#### Revision History

Revision No. 1

Date of Establishment or Revision 11/25/1999

Revision Reason/Contents

- Newly established

Revision No. 2

Date of Establishment or Revision 14/5/2001

Revision Reason/Contents

-Revision of English expression (there is no change of contents)

Revision No. 3

Date of Establishment or Revision 2/28/2003

Revision Reason/Contents

- Partial modification of Article 1.1 Basic Policy of Quality Assurance

Old: delight our customers --- New: satisfy our customers

- Modification of applying standard

Old: QS-9000 --- New: QS-9000 or ISO/TS16949

Changed at 2, 4.2 1), and 4.4 1)

- 3. Old: Initial product of volume production means the delivered product of the first lot of volume production

- 4. The following sentence is deleted; "which includes the full text of the ISO9001 quality assurance"

- Modification of department name

Old: Quality Assurance Department of the responsible division ---

New: Quality Assurance Department

Changed at: 4.2, 4.6 5), 4.9 11), 4.10 1), 4.10 5), 4.13 3), 4.14 2),

S.R.-2, -6, -7, -8, -9, -16, and -19.

- 4.3 1) Correction, Old: products that conform to JATCO 's requirements

- 4.4 5) Modification of document to be submitted, Old: Design Change Request

- 4.4 4) The following sentence is added; "it shall include the items shown in the attached form"

- 4.5 4) Requirement of QS-9000 is added.

- 4.6 3) The following sentence is added; "If requested, the results of conformity confirmation shall be submitted to JATCO."

- 4.6 6) Correction, Old: the results of audits by customers being effective quality system.

- 4.6 7) Addition

- 4.7 2) Requirement of QS-9000 is added.

- 4.9 7) The following sentence is added; "Especially as for the characteristics in QA list, control based on control plan shall be implemented."

- 4.9 11) Modification of document to be submitted, Old: Notification of Process Change

- 4.13 1) Correction of an error in writing, Old: making a document on --- New: making a slip on

- 4.15 4) The following sentence is added; "If JATCO instructs special rust prevention period, the instruction shall be observed by the supplier."

'- 4.16 3) Correction of an error in writing, Old: limit --- New: period

- 4.18 2) Correction of an error in writing, Old: internal audit --- New: internal quality audit

- 4.20 3) Based on the requirement of QS-9000, the following sentence is added "As For the characteristic in QA list instructed by JATCO, control based on control plan shall be implemented.

- S.R. -1Correction of an error in writing, Old: Director --- New: Officer

- S.R.-2 1. Correction of an error in writing, Old: Guide for Initial Product Control--- New: Guide for Change Control

- S.R. -2 2. The following sentence is added; "If the burden becomes heavy, adjustment may be granted on the condition that process capability can be understood.

- S.R.-3 Total revision

- S.R.-4 Modification of preparation timing of Control Plan, Old: before the 1st production trial --- New: before the engineering trial and S lot

- S.R.-4 4. Modification of retention period, Old: 2 years --- New: 5 years

- S.R. -5 4. Correction of submission range of Notification of Use of Sub Supplier, Old: when ordering to sub supplier between the design release and start of volume production for important parts and critical parts.

- S.R.-6 2. 3) "Application to JATCO" is added.

- S.R.-6 3. 3) The following items are added to the subjects of application to JATCO Relocation of facility

- Modification of sub supplier, -Replacement of mold, -Layout Change in the production site

- Setting up, modification or Relocation of mechanical devices

- Modification of fabrication or assembly method, - Modification of heat treatment or welding condition, - Change of inspection method, - When process change becomes necessary because of design Change, - When work formation changes more than 50% (e.g. 1 shift is changed to 2 shifts or vice versa),

- Cases specified by the quality assurance department of the responsible division of JATCO.

- S.R.-6 3. 3) Modification of document to be submitted, Old: Notification of Process Change --- New: Application for Process Change

- S.R.-6 3. 3) The following items are added, (3), (5) (Consult with quality assurance department for the method of initial product control if necessary.) and (6)

- S.R. -8 3. Modification of preparation timing, Old: Before the 1st production trial --- New: Before the engineering trial and S lot

- S.R. -8 7.10), 8. Addition

- S.R. -9 2.2) Definition of layout inspection, Old: Inspections of all dimensions and characteristics

- S.R. -9 2.2) Function tests and frequency are added.

- S.R. -9 3. Modification of the number of copies of inspection standard to be submitted Old: 3 copies

- S.R. -9 3. "Note" is added.

- S.R. -9 4. Modification of the number of copies of Approval Report for Limit Sample, Old: 3 copies

- S.R.-10 Total Revision

- S.R. -12 Addition of "QA List"

- S.R. -12 3. Modification of the provider of QA list, Old: each division

- S.R. -14 2. "When requested by JATCO, the following inspection results shall be reported to JATCO." etc. is added to Inspection/Tests.

- S.R. -15 Addition of 4).

- S.R. -16 Addition of "Prototyping (Development Trials)"

- S.R. -16 Modification of n number in the inspection and test of paragraphs 4 and 5.

- S.R. -16 The following sentence is added to paragraph 5 2). "As for the method of initial product control, consult with product quality assurance department if necessary."

- S.R. -16 The following sentence is added to paragraph 5 3). "Products identification shall be provided so that correspondence with the results of inspection and test is possible."

- S.R. -16 The following sentence is added to paragraph 6 1). "Data in the inspection 'report shall coincide with the product of initial volume production delivery."

- S.R. -18 2. Addition of "Proposed Use for Concession (Supplier's Development Prototype)" and where to submit.

- S.R. -18 4. Addition of "Basic Agreement for Parts Trading Article 9 (Discount Adoption) --- Quotation"

- Revision of Forms

Partial Revision: Form - 1, - 2, - 7, - 10, - 15, - 20, - 21, - 24, - 26, - 30,

and - 31.Total Revision: Form - 3, - 28, and – 29

New: Form - 34 (example only) to – 44

Revision No. 3-1

Date of Establishment or Revision 01/14/2004

Revision Reason/Contents

- S.R. -3 2.The following paragraph 2) was added. "At the time of the launch of a new unit, please follow the directions when JATCO asks for the joint activity based on the new material used, the new manufacturing method used, or the degree of change in the performance requirements of the parts, etc. (JATCO will ask for the joint activity, and notify activity details, submission forms, submission due date at the Supplier's meeting or in writing.)"

- S.R. -3 2. 2) Addition of "Verification of Production Preparation Progress"

- S.R. -3 2. 3) Modification of department name, Old: Quality Assurance Department --- New: Purchased Parts Quality Assurance Planning Department

-S.R. -6 2. 3) 1. Modification of the timing when the application for design change needs to be made, Old: 3 months --- New: 2 months

-S.R. -6 2. 3) Addition of 2)

-S.R. -8 7. 2) Modification to "Product Quality Assurance Division"

-S.R. -8 9. Revised

-S.R. -10 2. Modification of prototyping, Old: (Engineering trial, S lot, 1st and 2nd Production Trial) --- New: (Engineering Trial, 1st and 2nd Production Trial)

- S.R. -10 4. Modification of the department name, Old: Quality Assurance Department --- New: "Purchased Parts Quality Assurance Planning Department"

-S.R. -15 1. 3) The inspection reports for unimportant parts shall be kept, Old: tow years --- New: five years

-S.R. -19 4. Addition of 2)

Revision No. 3-2

Date of Establishment or Revision 04/01/2004

Revision Reason/Contents

-2. Modification of applying standard, Old: QS-9000 --- New: ISO/TS16949

-4. Modification of applying standard, Old: QS-9000 --- New: ISO/TS16949

-4.2 1) Modification of applying standards, Old: QS-9000 --- New: ISO9001:2000, Old: ISO/TS16949 --- ISO/TS16949:2002

-4.2 1) Modification of applying standards, Old: QS-9000-or-ISO/TS16949 --- New: ISO/TS16949

-Table of Contents Revision No. and Revision Date revised

Revision No. 3-3

Date of Establishment or Revision 04/01/2004

Revision Reason/Contents

-4.2 4) Moved one number back to -4.2 5)

-4.2 4) Addition of "Improvement Activities for Manufacturing Process Defect Rate Etc."

-Table of Contents - Revised Revision No. and Date

-Title Page -Modification of division and department name, Old: (Quality Assurance Department, Quality Assurance Division, Purchase Administration & Engineering Department, Purchasing Division) --- New: (Purchased Parts Quality Assurance Planning Department, Quality Assurance & Service Division, Purchasing Administration Department, Purchasing Division)

Revision No. 3-4

Date of Establishment or Revision 12/1/2005

Revision Reason/Contents

-Table of Contents - Revised Revision No., Date and Page No.

-4.6 5) Modification & addition of department name, Old: quality assurance department --- New: Product Quality Assurance Division･Purchased Parts Quality Assurance Planning Department

-4.9 11) Modification & addition of department name, Old: quality assurance department --- New: Product Quality Assurance Division･Purchased Parts Quality Assurance Planning Department.

-S.R. -1 4. 2) Modification of department name, Old: Quality Assurance Department, Quality Assurance Division --- New: Purchased Parts Quality Assurance Planning Department, Quality Assurance & Service Division

-S.R. -6 2. 3) Addition of (3)

-S.R. -6 3. 3) (2) Modification of department name, Old: quality assurance department --- New: Product Quality Assurance Division･Purchased Parts Quality Assurance Planning Department

-Form-1-V3 Form modified

-Form-20-V3 Form modified

-Form-21-V3 Form modified

Revision No. 3-5

Date of Establishment or Revision 6/1/2006

Revision Reason/Contents

-Table of Contents - Revised Revision No. and Date, addition of Form-45-V1

-General Rules 1.1 Modification of policy name, Old: JATCO spirit --- New: JATCO WAY

3. Definition of Terminology

-4.20 3) Modification of word form from singular to plural, Old: method --- New: methods

-S.R. -2 4. 2) Addition of "As for parts for Renault, at the 2nd production trial in principle" and "(Please submit forms instructed by JATCO)"

-S.R. -3 3. #13 Modification of Document Format, Old: Specified Format --- New: Referenced Format

-S.R. -9 2. 2) Modification of frequency, Old: once a year --- New: once a month

-S.R. -9 3. 3) Modification of quantity, Old: lot size --- New: quantity (how many were inspected out of the total volume, i.e. 5 / 200 etc.)

-S.R. -10 4. #27 Modification of document format, Old: Supplier's Document --- New: 45 (Referenced format)

-S.R. -14 2. Addition of "However, inspections shall be implemented semi-annually for raw materials." and "For more information, please contact Production Quality Assurance Division"

-S.R. -16 3. 1) Addition of "Describe in Initial Sample Quality Check Report"

-S.R. -16 4. 1) Addition of "Describe in Initial Sample Quality Check Report"

-S.R. -16 5. 2) Addition of "Describe in Initial Sample Quality Check Report"

-Form-1 Addition of Postal Code

Revision No. 3-6

Date of Establishment or Revision 4/1/2007

Revision Reason/Contents

The "Quality Control Procedure for Suppliers" was revised due to the organizational changes at JATCO Ltd. as of April 1, 2007. The assurance operation (except for acceptance inspections and initial defect handling) which had been undertaken by the Inspection Division was integrated into the Supplier Quality Assurance & Management Department.

1. Change of department for documents submission :

From Product Quality Assurance Division to Supplier Quality Assurance & Management Department

2. Addition of "Supplier Chain Registration Control Sheet" (Form-47)

3. S.R.- 6 Guide for Change Control:

Clarification of application lead time, change in "Notification of Process Change"

4. Design changes to be applied through Part Submission Warrant

5. Addition of inspection methods for 3D data drawings

- 3. Definition of Terminology:

Addition of: "Customer", "Supplier", "Inspection of all dimensions in the drawing", and "Inspection of all characteristics in the drawing".

- 4.2.5) Quality System: Revision of body text.

- 4.4.5) Design Control: "design change procedures"　→　"production part procedures"

- 4.5.4) Document and Data Control: Deleted.

- 4.6.1）Purchasing:

"an sub-supplier"　→　"Tier 2, Tier 3 or subsequent suppliers"

Addition of Form-47: Supplier Chain Registration Control Sheet.

- 4.9.7) Process control: Addition of "S Characteristic".

- 4.10. Inspections and Testing:

1), 5) "quality assurance department" → "Supplier Quality Assurance & Management Department"

5) Revision of body text.

- 4.14.　Corrective and Preventive Action:

2) Addition to body text noting that there are times when an inspection at JATCO may be required.

5) Addition of methods to accumulate information.

- 4.15.　Handling, Storage, Packaging, and Delivery:

4) "any division of JATCO"　→　"any JATCO plant"

- 4.17.3) Internal Quality Audits:

Modification in wording: "increasing the frequency"　→　"undertake improvements"

- 4.18 Training: Modification in wording

- 4.20 Statistical Control: 1).2) Modification in wording

3) Addition of "S characteristic".

