspection	Refers to an inspection that extracts sample from the inspection lot, based on the defined sampling inspection method.

1.3.4 Type of inspections and definitions used in this standard are as follow:

No.	Inspection type	Definition
1	receiving inspection of component, parts (hereinafter referred to as receiving inspection)	Inspection to judge whether component, parts delivered by suppliers conform to the receiving section requirements. The inspection used to confirm inspection performance submitted by suppliers, when inspections by the receiving section is omitted, is called data inspection.
2	shipping inspection of components, parts from the section (hereinafter referred to as section shipping inspection)	Inspection to judge the appropriateness of components, parts to be passed onto other sections or production facilities.
3	Completion inspection	Inspection to judge whether the completed product actually meets the requirements as a product.

2 System

2.1 Management System

2.1.1 Procedure flow relating to inspection is outlined in Attachment-1 “Inspection Control System.”

2.1.2 Comply with applicable regulations if details of procedures, etc. relating to inspection are defined in related regulation.

2.2 Roles

2.2.1 Main roles of those relating to inspection operations are as follow:

No.	Person in charge	Role	Authority
1	Quality Representative	Overall control of inspection operations of the applicable production facility	Approves establishment, revision of Inspection Criteria Sheet
2	Head of section preparing Inspection Criteria Sheet	Supervise preparation of Inspection Criteria Sheet and issuance control operations	Establishes, revises Inspection Criteria Sheet
3	Head of inspection section	Supervise inspection operations of applicable section	Confirms inspection results
4	Inspector	Implement inspection based on inspection criteria	Judges the results

2.2.2 The person responsible for each operation based on “Inspection Management System” is the head of the section in charge of the applicable operation.

3 Inspection Criteria Sheet

3.1 Issuance of Inspection Criteria Sheet

3.1.1 Stipulate the requirements using the Inspection Criteria Sheet when inspections applicable to this standard are necessary.

For receiving inspection and section shipping inspection, requirements may be stipulated using the control plan, etc. instead of Inspection Criteria Sheet.

No.	Inspection types	Designation of Requirements
1	receiving inspection (of component, parts)	Inspection Criteria sheet for components, parts, control plan, etc.
2	section shipping inspection (of component, parts)	
3	completion inspection	Inspection criteria sheet for completion inspection

3.1.2 The section in production facility preparing Inspection Criteria Sheet for completion inspection, components, parts prepares and upon obtaining the approval of the quality representative, issues the Inspection Criteria Sheet to the related sections, based on provisions stipulated from this paragraph to paragraph 3.8

Upon necessity, items to designate in Inspection Criteria Sheet are to be determined after discussing with the related sections.

3.1.3 The production facility of completed products submits the inspection units, items and methods necessary to maintain legality to the facility of component, parts, when they are supplied from other facilities.

3.1.4 Manufacturing section or the supplier in charge decides implementation and methods relating to inspections of component, parts not designated in Inspection Criteria Sheet through its technical judgement.

3.2 Designated Items in Inspection Criteria Sheet

Main items designated in Inspection Criteria Sheet are as follow:

(1) Inspection unit (type of completed product, name and identification of component, ~~or~~ parts)

(2) Inspection item

(3) Item importance

(4) Quality judgement criteria

(5) Inspection method

(6) Inspection mode (identification code and frequency)

(7) Inspection section

3.3 Unit and Item of Inspection

3.3.1 Designate inspection unit by completed product, component or part.

3.3.2 Inspection items to designate are as follow:

(1) Those required or judged necessary for inspection by the related regulations of destination

(2) Those that concluded inspection-related contracts with customers (contractor, etc.)

(3) Those deemed necessary by the head of the section preparing inspection criteria and the quality representative

3.4 Item Importance

3.4.1 Designate rank of importance on items to indicate the importance of applicable quality characteristics.

3.4.2 Importance rank of items and criteria are as follow:

Rank	Criteria
A	Those judged as to have critical influence on human life, such as the below, when there are defects on product structure or performance: (1) those that are not able to operate (run, turn, stop) (2) those relating to electrification, burn and injury (3) those relating to fire (4) those relating to pollution (5) those that allow protection of occupant impossible
B	Significant loss of function and quality other than those that fall under rank A when there are defects on structure, component or performance of product
C	Those other than A or B

3.5 Quality Judgement Criteria

3.5.1 Designate quality judgement criteria to inspect each inspection item.

3.5.2 Designate a quality judgement criteria based on the below:

(1) Value or indication of applicable drawing, specification, etc.