- S.R.-2.1 Outline:

Addition of Part Submission Warrant with respect to design change parts

- S.R.-2.3 Process for Production Part Approval:

"quality assurance department"　→　"Supplier Quality Assurance & Management Department"

- S.R.-2.4.1) Document to be Submitted:

Addition of Form-47: "Supplier Chain Registration Control Sheet"

Additional document to be submitted for design change parts is indicated by "＊"

- S.R.-2.4.2) Submission Timing: "1 week before"　→　"2 weeks before"

- S.R.-2.5.2) Master Sample:

"quality assurance department"　→　"Supplier Quality Assurance & Management Department"

- S.R.-3.1 Outline:

Addition of Gauge R&R, Design and Engineering Report and Supplier/CUS to "Concrete Examples" fields

- S.R.-3.3　Documents to be Submitted to JATCO:

Changes in "Submit to" column.

Addition of Design and Engineering Report and Supplier/CUS

- S.R.-4.4.1) Control of Data and Quality Records:

"sub-supplier"　→　 "Tier 2 and Tier 3 suppliers"

- S.R.-5 Guide for the Use of Suppliers:

"sub-supplier"　→　 "Tier 2 and Tier 3 suppliers"

4-2)　Addition of "Supplier Chain Registration Control Sheet"

- S.R.-6 Guide for Change Control:

3-1) "sub-supplier"　→　"Tier 2 and Tier 3 suppliers"

3-3)(1) Deletion of change regarding sub-supplier. Addition of "Tier 2, Tier 3 and subsequent suppliers" to the text.

3-3)(2) Application categories for changes were divided into four, clarifying the lead time of application.

3-3)(3) Documents to be submitted at the time of application were clarified.

3-3)(8) Addition of a statement regarding JATCO's unaccountable liability of defects caused by the process change approved by JATCO

3-5) Perform Quality System Audit with respect to process changes at overseas suppliers

- S.R.-7 Guide for Lot Control:

5-5) Addition of lot control identification of specially designated parts

9-3) Addition of lot control identification of specially designated parts

-S.R.-8 Guide for Control Plan:

"sub-supplier"　→　"Tier 2 and Tier 3 suppliers"

4. Addition of "Supplier Chain Registration Control Sheet (Form-47)"

5. Submission of a control plan for all products supplied to JATCO and the latest version to be submitted.

7. Assure all characteristics stated in the drawing to be included in the control plan.

- S.R.-9 Guide for Inspection Standard and Limit Sample:

"sub-supplier"　→　"Tier 2 and Tier 3 suppliers"

"Purchased Product Quality Assurance Planning Department"　→　"Supplier Quality Assurance & Management Department"

- S.R.-10 Guide for New Product Quality Procedure for Production Preparation Stage:

Modified S Characteristic to Cpk 1.67 or higher and regular characteristics to Cpk 1.33 or higher

4. "Notification of Use of Sub-supplier"　→　 "Notification of Use of Supplier" in submission level of "Document to be Submitted" table

Addition of Forms 39, 46, 47 and 48 to "Document to be Submitted."

- S.R.-11 Guide for Control of Important Parts, Etc.:

5. "Sub-supplier"　→　"Tier 2 and Tier 3 suppliers"

- S.R.-12 Guide for Control of Characteristic in QA List:

3-4)(1) Addition of S Characteristic Ppk, Cpk≧1.67

3-4)(2) Clarification of 3-month period for periodic confirmation of process capability

- S.R.-13 Guide for Special Activity during Launch Period:

2 Reporting period varies according to the development unit

"sub-supplier"　→　"Tier 2 and Tier 3 suppliers"

- S.R.-14 Guide for Quality Control in the Volume Production:

Inspections/Tests

1. Layout inspection　→　Unified inspection of all dimensions in the drawing
2. Modification of characteristic inspection to includes all characteristics in the drawing

Addition of 3D drawing inspection requirements

- S.R.-16 Guide for Initial Product Control

Addition of a statement to follow for the 3D data inspections during production trials and initial sample

- S.R.-19 Guide for Handling of Nonconforming Part

2-2) Addition of the retrospective inspections

4-3) Addition of Form 46: Process Audit Improvement Plan and Report

- Form-1 Report on Assignment/Change of Responsible Person for Quality Assurance:

・Addition of E-mail address column

- Form-2 Part Submission Warrant:

・Addition of Supplier Chain Registration Control Sheet

・Judgment: "Approved"　→　"Accepted"

- Form-3 QA Plan for New Product

・Addition of fields for name of supplier, etc.

- Form-13 Initial Product Delivery Notice

・Addition of field for process change control number

- Form-17 Approval Report for Limit Standard:

・Addition of field for manufacturing plant/factory and unit

- Form-18, 19 Gauge R&R Report:

・Standardized to A-3 form

- Form-20 Notification of Use of Suppliers:

・Modification of heading

- Form-21 Notification of Process Change:

・Addition of columns for details to be filled out and addition of remarks

- Form-22 Description of Process Change:

・Addition of comparison chart of process sequences for process changes

- Form-24, 25, 26　Inspection Standard:

・Addition of a statement regarding the use of the original copies of documents

- Form-33 Plan for Special Activity during Launch Period

・Clarification of items and addition of a field for writing in items to be considered for removal decision

- Form-42 Design & Engineering Report:

・Clarification of issue and receipt details

- Form-43 Cover of Prototype Inspection

・Change in wording and telephone numbers, etc. (prototype manufacturing depart.)

- Form-44 Proposed Use for Concession

・Addition of measures for preventing recurrences

- Form-46 Process Audit Improvement Plan and Report:

・Form for improvement plan is standardized

- Form-47 Supplier Chain Registration Control Sheet:

・Addition of Supplier Chain Registration Control Sheet

- Form-48 Supplier/CUS:

・Addition of feedback sheet on manufacturing requirements from suppliers

Revision No. 4

Date of Establishment or Revision 1/12/2009

Revision Reason/Contents

-Revision for globalization of supplier

-Revision of S.R. number

-Revision by change of quality assurance standard and method.

　　　-Change of expression more clearly（including mistake point）

【Summary】

Outline

・1.2　Add the “/Procedure” to “Claim Compensation Agreement”

・2.　Relationship to ISO/TS16949

“suppliers establish …” 🡪 “suppliers prove …”

・3. Definition of Terminology

Important parts : Add the “Parts have important characteristics”.

Critical parts : Add the “Parts have critical characteristics”.

Change of expression of the “General Parts” more clearly

Add the definition of “Important characteristics”.

Change the definition of “Special Characteristics” based on JATCO internal standard.

Add the “using volume production condition” to “Initial sample”.

Change to “PT1, PT2” from “1st and 2nd production trial” in “Initial product.

(This change refer to the following)

Add the “Full” to “Layout Inspection”

Add the “Approval”

4. Basic Requirements Related to Quality Assurance

　　　Remove the “ISO9001”. （JATCO follows ISO/TS16949 now.）

4.2 Quality System

　　　　　　　　　Remove the “be required to”

（JATCO does not order, if the supplier does not get the ISO9001 (Latest ver.) or ISO/TS16949.）

4.4 Design Control

　　　6） Add the “all” before the “confidential …”

4.5 Document and Data Control

　　　Change the control method of the “Documents which are invalid or which have been abolished”.

4.6 Purchasing

6）Add the “JATCO” before “Jatco’s customers”.

7）Change comment about evaluation item.

8）Add the information of “Evaluation of sub tier supplier by JATCO” and “Responsibility of sub tier suppliers and sub　contractors”

4.9 Process Control

1）Add the “Control chart, Check sheet” and “Training and work observation shall be conducted.”

3）Change to “Guide for Control of Important parts and Characteristic in QA List”

5）Change to “Quality Control Procedure for Suppliers” from “Guide for Quality Control in the Volume Production”. “Guide for Quality Control in the Volume Production” was removed.

7）Change to “Standard Operation Manual” from “work instruction”

11）Change to ““Notification of Process/ Design Change” shall be submitted …” and “Quality assurance activity including Jatco’s requirement …”

12）Change to “drawing (including specifications) and “Guide for establishment of parts cleanness standard””

4.10 Inspection and Testing

2）Description is simplified to “Based on the control plan, … “inspection and testing” and “process and product audit”.…”

5）Change to “JATCO may on occasion visit the supplier in order to do product audit …”

6）Move “If Jatco requires, the supplier shall confirm material quality …” form “Guide for Quality Control in the Volume Production”.

（“Guide for Quality Control in the Volume Production” was removed.）

7）Move “The processes shall be controlled and managed …” form “Guide for Quality Control in the Volume Production”.

（“Guide for Quality Control in the Volume Production” was removed.）

8）Move “The process capability shall be monitored …” form “Guide for Quality Control in the Volume Production”.

（“Guide for Quality Control in the Volume Production” was removed.）

4.11 Control of inspection, Measuring and Test Equipment

3）Add the information of “equipment type”, “periodical calibration based on measurement importance.”

　　　4）Remove the “Upon the request of JATCO” It carries out in principle.

Change to “Measurement system analysis” from “Gauge R & R” based on TS requirement.

4.13 Control of Nonconforming Part

　　　　　　　　　5）Add the following description

If JATCO found nonconformity parts, JATCO request to inspection by external company in an emergency.

The supplier responsible for all costs related to this activity.

　　　　　　　　　6）Add summary of S.R.-15

4.14 Corrective and Preventive Action

2）Move to 4.13 about “JATCO’s action in an emergency”. Add the “Report the results of corrective and preventive actions for nonconformity parts …”

　　　　　　4.17 Internal Quality Audits

3）Remove the “Internal quality audits shall be improved”

　　　　　　4.20 Statistical Control

3）Change to “Important Characteristics” from “S Characteristics”

-S.R.-1　 Guide for Assignment and Notification of Responsible Person for Quality Assurance

　　　　　　　　4. Report to JATCO

　　　　　　　　　1）Add the “Emergency contact such as night time or holiday …”

2）Remove the “Furthermore, when the supplier …”（This information is same as S.R. -3）

-S.R.-2　 Guide for Control of Documents, Data, and Quality Records（Change S.R no. 4→2）

2. Preparation of Documentation

　　　　　　　　　　Change to “before PT1” from “before production trial 1”

　　　　　　　　　　Add the “Standard/Manual”

4. Control of Data and Quality Records

　1）Change to “Supplier chain Registration Control Sheet” from “Supplier Contact Sheet”

(This change refer to the following)

-S.R.-3　 Guide for Use of Suppliers

4. Selection of sub tier suppliers

2）Add the “all material suppliers”

Remove the “Notification of Use of Suppliers” （It matches with the current condition）

　　　　　　　5. Requirements for Using sub tier suppliers

4）Add the “including raw material”

6．Verification by JATCO

　　Change to “audit” from “process verification”

-S.R.-4　 Guide for Change Control

2. Control of Design Changes

1）Scope

(1) Change to “Design change (directed by Jatco)” from “Changes”

(2) Add the “at supplier’s request”

2） Activities Concerning Changed Parts

(2) Add the “Production Part Approval shall be done.”

(3) Add the “Cope of PSW with JATCO approval shall be attached with Initial product delivery notice”

3）　Application to JATCO

(1) Description change more clearly

Add the “If supplier changes drawing, “Notification of Design/Process change” and “Description of Design / Process Change” shall be submitted soon.”

Add the “Change of sub tier suppliers”

(2) Add the “When supplier already deliver to other factory…”

Remove the (3) and (4).

3. Control of Process Changes

Change to “after approved parts submission warrant” from “during volume production”.

（Make application timing clear）

1）Scope　(2)Add the “Repair by non-regular process”

(3)Add the “Change of worker”

2）Activities Concerning Changed Parts

　　Add the “Process FMEA” to “Considerations before changing”

3）Process change for which application to JATCO is necessary

Title change to “Process change for which application to JATCO is necessary”

①Description change more clearly

Add the “Repair by non-regular process”

Add the “surface treatment, press, clinching”

Add the “Change of material suppliers and maker, change of name of material.”

②Change to the “Application timing” form the “Application Lead Time”

Change to the “Changes in material suppliers and makers” in the “Changes related to materials”

③Add the application document, no, name, details and document area

Notification of process change →Notification of Design/Process Change

(This change refer to the following)

Description of Process Change→Description of Design / Process Change

⑥Add the “Design and …”

⑦Change to “When the supplier delivers initial product …” from “Control method of initial product”

⑧Add description about way of thinking of JATCO’s responsibility

　　　5）Change to “System audit by JATCO” from “Process Change of Overseas Supplier”

　　　　　　Add the all description about sub tier supplier of ①

-S.R.-5 Guide for Production Part Approval

1. Outline　Add the “Process change parts”

3. Production Part Approval Process

Change of keep period to 2 years from 5 years

Description change of “Approval”, “Temporary Approval”, “Not approval” more clearly.