(2) Value or indication from the applicable regulation

(3) Value from test data

(4) Provide concreteness through such as numerical values or limit examples

3.6 Inspection Method

3.6.1 Designate inspection method or equipment appropriate to the applicable quality characteristic inspection.

3.6.2 Designate visual confirmation, etc. or other means that can easily judge whether or not it conforms to quality judgement criteria.

3.7 Inspection mode

3.7.1 Designate inspection mode per inspection item using the following symbols:

No.	Inspection mode	Identification code	Inspection Types: receiving inspection	Inspection Types: section shipping inspection	Inspection Types: Completion inspection	Application
1	100% inspection	A	○	○	○	① Inspection items (excludes cases when 100% inspections are judged as to not have been rationally implemented) ranked as A ② Inspection items of rank B and C which: ・100% inspection are mandated by regulations, etc. ・its 100% inspections are judged rational
2	Sampling inspection	C	○	○	○	① Inspection items of rank A that has been judged as to not have been rationally implemented for necessary destructive inspection or prolonged inspection ② Inspection items of rank B and C (excludes those applicable to 100% inspections)
		D*	○	—	—	Establish based on quality evaluation performance, etc. of applicable suppliers other than the above and not related to ranks of A, B and C

*Note：for receiving inspection, those that implement data inspection

3.7.2 Determine the inspection frequency of inspection modes by the applicable regulatory requirements and upon discussing with the inspection section.

3.8 Inspection Section

Designate the applicable inspection section per inspection unit as the follow:

(1) Designate the completion inspection section as the inspection section relating to product structure and performance or the appropriate manufacturing section, etc. which its section shipping inspection has been judged as rational.

(2) Components, parts delivered by the suppliers are inspected by the receiving inspection section and the applicable supplier.

4 Implementation of Inspection

4.1 Inspection Preparation

Inspection section implements and controls preparation of inspection equipment, etc., inspector trainings, etc. based on G-HQS [Production Preparation Standard], [Inspector Training], etc.

4.2 Sampling Inspection

4.2.1 Appropriately define lots of sampling inspection taking into consideration of lot consistency, number of sample inspection, etc.

Example of lot formation is specified in Attachment-2.

4.2.2 Below is exempted from rules stipulated in paragraph 4.2

(1) When lot formation methods are defined in regulatory requirements

(2) Lot formations that confirm conformity to Certification based on production conformity (COP) of Europe, etc.

4.2.3 Sampling inspections are conducted as follow:

(1) Inspection section prepares and control sampling inspection plan sheet based on the production schedule sheet, delivery schedule sheet, etc.

(2) Samples of sampling inspections are randomly extracted from the applicable lot

4.2.4 Appropriately define the frequency of sampling inspection by taking consideration of lot consistency, lot formation, etc. and making reference to international standards, etc.

If frequency, etc. is defined in regulatory requirement, comply as accordingly.

(Examples) and [Option] of sampling inspection frequency, etc. are specified from Attachment-3 to Attachment-9.

4.2.5 Categories (hereinafter referred to as “control category”) of vehicles are inspected per vehicle type.

It may be subcategorized, taking into consideration of quality characteristics per inspection item and test methods, etc. stipulated by regulations of the destination country of the product.

Different types may be categorized as under the same control if they possess the same characteristic or if they can represent multiple vehicle types from correlations found from test by the representative vehicle.

4.3 Data Inspection

4.3.1 Receiving inspection section confirms that inspection items applying data inspection are reflected in process quality control table and are inspected.

Define appropriate number of test samples, based on the suppliers’ proposal and discussions.

4.3.2 Frequency of submitting supplier inspection performance is based on inspection mode (frequency) of Inspection Criteria Sheet or arrangements with suppliers.

4.4 Implementation of Inspection

4.4.1 Inspector implements inspections based on the Inspection Criteria Sheet or control plan, etc.
Completion inspector, engine inspector and parts inspector are those that received trainings of G-HQS [Inspector Training]; other inspectors are those that received trainings relating to inspections of the section.

4.4.2 Judgement of the inspection is made as follow:

(1) Inspector judges the inspection

(2) For 100% inspection, inspection unit is judged as accepted if each inspection conforms to the applicable quality judgement criteria

(3) For sampling inspection (excludes data inspection of receiving inspection), lot is judged as accepted if the sample inspection conforms to the applicable quality judgement criteria.

(4) For receiving inspection, cross check the submitted inspection performance with the applicable quality judgement criteria and judge the acceptance.

4.4.3 Identify the uninspected samples by appropriate methods, such as segregating them, to prevent misusage.

4.5 Handlings after Inspection

4.5.1 Send only the accepted parts to the next process.

4.5.2 If attachment of accepted indication or inspection result sheet is necessary, handle them accordingly to each instruction method.

4.5.3 Handle the rejected parts based on G-HQS [In-house Quality information Handling Standard].

4.5.4 Appropriately package and store to prevent quality deterioration after inspection.

4.6 Records of Inspection Results

4.6.1 Record and store inspection results in inspection result sheet or checksheet, etc.

4.6.2 Record identification of products, those subject to inspection, lots, inspection date, inspector and measured value results, etc.

4.6.3 Head of the inspection section confirms whether inspection results and storing condition are appropriate.

4.7 Usage of Inspection Results

4.7.1 Data acquired from inspection results are used in control charts, etc.

4.7.2 Notify the inspection results to the sections necessary and have them use them.
Production facility of components, parts provides the production facility of completed products with the inspection results, when requested.

4.7.3 Control and improve inspection operations upon reviewing the appropriateness of the implemented inspection to the purpose, based on inspection results and quality information of subsequent processes or market, etc.