Add the “Note”

4. Add the “Definition of PPAP Terminology” （About PPAP and PSW）

5. Submission Contents

1）Revise of submission document

Add description of submission method for “Change”, “New”, “Others”

Revision of “Submission document table” （For globalization）

Remove the description of requirement for Ford from Note. (JATCO requests, if necessity.)

Add the “JATCO will also inform the supplier …”

Add the “”Approval Report for Limit Sample” and “Inspection standard” will be …”

　　　　　　　　　　　2）Submission timing

　　　　　　　　　　　　Remove the description for Ford, RENAULT, etc.

　　　　　　　　　5. Remove the “Master sample”

　　　　　　　　　　　There is no necessity on a quality assurance.（Master sample is used, when the failure occurred.）

-S.R.-6 Guide for Lot Control

　　　 3. Types and application of Lot Control

Add the “Application”

　　　　　Add the “Important parts” and “Except “important parts””

　　　4. Lot Configuration

　　　　　Add the description of “Important parts” and Except “important parts”

-S.R.-7 Guide for Control of Important parts and Characteristic in QA List

Combine “S.R.-11 Guide for Control of Important Parts, etc.” with “S.R.-12 Guide for Control of Characteristic in QA List”

　　　　　　　　　Definition of “Important parts” and “Parts with characteristic in QA List” is revised based on JATCO’s standard.

　　　　　　　　　Main revision point

Selection of characteristic in QA List is revised more clearly.

　　　Using sub tier suppliers for “Important parts” is prohibited as a rule.

　　　Rework/Repair of the “Important parts” is prohibited as a rule.

1. Outline

-S.R.-8 Guide for Initial Product Control

　　　2. Scope

5）. Add “the proposed use for concession”.

3. Prototyping (Development Trials) Add “inspection” to after “All drawing characteristics” and “Major characteristics（9 points）

4. Change to “S lot, PT 1, PT 2” from “Production trial”.

5. Initial sample

　　1） Condition of production process is unified.

　　5） Identification

Change to “visible place on the packaging” from “on the package”.

7. Others　Add the action for “precedence delivery to other plant of JATCO”

-S.R.-9 Guide for Special Process Control

1） Add the “micro shot peening” to Surface Treatment.

2） Subject Parts　　Change description more simply.

3） Carrying Out Particular Process Control　Change keeping period to 5 years from 2 years.

　　　4） Examination and Certification by the Customer

　　Change requirement more clearly.（Required to get authorization）

-S.R.-10 Guide for Management of Nonconforming Part

4. Procedure for JATCO

3）Add “Reporting Recurrence-Prevention Countermeasures”

　　Add “Submit the “Process Audit Improvement Plan a …”

　　Add the description of “Reporting Recurrence-Prevention Countermeasures (Electric version)”.

　　Add the description of “Process confirmation improvement plan and report”.

-S.R.-11 Guide for the Proposed Use for Concession

1. Outline　Add “If the supplier judges the parts usable from …”　（It clarifies that they are not all.）

2. Procedure for Proposed Use for Concession

Add “If the supplier products parts before JATCO approval …”

Add the description about sending method to JATCO.(Only original file)

　　　　　　　　　3. Delivery of Proposed Parts

Add “Delivery date and identification method …”

-S.R.-12 Guide for New Product Quality Procedure for Development Stage

2. Quality Assurance Activities for the Development Stage

Change to “Manufacturing Method matrix of part by part” from “Manufacturing Method matrix”

Change to “Measurement System Analysis” form “Gauge R&R”

3. Documents to be submitted to JATCO

- Change of time of submission to ”Before DR of first prototyping, Before DR of second prototyping” from “Before DR of Prior Lot、Before DR of PF Lot”

- Revision of name of document and “Category of subject Parts and Submission”.

Add the new document and designation of original document submitted

- Revision number of “Submit to” （It unites with “Production Preparation Stage”）

-S.R.-13 Guide for New Product Quality Procedure for Production Preparation Stage

2. Activities for Production Preparation

- Add “Equipment maintenance check sheet” and “Quality check sheet” to “Example”

- Add “S lot, PT1, PT2” to Production trial

- Add “Operation condition for Volume production trial” and “Run@Rate”

- Description of “Synthetic Review” is changed into items of “Process design review”.

3. Ensuring Process Capability

　　Change the “Category of control” based on JATCO’s standard.

　　Add “Indication of the standard and document, etc.”

4. Milestone of production preparation stage

New addition

5．Documents Submission to JATCO

- Description change of “Submission Timing”

- Revision of name of document and “Category of subject Parts and Submission”.

Add the new document and designation of original document submitted

- Change description to “Documents for the parts designated by JATCO …”

6. Process FMEA for prevention of Critical/Significant failures occurrence

New addition

　　　　　　　　　　　　Ranking table is established in order to judge necessity of countermeasure for process FMEA items.

This ranking table can make is used for prevent Critical/Significant failures by value of “Occurrence”, “Severity” and “Detection”.

　　　　　　　　　　　　Add the procedure of ranking table.

-S.R.-14　 Guide for Special Activity during Launch Period

1. Outline

Add “This guide describes Special Activity during Launch Period …”

2. Purpose of Special Activity during Launch Period

New addition

　　　　　　　　　　　Description is added in order to make judgement criterion clear.

3. Preparation and implementation of the “Plan for Special Activity during Launch Period”

　　-Change to “The supplier shall notify the result to JATCO …”.

　　- Move the item of application parts (A,B,C) from 1. Outline.

　　　3. Implementation procedure of the Special Activity during Launch Period

　　3）Preparation procedure of Plan for Special Activity during Launch Period（Procedure change）

Revision of 1) to 4). The way of thinking is made clear. Compatibility of control characteristic is made.

　　　　　5）Setting of criteria to remove the Special Activity during Launch Period

　　　　　　The judgement criteria (Control items of quality) made clear in 1)～4).

　　　　　6）Judgment to remove the Special Activity during Launch Period

　　　Change description more clearly.

-S.R.-15 Guide for Quality Control in the Volume Production → Remove

　　　　　Other S.R. has same information of this S.R. Some information change to other S.R..

-S.R.-15 Guide for Controlled Shipping (NEW)

Add this S.R. in order to request “Controlled Shipping” to supplier that can not stop outflow of nonconformity part.

-S.R.-16 Guide for Control Plan

1. Add “The control plan shows all control items …”.

2. Scope, 3. Preparation timing, 4. Format are revised more clearly.

5. Submission of documents

　　Add “In case of new parts, the supplier shall submit complete control plan …”.

7. Important Points

1）Add ““receive of material and part” to “packaging and delivery””

Revision of 5） to 8） （Description is not related to control standard.）

-S.R.-17 Guide for Inspection Standard, Limit Sample

“Inspection standard” and “Limit Sample” are divided.

2. Change to Inspection standard

1） Format

(1)Description change of Application more clearly.

　　　　　　　　　　　　(2) Add “Parts Cleanness

　　　　　　　　　　　　(3) Revision of requirement items for inspection standard more clearly

2） Submission and Acceptance

　　　　　　　　　　　　Change to “Confirmation” form “Received”

　　　　　　　　　　　　(6) Description change of definition of lot for inspection frequency.

（numerator/denominator → definition of lot）

　　　3. Limit Sample

　　　　　Add 1）Format, 2）Submission and Confirmation, 3）Control

　　　　　Add description of control method for storage of limit sample.

-S.R.-18 Guide for Gauge R&R

　　　Change of name to “Measurement system analysis (MSA)” from “Gage R&R”

（Because “Gage R&R” is one of the analysis method.）

2. Evaluation items　Revision and add evaluation items

3．The comprehensive evaluation method “Gage R&R” for “Repeatability” and “Reproducibility

Add “For details, refer to Measurement Systems Analysis …”

　　　4. Average and Range Method

　　　　　Description change based on JATCO’s standard.

5. Measurement system analysis for attribute gages

Description add based on JATCO’s standard.

-S.R.-19 Guide for Run @ Rate (NEW)

　　　　　　　　　JATCO decides application parts if needed.

　　　　　　　　　Add the “Difference between production trial and Run @ Rate” in order to make difference clear.

-S.R.-20 Guide for Establishment of Parts Cleanness Standard

　　　　　　　　　Add from other document

Form modified and added

-Form-1 Report on Assignment/Change of Responsible Person for Quality Assurance

-Form-2　Part Submission Warrant

-Form-3　Quality Assurance Plan for New Product

-Form-4　Design FMEA

-Form-5　Reliability Test Plan and Report

-Form-6　Process Flow Chart

-Form-7　Control Plan

-Form-8A　Process FMEA

-Form-8B　Process FMEA　（NEW）

-Form-9　Quality Control Indices for Production Preparation (Total Progress)

-Form-10　Quality Control Indices for Production Preparation (Individual parts)

-Form-11　Parts Chart (1/2)

-Form-12　Parts Chart (2/2)

-Form-13 Initial Product Delivery Notice

-Form-14　Initial Product Quality Confirmation Report

-Form-15A　Process Capability Study Report

-Form-15B　Process Capability Study Report

-Form-16　Counter measure for deficient process capability characteristics Report

-Form-17　Approval Report for Limit Sample

-Form-18 GAUGE R&R Report

-Form-19A 　Measurement Systems Analysis (Gauge R&R Report Sheets) Measurement Gages　（NEW）

-Form-19B　Measurement Systems Analysis (Gauge R&R Report Sheets) Attribute Gages　（NEW）

-Form-19C　Judgement of "Pass" or "Fail"（Sample）　（NEW）

-Form-20A　Request of control shipping　（NEW）

-Form-20B　Control Shipping Improvement Plan and Report　（NEW）

-Form-20C　Reply for request of control shipping　（NEW）

-Form-21　Notification of Design / Process Change

-Form-22A　Description of Design / Process Change

-Form-22B　Comparison of Change in Process Sequence

-Form-23　Notification of Delivered-Parts Lot Control

-Form-24　Inspection Standard (Individual - 1)

-Form-25　Inspection Standard (Individual - 2)

-Form-26　Inspection Standard (Group)

-Form-27　Characteristic in QA List Understanding Check sheet

-Form-28A　Proposed Use for Concession

-Form-28B　Purchasing prototyping parts　Proposed Use for Concession

-Form-30A　8D-Report（General）

-Form-30B　8D-Report（Electric data）（NEW）

-Form-31　Process Preparation Plan and Report

-Form-32　Contamination Task Sheet

-Form-33　Plan for Special Activity during Launch Period

-Form-34　P FTA (Example only)

-Form-35　Quality List 2

-Form-36　Quality Matrix

-Form-37　Manufacturing Method Matrix

-Form-38　QA List

-Form-39　Nonconformity and Pending Item List

-Form-40　Quality List 3

-Form-41　QA List (B)

-Form-42　Design and Engineering Report

-Form-43　Cover of Prototype Inspection Report

-Form-44　Deviation Permit Application and Problem report

-Form-45A　Standard Operation Manual

-Form-45B　Standard Operation Manual(Visual)　（NEW）

-Form-46A　Process Audit Improvement Plan and Report

-Form-46B　Process confirmation improvement plan and report　（NEW）

-Form-47　Supply Chain Registration Control Sheet

-Form-48　Supplier/CUS (Supplier Feedback Sheet Parts Production Requirements)

-Form-50A　Run @ Rate Calculation Sheet　（NEW）

-Form-50B　Run @ Rate Report Sheet　（NEW）

-Form-52　Key Characteristics Matrix　（NEW）

-Form-53　Material Test Results　（NEW）

-Form-56　Criteria & Process Risk Evaluation Sheet　（NEW）

-Form-57　Production Method Parameter QFD List　（NEW）

-Form-58　Production Know-how Matrix　（NEW）

-Form-59　New Engineering ＆New Manufacturing Method List　（NEW）

-Form-60　Production Novelty Check　（NEW）

Revision no.　4-1

Date of Establishment or Revision　12/09/01

Revision Reason/Contents

Quality control procedure for Supplier is revised by organization change of JATCO in 1st of April 2011.

Responsibility is changed the following.