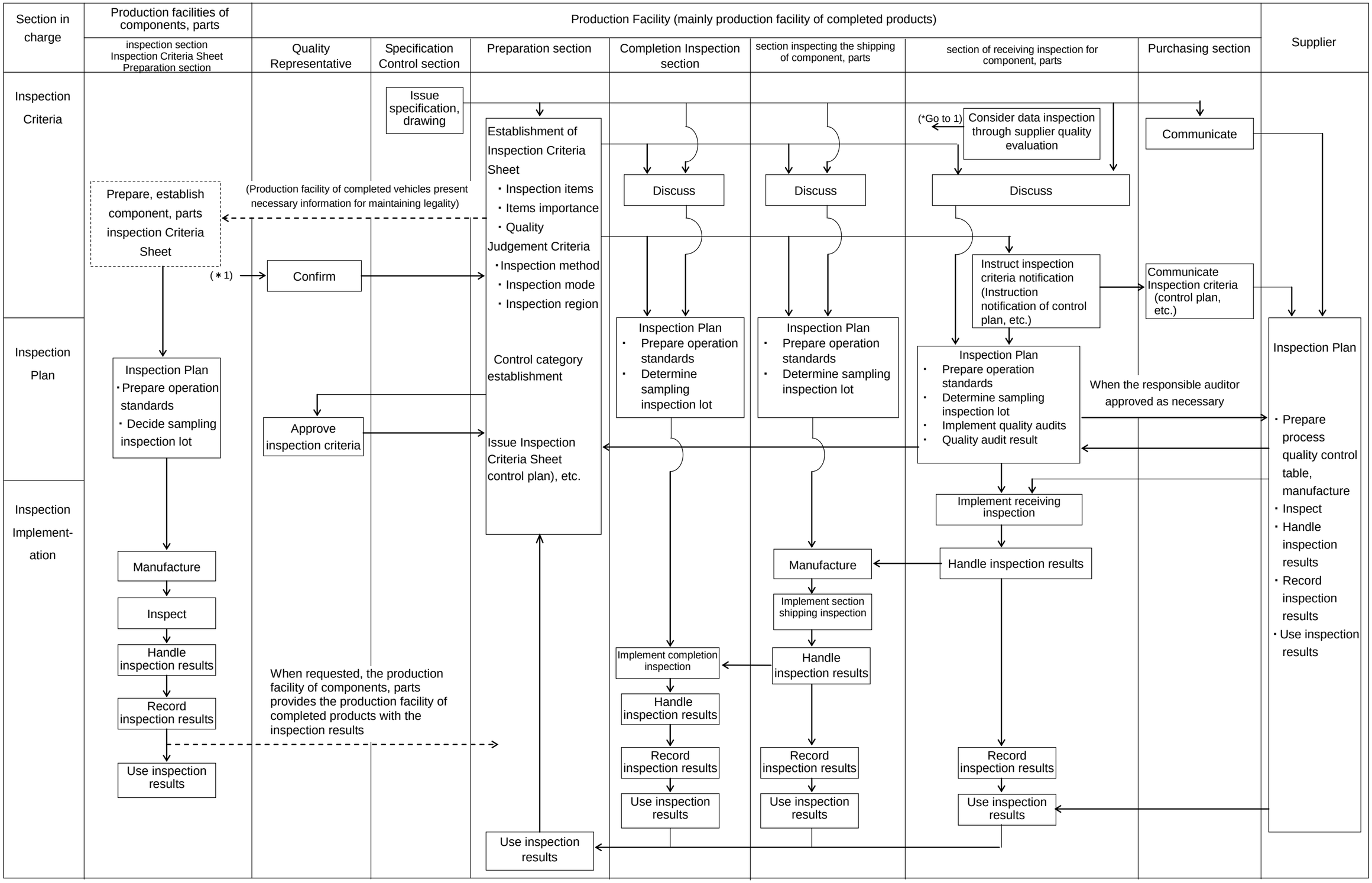
5 Supplementary Provisions

5.1 Application of Standard

Matters relating to the establishment, revision or implementation of this standard are outlined in G-HQS [Quality Management Standards Control Standard].

Attachment-1 (related to paragraph 2.1)

Inspection Control System



Attachment-2 (related to paragraph 4.2.1)

Example of Lot Formation (actual example from facilities of Japan)

Define the maximum lot formation for sampling inspection as the follow and define within the shown range.

Clarify evidences when changing lot formations.

	Completion inspection	section shipping inspection	receiving inspection
Maximum lot formation	Production amount of 6 months	Production amount of 6 months	Production amount of 12 months

Attachment-3 (related to paragraph 4.2.4)

Example of sample inspection of “Sampling Inspection Plans by Attributes with Adjustment,” defined upon taking into consideration of quality stability, etc. based on ISO 2859 (Implemented example of facilities in Japan)

(1) Sampling inspection conducted during receiving inspection and section shipping inspection are as follow:

(a) Special inspection level (S-1) for inspection level

(b) One time sampling inspection for sampling type

(c) Sampling inspection method is as follow:

Inspection Level				Lot Judgement Criteria	
Lot Size (n)	Sample Size (n)			Number accepted (Ac)	Number rejected (Re)
	Reduced inspection	Normal inspection	Tightened inspection		
2～50	2	2	2	0	1
51～500	2	3	3		
501～35000	2	5	5		
35001 or more	3	8	8		

Specify an appropriate sampling number if breaking tests, etc. are required

(2) Sampling inspection for completion inspection is as follow

(a) Special inspection level (S-1) for inspection level

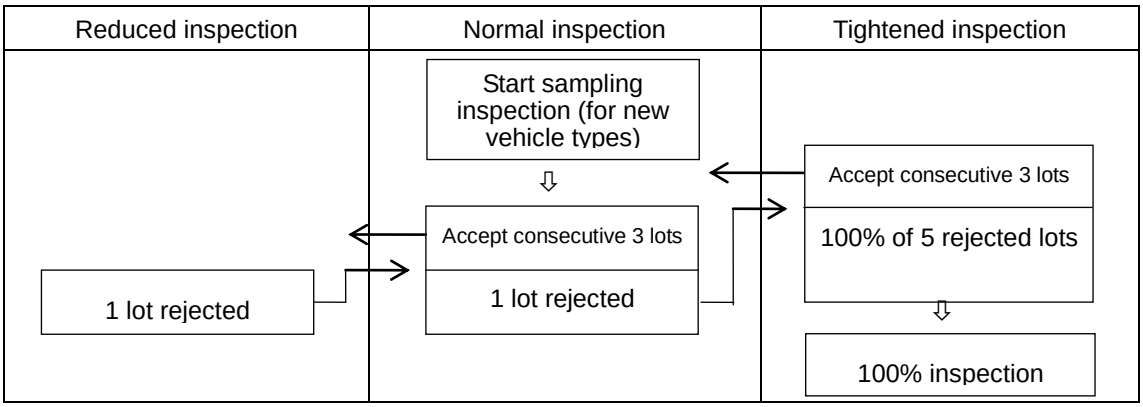
(b) One time sampling inspection for sampling type

(c) Sampling inspection method is as follow:

Inspection Level				Lot Judgement Criteria	
Lot Size (n)	Sample Size (n)			Number accepted (Ac)	Number rejected (Re)
	Reduced inspection	Normal inspection	Tightened inspection		
2～35000	2	3	5	0	1
35001 or more	3	5	8		

The above method does not apply for cases that are applicable to (1), (2) of paragraph 4.2.2.