Quality Assurance Engineering Section : Quality assurance for new project part in preparation stage, etc

Quality Control Department : Quality assurance for volume production part, etc

【Summary】

- Revision by department name change

　　　　　　Change to “Responsible supplier quality assurance department” form “Supplier quality assurance department”

Change point : Cover page

4.6 Purchasing

4.9　 Process Control

4.10　 Inspection and Testing

4.13 　Control of Nonconforming Part

4.14　 Corrective and Preventive Action

-S.R.-1　 Guide for Assignment and Notification of Responsible Person for Quality Assurance

-S.R.-3　 Guide for Use of Suppliers

-S.R.-4　 Guide for Change Control

-S.R.-5　 Guide for Production Part Approval

-S.R.-6　 Guide for Lot Control

-S.R.-7　 Guide for Control of Important parts and Characteristic in QA List

-S.R.-8　 Guide for Initial Product Control

-S.R.-10　 Guide for Management of Nonconforming Part

-S.R.-12　 Guide for New Product Quality Procedure for Development Stage

-S.R.-13　 Guide for New Product Quality Procedure for Production Preparation Stage

-S.R.-14　 Guide for Special Activity during Launch Period

-S.R.-15　 Guide for Controlled Shipping

-S.R.-16　 Guide for Control Plan

-S.R.-17　 Guide for Inspection Standard, Master Sample

-S.R.-19　 Guide for Run @ Rate

-S.R.-20　 Guide for Establishment of Parts Cleanness Standard

　　　　　　Submit to (Supplement)

Responsible supplier quality assurance department

Quality assurance for new project part in preparation stage : Quality Assurance Engineering Section

Quality assurance for volume production part : Quality Control Department (for the supplier)

　　　　　　　　　　　\*When there is an individual demand, please follow a source of demand.

　 　　　　　　　Plant Quality Assurance Department : Quality Control Section

- Revision related to globalization

　Add the using language for submission document

　Change point　：　1.3　 Quality Assurance for Delivered Parts by the Suppliers

・Change of name

Change to “Supply chain” from “Supplier chain”

　Change point : Table of contents

　　　　　　　　　　　4.6 Purchasing

-S.R.-3 Guide for Use of Suppliers

-S.R.-5 Guide for Production Part Approval

-S.R.-13 Guide for New Product Quality Procedure for Production Preparation Stage

-S.R.-16 Guide for Control Plan

- Add information about JATCO green guide

　　Change point :　S.R.-5 Guide for Production Part Approval

- Change of name

　Change to “Design/Process change” form “Process change”

　　Change point : Form-2, 15A, 15B, 16

- Remove the form and change form number

　Form-30A : Remove

　Form-30B : Change to Form-30

-Change of name

Change to “VC lot” from “S lot”

　　　　　　　Change point : 3. Definition of Terminology

-S.R.-2　Guide for Control of Documents, Data, and Quality Records

-S.R.-8　Guide for Initial Product Control

-S.R.-13　Guide for New Product Quality Procedure for Production Preparation Stage

-S.R.-16　Guide for Control Plan

-Change of Form

　　　　　 Form 43

　　　　　 Form 44 : Change to “Deviation Permit Application and Problem report” form “Proposed Use

for Concession(Supplier’s Development Prototype)

Change related to form change

-S.R.-8　Guide for Initial Product Control

-S.R.-11 Guide for the Proposed Use for Concession

Form modified

-Form-1　Report on Assignment/Change of Responsible Person for Quality Assurance

-Form-2　Part Submission Warrant

-Form-3　Quality Assurance Plan for New Product

-Form-9　Quality Control Indices for Production Preparation (Total Progress)

-Form-10　Quality Control Indices for Production Preparation (Individual parts)

-Form-11　Parts Chart (1/2)

-Form-12　Parts Chart (2/2)

-Form-13　Initial Product Delivery Notice

-Form-14　Initial Product Quality Confirmation Report

-Form-15A　Process Capability Study Report

-Form-15B　Process Capability Study Report

-Form-16　Counter measure for deficient process capability characteristics Report

-Form-17　Approval Report for Limit Sample

-Form20A　Request of control shipping

-Form-20B　Control Shipping Improvement Plan and Report

-Form-20C　Reply for request of control shipping

-Form-21　Notification of Design / Process Change

-Form-23　Notification of Delivered-Parts Lot Control

-Form-24　Inspection Standard (Individual - 1)

-Form-25　Inspection Standard (Individual - 2)

-Form-28A　Proposed Use for Concession

-Form-28B　Purchasing prototyping parts　Proposed Use for Concession

-Form-30　8D-Report

-Form-31　Process Preparation Plan and Report

-Form-32　Contamination Task Sheet

-Form-33　Plan for Special Activity during Launch Period

-Form42　Design and Engineering Report

-Form-43　Cover of Prototype Inspection Report

-Form-44　Deviation Permit Application and Problem report

-Form-47　Supply Chain Registration Control Sheet

Revision no.　4-2

Date of Establishment or Revision　12/03/01

Revision Reason/Contents

Change of expression（including mistake point）

Add the “Note” to Form（Make requirement clear）

【Summary】

1. General Rules

　1.3 6)　Change to “JATCO” from “Jatco”

S.R.-4　Guide for Change Control

　6. Process Changes of sub tier supplier

　　Description change of system audit for sub tier supplier change

S.R.-5 Guide for Production Part Approval

　Submission document table

　　　Description change of “Document format” and remove the “Sign of format”

　Note

　　　Add the description of IMDS

S.R.-12 Guide for New Product Quality Procedure for Development Stage

　3. Documents to be submitted to JATCO

　　　No.9 Report of the Results of Review on Reliability Test Plan

　Change to “Reference form” from “Prescribed form”

S.R.-13 Guide for New Product Quality Procedure for Production Preparation Stage

　3. Ensuring Process Capability

　Add the definition of “Groups”

　5. Documents Submission to JATCO

　　　No.11 Plan of Special Activity During Launch period

　　No.12 Notification and Description of Design/Process Change

　　　No.33 Gage R&R Report

　　　　　　Change of “Document format”

　　　No.40 Status received MDSs (IMDS) (NEW)

　6. Process FMEA for prevention of Critical/Significant failures occurrence

　　　Add the “Severity” to Ranking table

　　　Add the definition of “Severity”, “Occurrence”, “Detection”

S.R-14 Guide for Special Activity during Launch Period

　4. Implementation procedure of the Special Activity during Launch Period

　　5) Setting of criteria to remove the Special Activity during Launch Period

　　　　Change to “reject rate at process, delivery claim, Critical/Significant Failures, etc.”

Form modified

-Form-2　Part Submission Warrant

-Form-7　Control Plan

-Form-10　Quality Control Indices for Production Preparation (Individual parts)

-Form-15A　Process Capability Study Report

-Form-13　Initial Product Delivery Notice

-Form-19A　Measurement Systems Analysis (Gauge R&R Report Sheets) Measurement Gages

-Form-21　Notification of Design / Process Change

-Form-24　Inspection Standard (Individual - 1)

-Form-25　Inspection Standard (Individual - 2)

-Form-26　Inspection Standard (Group)

-Form-28A　Proposed Use for Concession

-Form-28B　Purchasing prototyping parts　Proposed Use for Concession

-Form-30　8D-Report（Sample）

-Form-38　QA List

-Form-44　Deviation Permit Application and Problem report

REVISION NUMBER 4-3

DATE of ENACTMENT or REVISION

REASON; REVISION CONTENTS

* Revision of the contents (Containing correction of typographical errors etc.)
* Revision of the style (concretization of the requirement)

【Summary】

1. General Rules

　1.2 Supplement of \*1 ‘JATCO' includes　JMEX/JGZ/JTL

　4.11　Addition of "the required precision for the measurement equipments".

4.13 Addition of the area of responsibility on suspicious parts management.

S.R.-1 to -20

１． Summary

　　Addition of supplementary comments

S.R. - 3: Guide for the Use of Suppliers

Establishment of Quality Control Procedures for sub tier suppliers

　It defined to apply this standard to sub suppliers..

S.R. - 4: Guide for Change Control

2. Control of Design Changes

1. Application to JATCO

　　(3) It was noticed clearly that the supplier has to submit "Notification of Design / Process change" and to get PSW approval.

3. Control of Process Changes

3) Application to Jatco

②The modification of application timing for fitting the lead time of Customer Requirement for Approval

S.R. - 5: Guide for Production Part Approval

5. Submission Contents

Epexegesis of the **notandums** for the using formats

S.R. - 6: Guide for Lot Control

　　5. Establishing Lot Numbers

　It clearly defined the responsible dept. of Jatco.

S.R. - 8: Guide for Initial Product Control

4. Production Trials

It clearly difined the submission materials and the documents

5. Initial Sample

It clearly defined that the submission materials and the documents

S.R. - 9: Guide for Special Processes, Process Control

Definition of Special process, process control

To identify its definition

4) Special processes audit

　It clearly defined that the performing audit, when customer requests.

S.R. – 13: Guide for Production Preparation Stage

4. Milestone of production preparation stage

"Equivalent for volume-production" modified from “off-tool” to “off-process”.

It clearly stated definition of “off-tool” and “off process”

5. Documents Submission to JATCO

It clearly defined to fit the actual condition

6. Process FMEA for prevention of Critical/Significant failures occurrenc

Addition of the requirement to FMEA, AIAG apply to the FMEA of the **deliverd** parts to JMEX.

S.R. - 14: Guide for Special Activity during Launch Period

4. Implementation procedure of the Special Activity during Launch Period

(5) Addition of the request of control for "Characteristic for customer assemble".

S.R. - 15: Guide for Controlled Shipping

3. Implementation Items

1) Decision of Control shipping

　　 (3),(4) It clearly defined the timing of the invocation for controlled shipping, and responsibility of its expenditure.

**S.R. – 16: Guide for Control Plan**

S.R. – 17: Guide for Inspection Standard and Limit Sample

2. Inspection standard

1) Format

(4) Additon of notes on creation.

3. Limit Sample

2) Submission and Acceptance

(1) Addition of the notice for visualizing limit-sample by picture or diagram instead of actual sample.

**S.R. – 18: Guide for Measurement system analysis (MSA)**

4.2)3) Judgment

It crealy defined the criteria of ndc.

S.R. - 20: Guide for Establishment of Parts Cleanness Standar

2. Evaluation Characteristics and Criteria for Contamination

2) Criteria for Contamination

　(1) It clearly defined the criteria for the contamination size.

　3. Procedure

　　Contamination Measurement Method

　　 (1) Revision of measurement procedure and equipments

Modification of the submitted documents form

* Form-2　 Part Submission Warrant
* Form-3　 Quality Assurance Plan for New Product
* Form-6　 Process Flow Chart
* Form-7　Control Plan
* Form-8　 Process FMEA
* Form-9　 Quality Control Indices for Production Preparation (Total Progress)
* Form-10　 Quality Control Indices for Production Preparation (Individual parts)
* Form-15　 Process Capability Study Report
* Form-17　 Approval Report for Limit Sample
* Form-18　 GAUGE R&R Report
* Form-19　 Measurement Systems Analysis (Gauge R&R Report Sheets)
* Form-20　 Request of control shipping / Control Shipping Improvement Plan and Report / Reply for request of control shipping
* Form-21　 Notification of Design / Process Change
* Form-23　 Notification of Delivered-Parts Lot Control
* Form-24　 Inspection Standard (Individual - 1)
* Form-25　 Inspection Standard (Individual - 2)
* Form-26　 Inspection Standard (Group)
* Form-27　 Characteristic in QA List Understanding Check sheet
* Form-28　 Proposed Use for Concession
* Form-31　 Process Preparation Plan and Report
* Form-32　 Contamination Task Sheet
* Form-33　 Plan for Special Activity during Launch Period
* Form-37　 Manufacturing Method Matrix
* Form-40　 Quality List 3
* Form-41　 QA List (B)
* Form-47　Supplier Chain Registration Control Shee
* Form-48　Supplier/CUS (Supplier Feedback Sheet Parts Production Requirement

・Form-50 A/B Run @ Rate Calculation Sheet and Run @ Rate Report Sheet

REVISION NUMBER: 4-4

DATE of REVISION: 1st Apr. 2016

REASON: REVISION CONTENTS

4.1. Management Responsibility

The following additional wording to 2)

“Quality assurance shall include, selecting special characteristics, establishing quality objectives and related education and training, correction and preventative action, and design and development of product.”

6) 7) was added

6) Management shall establish a system that provides information on nonconforming product or

process to the managers who have responsibility and authorization to the corrective action.

Additionally, management shall empower the employees who have responsibility for conforming to the specific product requirements, to suspend production in an effort to correct quality issues.

For production activity that applies entirely shift-work system, management shall allocate employees, who are responsible of conforming to the specific product requirement, or who have been delegated such responsibility.

7) Quality Management System Review shall cover all matters and that performance trends required by Quality Management System as an essential part of continuous improvement.

To make evidence that there is a minimum achievement made in “Stated Quality Objectives” and “Customer Satisfaction with delivered product”, the following items shall be included and recorded for inputting to management review.

To input Management review, the following items shall be included and recorded.

・Failures that actually being occurred, failures on a potential filed and also analysis of those defects having impact on quality, safety or environment

・Achievement ratio of Quality Objectives

・Cost relevant to nonconforming product

4.6　 Purchasing

9) was added

9）Supplier should monitor the performance of your Tier 2 suppliers and under. The following items

needs to be included.

・Complaints including returned market defected parts from customers and JATCO

・Delivery schedule (including cost incurred for special conveyance)

・conformity with requirement of delivered product

We suggest that suppliers themselves should monitor or carry out self-evaluation of performance.