(3) Begin inspection from normal inspection and adjust the tightening as follow:
If quality characteristics of applicable inspection items are judged as stable from past inspection performances, etc. or if alternative characteristics are 100% inspected, it may begin from reduced inspection.



(4) Apply 100%inspection or a more tightened inspection if the head of the inspection section judges necessary from the sampling inspection results.

【Japan Option】

Attachment-4 (related to paragraph 4.2.4)

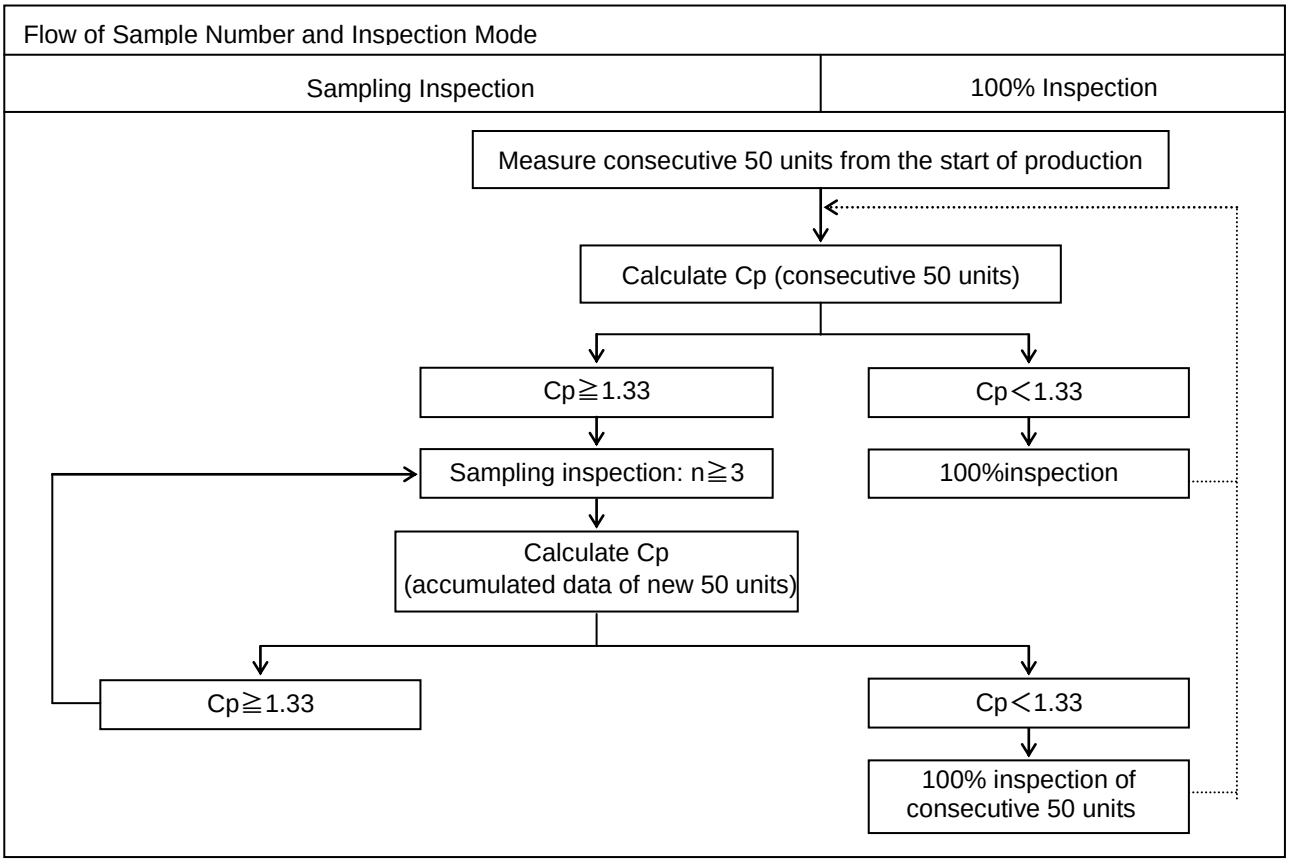
Special Sampling Inspection of Completion Inspection
(Exhaust gas, Noise for Motorcycle)

Exhaust Gas Mass (Mode)

Control Category	Test, etc.	Lot Formation	Sample number (number of units extracted)	Accumulated average value control
-Vehicle type (model) -Engine type -Others, etc.	Motorcycle mode	Production amount of 1 month	N≧3 unit/month	Implement accumulation judgement from the second vehicle of test results to the last vehicles specified by category control

Exhaust Gas Mass (Idling)

Control Category	Lot formation	Sample number (number of units extracted)	Scope
-Engine Type -Exhaust emissions control method, etc.	Production amount of 1 month	see flow below	Apply 100% inspection for vehicle types that do not have emissions control system



Noise

Control category	Test method, etc.	Sample number (number of units extracted)
-Applicable noise standard -Engine type, maximum output -Distinction of manual and automatic transmission	Representative vehicle	2 units/2 months for vehicles of the same vehicle type or engine type categorized in severest noise control category. If the production number of severe noise control category is not enough for sampling, they may be taken from vehicles in the second severest noise control category or from the category with most production numbers.
	Vehicles other than the representative	One unit per year for every same vehicle type, engine type.

【Japan Option】

Attachment-5 (related to paragraph 4.2.4)

Special Sampling Inspection of Completion Inspection (Exhaust gas, noise for Automobile)

Exhaust Gas Mass

No.	Inspection item	Control category	Testing methods, etc.	Lot formation	Sample number (number of units extracted)	Cumulative average control
1	Exhaust Gas Mass Mode	-Engine type -Exhaust emission control method -Equivalent inertia mass -Transmission type -Reduction gear ratio (N/V ratio), etc.	Mode	Production amount of 1 month	n≧3 units/month	Implement cumulative judgement from the second vehicle of the test results to the last vehicles defined in category control
2	Fuel Consumption Mode	-Engine type -Transmission mode -Equivalent inertia mass -Reduction gear ratio (N/V ratio), etc.	Mode	Production amount of 1 month	Use the vehicles extracted for sampling method of exhaust gas mass mode. Inspect at least 1 vehicle a month for 3 months for every control category of fuel consumption mode that could not be inspected. After three month, number of samples may be adjusted.	——

Noise

Control Category	Test method, etc.	Sample Number (number of units extracted)
-Applicable noise standard -Engine type and maximum output -Noise control system -Axle array and driving system -Distinction of manual and automatic transmission (number of speed) -Reduction gear ratio (N/V ratio), etc.	Representative vehicle	3 units/3 month per the same vehicle type, engine type in the severest noise control category. If the number of production vehicles in the severest noise control category is not enough, take samples from the second severest noise control category or those categorized in the noise control with much production.
	Other than the representative vehicle	1 unit per year for every same vehicle type and engine type

【US Option】

Attachmen-6 (related to paragraph 4.2.4)

Special Sampling Inspection of Completion Inspection (Power products, exhaust gas)

Exhaust Gas Mass (mode) Power products, excluding marine engines

Control category	Test method, etc.	Lot Formation	Sample Number (number of units extracted)	Remarks
EPA Phase 2 Per engine family	6 mode or 2 mode (ISO8178-4)	For the United States Production amount of 1 month	[Cum Sum Method] Begin sampling inspection at a rate of 1% per family after start of every model year (hereinafter referred to as “MY”) production. Determine the number of samples by calculating the sampling inspection result of the first 2 units with the specified calculation (for certification carry-over family, calculate combining the first unit test results and last test result of the previous MY)	
CARB Tier2／3 Per engine family		For California Production amount of 1 month	(1) [1% extract (out liar method=alternative method)] Quarterly production of 5000 units or more: 10 units a month Quarterly production of less than 5000 units: 5 units a month or 1% a month (2) [Cum Sum Method] Determine the number of samples for the subsequent quarter by calculating the result of sampling inspection for at least 2 units per family with a specified calculation	Depending on production number, select either (1) or (2) per engine family or model year

【EU Option】

Attachment-7 (related to paragraph 4.2.4)

Special Sampling Inspection of Completion Inspection (Exhaust gas, Noise for Power Product)

Exhaust Gas Mass　Power products, excluding marine engines

Control category	Test method, etc.	Lot Formation	Sample Number (number extracted)	Remarks
By engine family	6 mode or 2 mode (ISO8178-4)	Production amount of 6 months	n=2 units	The section in production facility in charge semi-annually summarizes the mass production test results (from January to June and July to December) and submits them to the Motorcycle & Power Equipment Certification Office of Honda Motor, Co., Ltd. by the end of the following month of the summarizing period. Motorcycle & Power Equipment Certification Office of Honda Motor, Co., Ltd. submits the result to Certification Authority within 1 to 45 days of the following month of period subject for collection.