4.9　 Process Control

8) was added

8) In the case where set-up change is carried out at production process, establish a person who have responsibility and authorization to validate set-up change in each case.

Additionally, standard operation sheet should make available for use of set-up change operator.

The following additional wording to 12)

If specifically directed by JATCO, report to Supplier Quality Assurance Dept. that there is no changes even if no process change and design change.

14) was added

14) “Rule to prohibit from putting part aside” should be set out to prevent from occurring defect and

in thorough compliance with the rule.

The parts should be placed in the location where undefined place for “putting part side”

4.11　 Control of Inspection, Measuring and Test Equipment

The following additional wording to 3)

Yearly plan for calibration should be prepared and follow according to the plan.

4.13　 Control of Nonconforming Part

4) was added

4）If nonconforming product to be remade by out of necessary, remake instruction document should be

prepared and carry out the remake upon the approval of responsible official of quality assurance of supplier.

Remake instruction shall be made available for viewing to the responsible personnel.

For those parts that with QA table characteristics, full number of inspections shall be performed and retain the records for 10 years.

Important security part process shall be disapproved of remake.

4.14　 Corrective and Preventive Action

The following additional wording to 1)

With regard to preventative action, major equipment for process shall be specified and establish an effectively planned comprehensive preventative maintenance systems.

The followings shall be included in comprehensive preventative maintenance system.

・Maintenance Activity Plan（set out yearly equipment maintenance plan and follow according to the plan.）

・Packaging and storing devices, jigs and tools as well as gauges

・Possibility of availability of replacement parts for major production devices

・Documentation of maintenance objectives, evaluation and improvement cycle

The following additional wording to 4)

and global regional plants.

4.17　 Internal Quality Audits

The following additional wording to 1)

In the case of any complains about nonconformity received from customers and JATCO, review on audit

frequency shall be carried out.

2) was added

2）The internal audit shall include the following items addition to quality management system audit.

・Production Process Audit

Those processes should be audited to deliver the judgement that the each production process has completely followed the control process chart (control plan).

・Product Audit

The product should be audited at the appropriate stage in production and delivery on the specified frequency to verify conformance with all specified requirements such as product measurement, functionality, packaging and label display.

S.R. -4:

The following additional wording to 3.3)

When there is hesitation about deciding whether or not application is required, ensure to contact and confirm with JATCO without making your own judgement.

The following additional wording to 4.①

Documents to be submitted are “Notification of Design/Process change”, “Descriptions of

Design/Process change” and “Process sequence comparative Table of process change”.

S.R. -5

・※1 With regard to extraction of contamination issues sheet, the result of verification of residual burrs check sheet should be attached.

・4M List was added to Submission document table

・The following additional wording to the Note

Any additions or changes should be clearly identifiable by marking in the each submitting documents.

S.R.-9

Added “Moulding” to the Examples of Special Processes

S.R.-10

Wording of 2) of 3 has been modified as follows

Same countermeasure shall be adopted to similar parts, similar processes and global regional plants.

S.R.-12

4M List was added to Submission document table

S.R.-13

2. (1) 4M List was added to Submission document table

3. 4M List was added to Submission document table

5. 4M List was added to Submission document table

6. (5) Ranking Table has been modified

S.R.-14

Wording of 3. Has been modified as follows

Preparation and implementation of the “Plan for Special Activity during Launch Period”

A “Plan for Special Activity during Launch Period” shall be prepared and implemented keeping the following points in mind. The responsible person shall control and follow the plan.

In case of the following parts, the supplier shall submit the “Plan for Special Activity during Launch Period” with “PSW” for confirmation of JATCO. The supplier shall notify the result to JATCO, when Special Activity during Launch Period finishes.

If any request received from JATCO during initial flow period, the status should be reported.

S.R.-20

3.(2)　Clerical errors have been corrected

The following forms have been changed

・Form　8　 Process FMEA

・Form　21　 Notification of Design / Process Change

・Form　32　 Contamination Task Sheet（Map）

・Form　33　 Plan for Special Activity during Launch Period

・Form　61　 4M list

Revision No.　4-5

Established or Revised date　2017/04/01

Reason for Revision ・Key Description

　　　　　・Request change　TS16949　to　IATF16949

　　　　 ・Additional description relevant to purchased parts DR

・Full review of details（including correction of literal errors and omitted letters）

　　　　 ・Additional documentations　and　elimination documentation

The in blue lettering area of the following descriptions were added, modified

**Table of Contents**

|  |  |  |  |
| --- | --- | --- | --- |
| 2 | Relationship to　IATF 16949 | 4－3 | 31/3/2014 |
| S.R.-21 | Guide for Purchased Parts DR | 4－5 | 31/3/2017 |

**Table of Format**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Form-21 | Notification of Design / Process Change | 4－5 | 31/3/2017 | V6 |
| Form-27 | QA table characteristics Understanding Check sheet | 4－5 | 31/3/2017 | V2 |
| Form 28~~A~~ | Proposed Use for Concession | 4－5 | 2017/2/28 | V5 |
| ~~Form 28B~~ | ~~Purchasing prototyping parts　Proposed Use for Concession~~ | ~~4－3~~ | ~~2014/3/31~~ | ~~V4~~ |
| Form-62 | “Hatsumono” Indication | 4－5 | 2017/2/28 | V1 |
| Form 63 | List of Changing Point | 4－5 | 2017/2/28 | V1 |

1. General Rules

1.1　Basic Policy of Quality Assurance

At JATCO, we follow our basic quality policy of “Actualization of a higher quality level that continues to be in reliable to our customer”.

２．　Relationship to IATF 16949

JATCO quality assurance system is based on IATF 16949:2009 or latest version. Under this text “Quality Control Procedure for Suppliers” we clarify the basic quality system prescribed by IATF 16949.Suppliers shall develop and work with a system which complies with IATF 16949 as we based this procedure.

3. Definition of Terminology

|  |  |
| --- | --- |
| Priority parts | Parts includingimportant characteristics.  The parts specified by JATCO as “Priority Parts” on the required specifications (design drawings). |
| Critical safety parts | Parts including Critical safety characteristics s.  The parts specified by JATCO as “Critical safety parts” on the required specifications (design drawings). |
| General Parts | Parts other than parts which has QA characteristics and/or Priority characteristics. |
| Priority characteristics | Quality characteristics of Priority Parts and region specified by drawing. |
| QA table characteristics | Quality characteristics listed on the QA list issued by JATCO. |
| S-Characteristic | Special characteristics and characteristics specified by the customer. |
| Critical safety characteristics | This characteristic especially becomes the factor of failure in the parts with important function. That function has possibility of critical failure. This characteristic enclosed with wavy line in drawing. |
| Initial-sample | Parts produced using volume production condition denominated off tools and off process. Those parts precede mass-production delivery. |
| Initial Production “Hatsumono” | First delivered lot of VC lot, PT1 and PT2 and mass-production parts. Including production after any change of design and/or production process. |
| Purchased Parts DR | Joint implementation of Confirmation Meeting with JATCO on production preparation and process design |

Change the term of “Important parts” to “Priority parts”

Change the term of “Critical characteristics” to “Critical safety parts”

Change the term of “Important Characteristics” to “Priority characteristics”

Change the term of “characteristics in QA List” to “QA table characteristics”

Change the term of “Special Characteristic (S-Characteristic)” to “S-Characteristic”

Change the term of “Critical characteristic” to “Critical safety characteristics”

4. Basic Requirements Related to Quality Assurance

This section describes the basic requirements requested by JATCO in order to assure a stable product quality by the suppliers.

JATCO requirements are based on IATF 16949: latest version for further information, refer to IATF 16949: latest version. Hereafter, IATF 16949:2009 will be shown IATF 16949.

4.2 Quality System

1. The supplier shall obtain certification of ISO9001: 2015 or latest version or IATF 16949 to assure conformity for products requirement.

4.4 Design Control

1. Suppliers intending to design parts based on Jatco’s required specifications, shall develop an IATF 16949-conforming system to control design process and verify design output. Follow the procedure in the “New product quality procedure for development stage”.

4.9 Process Control

3) Change the term “Important parts” to “Priority Parts”

Change the term “Characteristic in QA List” to “QA table characteristics”

*Related Guide/Form*

Change the term “Important parts” to “Priority Parts”

4.10　Inspection and Testing

7）Suppliers shall submit the following inspection results to Jatco if JATCO requested

　　　　＊”Inspection standard” shall include inspection frequency.

　　　　　　③Inspection of parts cleanness (Contamination test) shall be done once a month or more.

The frequency which can guarantee the contamination　spec is sometimes requested.

　　　　　　　　Frequency for Inspection of parts cleanness

|  |  |  |
| --- | --- | --- |
| Subject parts | Frequency | Comments |
| JATCO specified parts  in JATCO “Quality file“ | according to  JATCO　“Quality file“ | especially JATCO  specified in　JATCO “Quality  file“；Quality Requirement  Standard included in JATCO  RFQ for Purchased parts |
| JATCO specified parts | JATCO specified | JATCO-SQA specified parts |
| other than above items | once a month | － |

④Process Capability Results (Cpk/Ppk) must be deliver to JATCO every 3 months.

A target part indicates from Jatco.

8）Characteristics specified by 3D and profile shown in the drawing shall be measured by supplier’s “Noncontact Coordinate Measuring Machine”. Basically, measurement result shall be judged directly compared with 3D data of drawing.

For all the CMM measurements the software required is calculation using Gaussian least squares method．

4．13 Control of Nonconforming Part

4) Change the term of “Characteristic in QA List” to “QA table characteristics”

6) In an emergency, the quality assurance department of JATCO may take actions independently of the supplier. (i.e.: inspection by JATCO, inspection by external company with JATCO consigned, etc.).

Additionally, supplier may perform or be requested from JATCO to perform durability test, in the case that nonconforming items are incorporated into JATCO product.

4．14　 Corrective and Preventive Action

2）　If supplier receives information of nonconforming parts from JATCO, the supplier shall take corrective and preventive actions for nonconforming parts due by either within 10 operation days or the date directed by JATCO. Report the results of corrective and preventive actions for nonconforming parts to the responsible supplier quality assurance department or plant quality assurance department of JATCO.

4．15　 Handling, Storage, Packaging and Delivery

6）　Suppliers shall carry out their packaging setting and cleanness of packaging containers

based on the “JATCO GROUP LOGISTICS REQUIREMENTS TO SUPPLIERS” issued

by JATCO’s Production Control Department. The details can be confirmed on

JATCO Supplier Portal site.

4．17　Internal Quality Audits

1. Yearly plans for internal quality audits at least once a year shall be prepared and executed in order to evaluate whether the quality activities and their results are as planned, to verify the effectiveness of the quality system its accordant with IATF16949..

In the case of any complains on nonconformity received from customers and JATCO, frequency of audit shall be reviewed.

**S.R. - 2: Guide for Control of Documents, Data, and Quality Records**

3．　Control of Documents

1. Determine departments responsible for preparation, approving, and control of documents. The department responsible for control of documents shall regularly (once a year) confirm its maintenance status (changes, abolition, insufficient maintenance, etc.) of documents, including external documents, and control the newest editions. And if any nonconformities are found, supplier should immediately collect.

4. Control of Data and Quality Records

Change the term of “Important Parts” to “Priority Parts”

Change the term of “Critical parts” to “Critical safety parts”

**S.R. - 3: Guide for the Use of Suppliers**

2. Establishment of Quality Control Procedure for sub tier suppliers

In principle, the contents should be equivalent of this standard and assure sub tier suppliers are in accordant toIATF16949

3. Implementation of Audits

1. In order to maintain quality control level, audits shall be carried out regularly (At least once in a year) or whenever needed to confirm and evaluate the quality control level.

**S.R. - 4: Guide for Change Control**

**3．**Control of Process Changes

For the Process Changes, JATCO will control and give a Part Submission Warrant (PSW), please confirm detail on the below points.

* 1. Scope

Process Change Management applies to all production process including sub tier suppliers

2)Activities Concerning Changed Parts

|  |  |
| --- | --- |
| Item | Contents |
| Considerations before changing | -Clarify the part to be changed, the reason for, and contents of the change.  -Prepare and distribute a plan of adoption change.  -Consider and establish the quality objectives and assurance methods.  (Quality Assurance Plan for New Product)  Establish trial timing, methods, number of samples, and subject parts list.  Prepare documents (Process FMEA, inspection standards, control plan, process instruction, etc.)  Verify the process, the product quality, and the process capability.  Determine activities, period, and release criteria for “Special Activity during Launch period”.  Prepare plans for education/guidance of workers and inspectors.  Prepare plans for internal audits (process change feasibility decisions, maintenance verifications).  -Prepare Capacity Plan  -Prepare Reliability Test Plan and Report  -Prepare Comparison of 4Ms |

3)Process change for which application to JATCO is necessary

-Changes concerning the characteristics of critical parts and important parts

-Change to new technologies/materials which the supplier has no experience

-A new production line or new factory

-Use of new sub tier suppliers and change of sub tier suppliers

-Changes which the supplier thinks will have a large effect on quality（Example: Due to malfunction of equipment, suppliers use a temporally process, production restart over 2 month stopped）

-Relocation of facility

-Repair by non-regular process.

-Replacement of mould, Modification of mould　(remodel)

Change the term of “Critical Parts“ to “Critical safety parts”

Change the term of “Important Parts“ to “Priority Parts”

(1)Application Lead Time

|  |  |  |  |
| --- | --- | --- | --- |
| 3 | Changes related to ATCU/SOL/belt  Risk Control Parts | -ATCU, includes separate type ATCU.  SOL/Belt/Chain/BRG for Pulley　/Tapered roller BRG/clutch/break | At least 180 days prior to the start of initial product delivery (in principle) |
| \*Because prior auditing by the JATCO Design Department will be required, submit Design and Engineering Report to the Purchasing Division beforehand | |

4)Application to JATCO

①　Documents

Documents to be submitted are “Notification of Design/Process change”, “Descriptions of Design/Process change” and “4M List”.

③　JATCO will return an approved copy of the Notification of Design/Process Change to the supplier. Proceed with preparations as instructed by JATCO on the notification.

Additionally, JATCO may request supplier to participate in Purchased parts DR activity,

in such case supplier should provide their support and coordinate with Supplier Quality

Assurance department.

**S.R. - 6: Guide for Lot Control**

3. Types and application of Lot Control

Change the term of “Important parts” to “Priority Parts”

|  |  |  |
| --- | --- | --- |
| Individual control | Method of control by assigning a unique number to each individual part. | “Priority Parts” |
| Group control | Method of control by assigning a number to each manufactured group (lot). | Except “Priority Parts” |

4. Lot Configuration

Change the term of “Important parts” to “Priority Parts”

**S.R. - 7: Guide for Control of Important parts and Characteristic in QA List**

Change the term of “Important parts” to “Priority Parts”

Change the term of “Characteristic in QA List” to “QA table characteristics”

**S.R. - 7: Guide for Control of Priority Parts and QA table characteristics**

1. Outline

Change the term of “Important parts” to “Priority Parts”

Change the term of “Characteristic in QA List” to “QA table characteristics”

1. Definition of Priority Parts and QA table characteristics.

Change the term of “Important parts” to “Priority Parts”

Change the term of “Characteristic in QA List” to “QA table characteristics”

Change the term of “Critical Parts“ to “Critical safety parts”

1. Selection of Characteristic in QA List

Change the term of “Characteristic in QA List” to “QA table characteristics”

Change the term of “Critical Parts“ to “Critical safety parts”

Change the term of “Critical characteristics“ to “Critical safety characteristics”

Change the term of “Special Characteristic (S-Characteristic)” to “S-Characteristic”

9)Characteristics specified by Jatco’s customers. (S-Characteristic)

4. Indication of the QA Characteristics in a documented standard.

Change the term of “Characteristic in QA List” to “QA table characteristics”

Change the term of “Critical characteristics“ to “Critical safety characteristics”

６． Ensuring and Maintaining Process Capability

* 1. Process-capability control for “Important characteristics” and “Characteristics in QA list” shall be kept based on “Guide for New Product Quality Procedure for Production Preparation Stage”. Process capability shall be confirmed every 3 month as a rule. When JATCO requests, process capability shall be informed to JATCO.

JATCO directs a target part.

7. Prohibition of using sub tier suppliers for “Priority Parts”

Change the term of “Important parts” to “Priority Parts”

10. Self-Audits

Change the term of “Important parts” to “Priority Parts”

**S.R. - 8: Guide for Initial Product Control**

5. Initial Sample

3）Preparation and Submission of Inspection Report

Inspection reports shall be prepared using the “Initial Product Delivery Notice”, the “Initial Product Quality Confirmation Report” and “All characteristic on drawing report”, and shall be attached at the time of delivery.

In relation to Design change parts and Process change parts, the description of any changes should be clearly specified in “Initial Product Quality Confirmation Report” to be able to find any changes are included.

　　When there are any changes in component parts, supplier should add the following 2 points to “Initial product quality confirmation report”.

　　・Inspection result of component parts

　　　In case of component parts are supplied part, inspection report can be substituted.

　　・Confirmation result of that changed component parts to be incorporated.

Products identification shall be provided so that correspondence with the results of inspection and measurement correlation is possible.

6．　Initial Product of Volume-Production

1. Preparation and Submission of Inspection Report

The inspection report shall be prepared using the “Initial Product Delivery Notice” and the “Initial Product Quality Confirmation Report (n=5)” and “Process Capability Study Report” shall be attached at the time of delivery.

And submit process capability data

In relation to Design change parts and Process change parts, the description of any changes should be clearly specified in “Initial Product Quality Confirmation Report” to be able to find any changes are included.

　　When there are any changes in component parts, supplier should add the following 2 points to “Initial product quality confirmation report”.

　　・Inspection result of component parts

　　　In case of component parts are supplied part, inspection report can be substituted.

　　・Confirmation result of that changed component parts to be incorporated.

(If initial product condition of Volume-Production is same as initial sample production, supplier can use copy of “Initial Product Quality Confirmation report” at initial sample production timing.)

1. Identification

In principle, the first three shipments delivered to each division of JATCO after the start of volume production shall be marked, either with an INITIAL stamp at least 50 mm across, or else a separate form (Form-62：Reference), attached to the packaging in such a position as to be clearly identifiable. Also, Form-62: Reference shall be displayed in a place where is clearly visible of the first three shipments.

7. Others

If supplier already delivers to other plant of Jatco, please submit “Initial product delivery notice” and “Initial Product Quality Confirmation Report” with “Notification process change” and “Part~~s~~ submission warrant” with approval by Jatco to each plant receiving parts.

*<Related Guide/Form>*

・[Initial Product Delivery Notice (Form-13)](file:///C:\md0\gen\SHOP\Quality\Quality%20technology\07)Standardization\001.%20新)継続(永久版)\01-2.%20取引先のための品質管理基準書(英語版)@JC\4-2版(2012年3月1日発行\Forms\Form13.xls)

・[Initial Product Quality Confirmation Report (Form-14)](file:///C:\md0\gen\SHOP\Quality\Quality%20technology\07)Standardization\001.%20新)継続(永久版)\01-2.%20取引先のための品質管理基準書(英語版)@JC\4-2版(2012年3月1日発行\Forms\Form14.xls)

・Initial Product (Form-62：Reference)

**S.R. - 9: Guide for Special Processes, Process Control**

**2．**Definition of Special process, process control

The process where characteristics that cannot be measured directly are made; malfunction would appear after use and those characteristics cannot be inspected without cutting the parts. Process that includes characteristics not enable for 100% inspection.

1)Examples of Special Processes

|  |  |  |
| --- | --- | --- |
| Heat Treatment | Add temperature and change material characteristics | For metals Hardening, tempering  Carburized quenching, Low-temperature -annealing  Nitriding, nitro carburizing  Carbonitriding  Flame hardening/tempering |
| Welding | Heat up  Component  until exceeds  melting point, add pressure to combine at molecular level. | Ultrasonic welding, Welding vibration, High frequency welding |
| Other |  | Impregnating, bonding, depositing and moulding etc. |

1. Carrying Out Particular Process Control

Change the term of “Important parts” to “Priority Parts”

Change the term of “Critical Parts“ to “Critical safety parts”

**S.R. - 10: Guide for Handling of Nonconforming Part**

2. Handling of Nonconformity

4)Countermeasures

The supplier shall investigate causes of nonconformity and apply countermeasure quickly.

Containment Actions must be performed within the first 24hrs after Notification.

Permanent Actions must be performed within the first 10 working days after

Notification.or in the time limit directed from Jatco.

3. Recurrence Prevention

2)Horizontal Development

Horizontal development shall be for similar parts and process, and global regional plants and take appropriate actions accordingly.

4. Procedure for JATCO

3)Reporting Recurrence-Prevention Countermeasures

Submit the Report on Defect Recurrence Prevention (8D), containing the cause, recurrence-prevention countermeasures, etc. based on the “Inspection Report” and “Market/Delivery Claim Countermeasures Request” issued by JATCO. Response shall be submitted before time deadline.

* Permanent Prevention Countermeasure must be reported within the first 10 working days after Notification or in the time limit directed from JATCO.

**S.R. – 11: Guide for the Proposed Use for Concession**

2. Procedure for Proposed Use for Concession

*<Related Guide/Form>*

*Before VC trial（Design trial）*[*Proposed Use for Concession (Supplier’s Development Prototype) (Form-44)*](file:///C:\md0\gen\SHOP\Quality\Quality%20technology\07)Standardization\001.%20新)継続(永久版)\01-2.%20取引先のための品質管理基準書(英語版)@JC\4-2版(2012年3月1日発行\Forms\Form44.xls)

*~~VC trial~~*[*~~Proposed Use for Concession (For Purchasing Prototype) (Form-28B)~~*](file:///C:\md0\gen\SHOP\Quality\Quality%20technology\07)Standardization\001.%20新)継続(永久版)\01-2.%20取引先のための品質管理基準書(英語版)@JC\4-2版(2012年3月1日発行\Forms\Form24.xls)

*After PT1 ～Mass production* [*Proposed Use for Concession (For Mass Production) (Form-28~~A~~)*](file:///C:\md0\gen\SHOP\Quality\Quality%20technology\07)Standardization\001.%20新)継続(永久版)\01-2.%20取引先のための品質管理基準書(英語版)@JC\4-2版(2012年3月1日発行\Forms\Form24.xls)

**S.R. – 12: Guide for New Product Quality Procedure for Development Stage**

2）At the time of the launch of a new unit, please follow the directions when JATCO asks for the joint activity based on the new material used, the new manufacturing method used, or the degree of change in the performance requirements of the parts, etc.

(JATCO will ask for the joint activity, and notify activity details, submission forms, submission due date at the supplier’s meeting or in writing.)

|  |  |  |
| --- | --- | --- |
| Request for Modification of Drawings and Specifications | -Through synthetic review, test verification, improvement of difficult operation and the like, necessity of request to JATCO design department on modification request of drawings and specifications shall be reviewed and requested to JATCO. | -Drawings  -Engineering Specifications of the product  -Design and Engineering Report, Supplier/CUS  -4M list  -List of Changing Point  （Submission is mandated whenever there are any changes.） |

**3．　Documents to be submitted to JATCO**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 26 | 4M list | Group 1 | S＊ | ○ | ○ | ○ | ２ | 61  （Specified Format） |
| Group 2 |
| Group 3 |
| 27 | **List of Changing Point** | Group 1 | S＊ | ○ | ○ | ○  英版OK | ３ | 63  (Specified Format） |
| Group 2 |
| Group 3 |

Parts Level

Group 1: Change the term of “Important parts” to “Priority Parts”

Change the term of “Critical Parts“ to “Critical safety parts”

**S.R. – 13: Guide for Production Preparation Stage**

1. Activities for Production Preparation

|  |  |  |
| --- | --- | --- |
| Study of Quality Assurance Methods | -Study how, and at what stage, all requirements and production quality objectives will be ensured.  -Compare manufacturing methods, etc., between current parts and similar parts. Make clear the methods to ensure the quality assurance at the different points. | -Quality List 3  -QA List B  -Manufacturing Method Matrix  -Quality Matrix  -Control Plan  -4M List |
| Synthetic Review (Supplier’s Process Design Review)  or Purchased　Parts  DR with JATCO | -Progress of the plan to achieve the target of product and process shall be confirmed.  (Confirmation Items)  -Extraction of design subject for Production DR  -Evaluate of production subject based on parts design.  -Confirm the appropriateness of the verification method, correlation verification.  -Confirm the appropriateness of the process design and extraction of subject.  -Confirm the appropriateness of the process parameter and extraction of subject.  -Evaluate the necessity of technical support for production method.  -Evaluate the finish timing of process preparation.  -Complete the process FMEA and confirmation of each item.  -Evaluate of significant failures recurrence prevention and horizontal development.  -Process design review shall be done with the responsible supplier quality assurance department.  -The supplier shall notify the date and subjects of the internal review at least two weeks before the date of the review to JATCO. | -Record of Process Design  Review |

3.Ensuring Process Capability

Change the term of “Critical characteristics“ to “Critical safety characteristics”

\*4　　　See “QA table:Form38”from JATCO.If you have no “QA table”,please confirm it’s

presence by asking JATCO Supplier quality assurance department.

4.Milestone of production preparation stage

\*\*Other type of Milestones events may exist and these will be notified by JATCO.

4．　Documents Submission to JATCO

The supplier shall submit the documents below to JATCO.