Noise (stationary exhaust noise, cruising noise) Power products, excluding marine engines

Control category	Test method, etc.	Lot Formation	Sample Number (number extracted)	Remarks
By guaranteed sound power level category per model	Based on measuring method of 2000/14/EC	Production amount of 2 months	n≧1 unit	(1) Guaranteed sound power level refers to warranty value per model the Certification section submitted to Authority (2) Result Reporting Production facility summarizes the annual (April of the previous month to March of the current year) mass production test results and submit the summarized test results to the Motorcycle & Power Equipment Certification Office of Honda Motor, Co., Ltd. by the end of April. The Motorcycle & Power Equipment Certification Office of Honda Motor, Co., Ltd. submits the results to Certification Authority (AVE) every May.

【China Option】

Attachment-8 (related to paragraph 4.2.4)

Special Sampling Inspection for Completion Inspection (Power product exhaust gas, maximum torque)

Power products, excluding marine engines

Inspection item	Control category	Test method, etc.	Lot Formation	Sample Number	Remarks
Exhaust gas mass	By engine family	6 mode or 2 mode (ISO8178-4)	Production amount of the quarter	Select a parent engine that can represent the entire engine family n=2 units	Reporting of result (1) Quarterly Reporting - Production facility's section in charge summarizes the quarter's inspection results of mass production and submits to the Motorcycle, Power Products Certification Office of Honda Motor Co., Ltd. within 30 days after the end of the quarter - Motorcycle, Power Products Certification Office of Honda Motor Co., Ltd. collects the results from each production facility and submits to HMCI (Beijing) within 40 days - HMCI (Beijing) submits to the Certification Authority within 45 days (2) Annual Reporting - Production facility's section in charge submits the annual (from January to December) inspection judgement results by February 15 of the following year to the Motorcycle, Power Products Certification Office of Honda Motor Co., Ltd. - Motorcycle, Power Products Certification Office of Honda Motor Co., Ltd. collects the results from each production facility and submits to HMCI (Beijing) by February 21 - HMCI (Beijing) submits to the Certification Authority by March 1
Maximum torque	By engine family	Submitted engine speed that produce maximum torque			

* JLH (Jialing-Honda Motors Co., Ltd.) is not applicable to the above and is to comply with the usage of its facility

【Others】

Attachment-9 (related to paragraph 4.2.4)

Appropriately define the number of sampling inspections and frequency, taking consideration of the regulations and production number rate of production facilities, etc.

Example of Special Sampling Inspection of Completion Inspection (Emission gas for Automobile)
(Implemented example of facilities in Japan)

Destination	Inspection items	Sampling inspection numbers	Regulatory requirements Authority requirements	In-house operation	Remarks
US	・FTP(LA-4) mode emissions	n≧3 units/month		○	
	・SFTP(US06) mode emissions	n≧1unit/quarter			
Europe Australia	・UDC+EUDC emissions mode ・CO2 exhaust amount (only in Europe) ・Crankcase emissions ・evaporating emissions	n≧3 units/3 months	○	○	COP is conducted for mode emissions and CO2 mass in Europe European Commission Regulation (EC) No.692/2008 Annex I 4.
China	・UDC+EUDC emissions mode ・idling emissions ・crankcase emissions ・evaporating emissions	n≧3 units/year	○		
Thai	・UDC+EUDC emissions mode ・Idling emissions ・Crankcase emissions ・Evaporating emissions	1 unit/ 3 month or 1 unit/2000units	○		
Singapore	・Emissions of applicable mode	When marketed, per requested type	○		
Hong Kong	・Emissions of applicable mode	1 unit/year (calendar year)	○		
South Korea	・CVS-75 emissions	1 unit/lot	○	○	One lot consists of 500 units by accumulated production Type extracted is to be the vehicle with the most production

Establishment and Revision

Date of Establishment, Revision or Enactment (MM/DD/YYYY)			Description (MM/DD/YYYY)	Approved by:
0	Estab. Enact.	03/18/2013 05/01/2013	First issue. This document becomes effective as of 05/01/2013.	T. Sonoda (Signed on original)