If JATCO provides instructions about the documents, “submission timing” and “submission to”, the supplier shall follow the instructions.

Also, JATCO may request supplier to disclose and submit any documents relevant to after the Tier2 and Tier3 more　as necessary.

However, in case of event where the documents are not available to submit to JATCO, such as confidential items, consult and decide with JATCO for any alternative means to get confirmed.

Change the term of “Important parts” to “Priority Parts”

Change the term of “Critical Parts“ to “Critical safety parts”

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 42 | Copy of IATF certifications | Group 123 | S |  |  |  |  | Yes |  |  |  |
| 43 | 4M List | Group 1 | S＊ | ○ | ○ | ○ | ○ | ○ | ○ | 2 | 61  （Specified Format） |
| Group 2 |
| Group 3 |

Parts Level

Group 1: Priority Parts, Critical safety parts, special parts (regulation parts, OBD characteristic parts, \*specified parts)

6．　Process FMEA for prevention of Critical/Significant failures occurrence

2）Application

JATCO Supplier Quality Assurance Department requests to execute process FMEA to the supplier.

The supplier will execute PFMEA by ranking each potential failuremode using AIAG Reference Manual - FMEA 4th ed. (or latest version)**,** the responsible supplier quality assurance department will evaluate the correct ranking used.

Full requirements AIAG – FMEA (Latest Version) applies to parts delivery to JATCO Mexico.

5）Use of ranking tables.

\* Ranking tables are based in AIAG Reference Manual - FMEA 4th ed. (or latest version). Always

confirm the use of latest version.

Reference：ranking tables. (quote from AIAG　FMEA　ranking　tables)

Severity



Occurrence



Detection



**S.R. - 14: Guide for Special Activity during Launch Period**

3. Preparation and implementation of the “Plan for Special Activity during Launch Period”

A “Plan for Special Activity during Launch Period” shall be prepared and implemented keeping the following points in mind. The responsible person shall control and follow the plan.

In case of the following parts, the supplier shall submit the “Plan for Special Activity during Launch Period” with “PSW” for confirmation of JATCO. The supplier shall notify the result to JATCO, when Special Activity during Launch Period finishes.

If any request received from JATCO during initial flow period, the status should be reported.

4. Implementation procedure of the Special Activity during Launch Period

4)Period of special activity during launch period.

The Period shall be set until finished verification of quality assurance system.

(Because the period is related to type of parts or production volume, specific customer requirements please consult with the plant quality assurance department.)

Period of special activity during launching is decided by Jatco Supplier Quality Assurance section.

　A guideline about period of special activity during launching is indicated as follows.

　ａ. Parts for Project

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | month | -n | １ | ２ | ３ | +α\* |  |
| JATCO UNIT | Assembly start |  |  | SOP |  |  |  |
| purchased parts | Start  from PSW |  | SOP |  |  |  | end　of　JATCO　UNIT  Assembly’s Special Activity during Launch Period |

ｂ．Process change and Design change

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | month | １ | ２ | ３ | +α\* |
| purchased parts | Start  from PSW |  | SOP |  |  |

ｃ．Parts for phase in

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | month | -n | ０ | +n | ・・・・ | １ | ２ | ３ | +α\* |  |
| JATCO　UNIT | Ａｓｓｅｍｂｌｙ | Phase in |  |  | no  production |  |  | SOP |  |  |
| purchased parts | Start  from PSW |  | Phase in |  | no  production |  |  | SOP |  | end　of　JATCO  UNIT　Assembly Special Activity during Launch Period |

　　　　　　　　　　　　　　　　　　　　　　＊α：requirement by Jatco’s customers and Jatco

**S.R. - 15: Guide for Controlled Shipping**

3．　Implementation Items

1. Decision of Control shipping

[Level of control shipping]

2,Controlled Shipping 2 (CS2): If the supplier’s control after implementation of CS1 is not enough for maintain delivery of parts quality, control shipping shall be done by adding an extra 100% verification (inspection, measurement, etc.) by an approved external company at the Supplier’s Facility, not at JATCO’s facility implementation of CS2 do not exclude the supplier to remove CS1 inspection.

3.New Business on Hold (NBH): If the supplier’s control after implementation of CS2 is not enough, by a case, the Supplier will face New Business On-Hold; in this category the supplier must maintain the controls of the CS2 + Freeze in the Sourcing of New Pro

(3) JATCO requires CS2 of suppliers if JATCO judged CS1 is not effective, In case of there was serious issue or request from customer, JATCO would request CS2 first.

Addition to the above, any cost incurred association with CS1, CS2 shall be settled

at the responsibility of supplier.

4) Exit criteria of control shipping

(3)The tasks about “Improvement Plan and Report for control shipping” have been closed and validated that the Countermeasures for Occurrence and Scape have been corrected and are effective, Validation of effect shall be 90 days as a guideline.　JATCO will decide

on the period according to the scale of mass-production and concern item.

**S.R. – 16: Guide for Control Plan**

1. Outline

This guide prescribes the procedures for Control plan.

The Control plan is a document that describes control methods and characteristics controlled during the entire volume production process, from receipt of materials and raw materials to delivery of ~~the~~ parts. The Objective is for the supplier to establish the quality assurance method. The control plan shows all control items of quality and control method and judgement, etc. in the volume production. The control plan is basic procedure for production control. This guide is based in AIAG Reference Manual – APQP 2nd ed. (or latest version)

**S.R. – 18: Guide for Measurement system analysis (MSA)**

2. Evaluation items

1. Linearity

\* Evaluation Method must be in accordance with MSA AIAG 4th Version or latest.

3. The comprehensive evaluation method “Gage R&R” for “Repeatability” and “Reproducibility”

3) ANOVA Method: A high-level method using variance analysis, it is used in analysing measurement errors and data variable factors.

The “Average and Range Method” is described below.

For details, refer to AIAG Reference Manual – MSA 4th ed. (or latest version).

3) Judgment

* 1. Criteria for gauge R&R (Repeatability and Reproducibility)

R&R(%)≤10 --- OK, no problems

10<R&R(%)≤30 --- Decide usable or not depending on process importance (Based on JATCO Judgment)

**S.R. – 19: Run @ Rate**

5. Procedure of Run @ Rate

Note: The responsible supplier quality assurance department of JATCO may participate to Run @ Rate, if necessity.

Other department (Development, Purchasing, Production control etc.) of

JATCO also participate.

**S.R. - 20: Guide for Establishment of Parts Cleanness Standard**

1. Evaluation Characteristics and Criteria for Contamination

2) Criteria for Contamination

　 （1）Contamination Size

~~General: There shall be no contamination that the projection area over 0.4 mm2.~~ 【Deleted】

・General: There shall be less than 0.4 mm2 of the projection area

・Parts in oil circuit: There shall be less than 0.16 mm2 of the projection area

（Details shall prevaile to the drawing standard）

＊Projection area shall be set to the maximum value

(2) Contamination Weight

　Standard value shall be less than the weight (W) calculated by the following formula.

a) Iron parts 　　　 W =0.07√A : formula 1

b) Aluminium parts　 W =0.03√A : formula 2

c) Non-metallic parts W=0.01√A : formula 3

W: Standard for contamination weight (mg)

A: Surface area of the part (cm2)

\*In regard to the component parts made by 2 or more materials, it shall be calculated by multiplying the above material, a), b) and c) respectively by ratio of areas of each part and summed them up.

d) Weight Measurement

・To measure the weight of the nylon filter or other specified by JATCO, which has gathered the contamination in accordance with " ① Preparation of Filter ".

・The weight of the contamination to be the difference of the weights ( Weight d) - Weight a) )

・In case that the weight of the contamination is less than 1.0 mg due to smaller parts etc., a number of sample shall be increased to reach 1.0 mg.

e) Number of contaminations and Size Measurement

・A number of the contamination on the used filter or other specified JATCO which is 0.4 mm2 or over shall be counted and measure size by using microscope ( ×10 or ×20or×40 ).

Appendix 1: MEASUREMENT INSTRUMENTS

4. Nylon filter: 40 micron (μ) filter (Or other specified by JATCO)

**S.R.-21　Guide for Purchased Parts DR**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1．Purpose of Implementation** | | | | | | | | | | |  |  |  |
| The purpose of this activity is identify the novelty of parts in production efficiently and without any  Omissions, and achieve off-process lot level of quality after SOP and maintenance. | | | | | | | | | | | | | |
| **2．Applicable scope of Purchased Parts DR Activity** | | | | | | | | | | |  |  |  |
| The applicable scope shall include all parts to be new parts or specified by JATCO. | | | | | | | | | | | | |  |
| **3．What is a Purchased Parts DR Activity?** | | | | | | | | | | |  |  |  |
| This is an activity that Quality Assurance Department of JATCO to perform production preparation and  process design Review for Purchased parts.  This will be carried out for new parts and the parts with new process, and review the result of a series  of activity plans　from identifying any issues, making quality check plan and result of validation and  extended to process check. | | | | | | | | | | | | | |
|  | | | | | | | | |  |  |  |  |  |
| **4．Description of activity and necessary document of Purchased Parts DR** | | | | | | | | | | |  |  |  |
| Purchased Parts DR | Purpose | Timing of Implementation  Starting – Completion | Description of Review | Documents to be prepared | (〇:Responsible of preparation) | |
| Supplier | JATCO |
| ＃０ | The items to be continuously reviewed at Purchased parts DR shall be determined based　on change / changing point, criticality of failure mode, Presence / absence of special mode. | Within a month following finalizing of supplier  or  time specified by JATCO | ・Any changes/change points should be identified without omissions.  ・Novelty of change/change point should be appropriately assessed.  ・Failure mode should be appropriately assessed.  ・Presence/absence of special process should be appropriately judged. | Written materials clearly showing drawing and parts specification | 〇 | 〇 |
| Result of Risk Assessment, Briefing materials |  | 〇 |
| Parts Specification Comparison Table |  | 〇 |
| 4M List | 〇 |  |
| Process Flow Chart | 〇 |  |
| 4M Questioner | 〇 |  |
| ＃１ | Any technical issues shall be identified and make an assessment for expected level of difficulty to solve problems. | Following finalizing of suppliers  or  time specified by JATCO | ・Technical issues for change/change point, critical failure and special process should be identified.  ・There should be a correct system of incorporating ASSY drawing of parts that specify specifications into a single item drawing. | 4M List |  | 〇 |
| Concern List |  | 〇 |
| ＃２ | Solution/conformation method of technical issues and validation of the plan shall be evaluated. | Following finalizing of suppliers  or  time specified by JATCO | ・Solution to technical  issues should be validated.  ・The method to assess/check the output obtained from solution of the issues should be clarified.  ・Problem resolution plan should be carried out according to the project schedule.  ・There should be backup plan and the time of judgement must be clarified. | Problem resolution plan  /Backup　Plan | 〇 |  |
| Concern List |  | 〇 |
| ＃３ | Prospect of solution to the issues shall be confirmed. | Before Design Release  or  time specified by JATCO | ・Having clear prospect of solving technical issues.  ・There should be expectation of process capability and achievement forecast. | Concern List |  | 〇 |
| ＃４ | Presence /Absence of Novelty in change/changing point, criticality of failure mode and special process shall be reconfirmed with specification for Design release to determine for presence of any additional technical issues. | Design Release to VC Lot  or  time specified by JATCO | ・Any changes/changing points should be identified without omissions.  ・Novelty of change/change point should be appropriately assessed.  ・Failure mode should be appropriately assessed.  ・Presence/absence of special process should be appropriately judged  .・If there are any additional technical issues, additional Purchased parts DR schedule. | Production Drawing | 〇 |  |
| 4M List |  | 〇 |
| Concern List |  | 〇 |
| ＃５ | Make sure to confirm that any technical issues are solved at Off-process. | PT1 to SOP  or  time specified by JATCO | At OFF-process  　・Any technical issues should be closed.  　・There should be no problem as a result of the quality check.  　・Process capability should be attained the target value.  ・Control method at SOP should be clarified.  ・The items to be verified at Supplier process audit should be clarified. | Concern List |  |  |
| Inspection Standard | 〇 |  |
| Process FMEA | 〇 |  |
| Control Plan | 〇 |  |
| Standard Operation Manual | 〇 |  |
| Process Capability Study Report | 〇 |  |

**Additional, reviewing Forms**

１）Additional Forms

　　・Form 62(Referential form)　 “Hatsumono” Indication

　 ・Form 63(Designated form)　Changing　List

２）Reviewing Form （a partial review of descritption）

・Form 21　Design / Process change application

・Form 28　Application for concession（for Mass-production）

・Form 38 QA List

Revision No.　4-6

Established or Revised date　2018/8/21

Reason for Revision ・Key Description

　　　　 ・Request change　TS16949　to　IATF16949

　　　　 ・Additional description relevant to purchased parts DR

・Full review of details（including correction of literal errors and omitted letters）

　　　　 ・Additional documentations　and　elimination documentation

The in blue lettering area of the following descriptions were added, modified

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| Form-33B | Application for Special Activity during Launch Period | 4－6 | 1/8/2018 | V1 |

4.10 Inspection and Testing

7）Suppliers shall submit the following inspection results to Jatco if JATCO requested.

　　　　　　①Layout Inspection・・・Inspection interval is once a month as a rule.

　　　　　　　　　　　　　　　　　　 　Raw material parts are inspected as minimum every six months.

　　　　　　②Inspection of all Characteristics in the Drawing shall be perform once a year・・・

＊Durability Test can be excluded for Annual Confirmation with previous Approval from JATCO.

**S.R. - 4: Guide for Change Control**

3. Control of Process Changes

1. Process change for which application to JATCO is necessary
2. -Addition, Replacement and Modification of mould(remodel)
3. -Addition, Replacement and/or modification of Jig and Tool. (Exclude expendable/consumable items that are replaced on Daily Basis)
4. -Layout change in the production site
5. -Setting up, modification or relocation of mechanical devices
6. -Change of machining or assembly method
7. -Change of heat treatment or welding condition, surface treatment, press, clinching
8. -Change of material suppliers and maker, change of name of material.
9. - Addition, Replacement and modification exclusive inspection Items.

**S.R. - 7: Guide for Control of Priority Parts and QA table characteristics**

1. Selection of “Quality Design Sheet characteristics” and QA table characteristics

First,JATCO select important characteristics from the following point of view, and notify/

shares by “Quality Design Sheet” the purpose of the Design section to the Supplier’s Quality

Assurance person in charge.

Please share these characteristics with the production plant,and respond the result.

Next, the JATCO design department selects highly sensitive characteristics from the "Quality Design Sheet" and supplier shows from the JATCO supplier quality assurance department

in the QA list.

4. Indication of the QA Characteristics in a documented standard.

Indication shall be added to standards and documents such as (FMEA,Control plan, Inspection Standard, Operation manual, Check sheet, etc.) for used document at production preparation stage and volume production. Controls added into standards for those characteristics shall be identified as “QA”.

5. Control of “Quality Design Sheet”,“Important characteristics” and “Characteristics in QA List”

1) Clarification of Process Control Points

In order to ensure assurance of “Critical Safety Parts Characteristics" and “QA table Characteristics”, check the conformity with the process control characteristic value

and clarify the point of process control(measurement point, its methods and frequency etc.) in the control process chart.

Inspection frequency established for those characteristics need to cover all process variables (shift change, tool change, start up, etc.).

1. Description and Indication to documented standards

Please include the documents used in actual work(FMEA,inspection standard, control plan, process instruction, check sheets, etc.) Indicate “Critical safety parts”and QA table characteristics, enhance the awareness of the worker.

1. “Quality Design Sheet”and “QA list characteristics” for Workers’ Education and Evaluation of Understanding level.

**S.R. - 9: Guide for Special Processes, Process Control**

２.　　　Definition of Special process, process control

|  |  |  |
| --- | --- | --- |
| Casting | Dissolve the metal and cool it after injection into the mold. | Metal mold Casting、Sand mold Casting. |

**S.R. - 14: Guide for Special Activity during Launch Period**

3. Preparation and implementation of the “Plan for Special Activity during Launch Period”

A “Plan for Special Activity during Launch Period” shall be prepared and implemented keeping the following points in mind. (Each production line include Tier N suppliers) The responsible person shall control and follow the plan.

**S.R.-21　Guide for Purchased Parts DR**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **4．Description of activity and necessary document of Purchased Parts DR** | | | | | | | | |
| Purchased Parts DR | Purpose | Timing of Implementation  Starting – Completion | Description of Review | Documents to be prepared | (〇:Responsible of preparation) | |
| Supplier | JATCO |
| ＃０ | The items to be continuously reviewed at Purchased parts DR shall be determined based　on change / changing point, criticality of failure mode, Presence / absence of special mode. | Within a month following finalizing of supplier  or  time specified by JATCO | ・Any changes/change points should be identified without omissions.  ・Novelty of change/change point should be appropriately assessed.  ・Failure mode should be appropriately assessed.  ・Presence/absence of special process should be appropriately judged. | Written materials clearly showing drawing and parts specification | 〇 | 〇 |
| Result of Risk Assessment, Briefing materials |  | 〇 |
| Parts Specification Comparison Table |  | 〇 |
| 4M List | 〇 |  |
| Process Flow Chart | 〇 |  |
| 4M Questioner | 〇 |  |
| ＃１ | Any technical issues shall be identified and make an assessment for expected level of difficulty to solve problems. | Following finalizing of suppliers  or  time specified by JATCO | ・Technical issues for change/change point, critical failure and special process should be identified.  ・There should be a correct system of incorporating ASSY drawing of parts that specify specifications into a single item drawing. | 4M List |  | 〇 |
| Concern List | 〇 | 〇 |
| ＃２ | Solution/conformation method of technical issues and validation of the plan shall be evaluated. | Following finalizing of suppliers  or  time specified by JATCO | ・Solution to technical  issues should be validated.  ・The method to assess/check the output obtained from solution of the issues should be clarified.  ・Problem resolution plan should be carried out according to the project schedule.  ・There should be backup plan and the time of judgement must be clarified. | Problem resolution plan  /Backup　Plan | 〇 |  |
| Concern List | 〇 | 〇 |
| ＃３ | Prospect of solution to the issues shall be confirmed. | Before Design Release  or  time specified by JATCO | ・Having clear prospect of solving technical issues.  ・There should be expectation of process capability and achievement forecast. | Concern List | 〇 | 〇 |
| ＃４ | Presence /Absence of Novelty in change/changing point, criticality of failure mode and special process shall be reconfirmed with specification for Design release to determine for presence of any additional technical issues. | Design Release to VC Lot  or  time specified by JATCO | ・Any changes/changing points should be identified without omissions.  ・Novelty of change/change point should be appropriately assessed.  ・Failure mode should be appropriately assessed.  ・Presence/absence of special process should be appropriately judged  .・If there are any additional technical issues, additional Purchased parts DR schedule. | Production Drawing | 〇 |  |
| 4M List |  | 〇 |
| Concern List | 〇 | 〇 |
| ＃５ | Make sure to confirm that any technical issues are solved at Off-process. | PT1 to SOP  or  time specified by JATCO | At OFF-process  　・Any technical issues should be closed.  　・There should be no problem as a result of the quality check.  　・Process capability should be attained the target value.  ・Control method at SOP should be clarified.  ・The items to be verified at Supplier process audit should be clarified. | Concern List | ○ | ○ |
| Inspection Standard | 〇 |  |
| Process FMEA | 〇 |  |
| Control Plan | 〇 |  |
| Standard Operation Manual | 〇 |  |
| Process Capability Study Report | 〇 |  |

Revision No.　4-7

Established or Revised date　2019/5/10

Reason for Revision and Key Description

　　　　 ・Title and Contents of S.R.-7 has been changed with addition of “Quality Design Sheet”.

The related forms are revised.

　　　　 ・On Safe Launch Period activities, the related forms simplified and integrated.

In addition, the entry examples in the form were deleted and only the form was made.

・Clarification of characteristics that do not require　SPC(Statistical process control)

　　　　 ・Revised the contents of S.R.-6 to meet current JATCO requirements.

・Description of design change / process change prohibition period (clarification of existing rules).

　　　　 ・Revision of　Forms; Please refer to the following "form" for the target form.

The red letters of the following descriptions were added or modified.

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| Form-24 | Inspection Standard (Individual - 1) | 4－7 | 2019/5/10 | V5 |
| Form-25 | Inspection Standard (Individual - 2) | 4－7 | 2019/5/10 | V5 |
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| Form-27 | QA table(Quality design sheet) characteristics Understanding Check sheet | 4－7 | 2019/5/10 | V3 |
| Form-33~~A~~ | Plan for Special Activity during Launch Period | 4－7 | 2019/5/10 | V6 |
| ~~Form-33B~~ | ~~Application for Special Activity during Launch Period~~ | ~~4－6~~ | ~~21/8/2018~~ | ~~V1~~ |
| Form-38 | QA Table(Quality design sheet) | 4－7 | 2019/5/10 | V4 |
| Form-41 | QA Table(Quality design sheet) (B) | 4－7 | 2019/5/10 | V3 |
| Form-44 | Proposed Use for Concession (Supplier’s Development Prototype) | 4－7 | 2019/5/10 | V4 |

1. General Rules

1.2 Quality Assurance of Products Purchased by JATCO (\*1)

\*1: ‘JATCO’ includes JMEX/JGZ/JTL/JSZ

Parts Purchase Agreement

Supplier Quality Assurance Manual

Requirements regarding quality assurance activities

Inspections and audits by JATCO

Claim Compensation Agreement/Procedure

1. JATCO’s requirements for quality assurance is specified in the Supplier Quality Assurance Manual explains.

3. Definition of Terminology

|  |  |
| --- | --- |
| JATCO’s Required Specifications | 1. Drawings, specifications, QA Table(Quality design sheet), inspection standards, various standards, and other similar documentation provided by JATCO and submit to the supplier. 2. Drawings prepared by the supplier and accepted by JATCO. 3. Other items, discussed and agreed-upon by both parties. |
| ・・ | ・・ |
| QA table(Quality design sheet) characteristics | Quality characteristics listed on the QA Table(Quality design sheet) issued by JATCO.  QA　Table(Quality　design　sheet)　include　QA　Characteristic　and  Semi-QA　characteristic. |

1. Basic Requirements Related to Quality Assurance

4.2 Quality System

1. The supplier shall obtain certification of ISO9001: 2015 or latest version or IATF 16949;

2016　or　latest　version, to assure conformity for products requirement.

* 1. Process Control

3) For Priority Parts and QA characteristics,　and　Semi-QA　characteristics control shall be

done based in following the “Guide for Control of Priority Parts and QA table(Quality

design sheet) characteristics”.

5) In order to permanently maintain stable product quality, process control shall be done following the “Supplier Quality Assurance Manual”

7) Processes shall be controlled and managed according to control plan, standard operation manual, inspection standards, equipment-maintenance standards, etc. Processes shall be well observed and the result shall be recorded to ensure stable production quality. Especially for processes that interfere with QA table (Quality design sheet) characteristics control shall be using control charts etc..

*Related Guide/Form*

・Guide for Control of Priority Parts and Characteristics in QA table(Quality design sheet) （S.R-7）

4.13 Control of Nonconforming Part

4) If the Rework of Non-conforming material is inevitable, rework instruction document should be prepared and rework activity must be generated until the reception of the Approval of Supplier's quality assurance manager and JATCO Supplier Quality Assurance department. Rework instruction shall be made available for viewing to the responsible personnel. For those parts that with QA table (Quality design sheet) characteristics, 100% inspection shall be performed and retain the records for 10 years. Important security part process are prohibited to be reworked.

5) Proposed use or rework of parts which do not conform to specified requirements shall be reported to the responsible purchasing department of JATCO and approved by the form “Proposed Use for Concession” before delivery.

4.14 Corrective and Preventive Action

6) Regarding the case of the Report on Defect Recurrence Prevention

(8D-report),Two months and three months later, Please confirm that

the measures are maintained at your site.

Then fill in the results in the 8D-report and submit.

4.18 Training

3) Keep records of training.

4) Effects of training shall be evaluated regularly.

Following the “Guide for Control of Characteristics in QA Table (Quality design sheet)” for the important characteristics and the characteristics in QA Table (Quality design sheet) shall be evaluated.

<Related Guide/Form>

Guide for Control of Characteristics in QA Table (Quality design sheet) (Supplementary Rule-7)

Characteristics in QA Table (Quality design sheet) Understanding Check Sheet (Form 27)

**S.R. - 2: Guide for Control of Documents, Data, and Quality Records**

5. Submission of Documents, Data, and Quality Records

Submit documents, data, and quality records, measured products when requested by JATCO.

**S.R. - 4: Guide for Change Control**

3. Control of Process Changes

For the Process Changes, JATCO will control and give a Part Submission Warrant (PSW), please confirm detail on the below points.

(This applies to all production process including sub tier suppliers)

Note;

As a general rule, PT1 ~ SOP ~ SLP

Prohibit design / process change.

If you need to these change,

Please consult with JATCO supplier quality assurance department.

1. Scope

Process Change Management applies to all production process including sub tier suppliers.

|  |  |
| --- | --- |
| Item | Description |
| ・・・ | ・・・ |
| (2) Change of manufacturing method/characteristics | -Change of methods/conditions for any production/working process.  -Change on equipment conditions for any process.  -Change of test/inspection method  -Addition of any rework by non-regular process. |

3)Process change for which application to JATCO is necessary

(1)Process change for which application to JATCO is necessary is as follows. When there is hesitation about deciding whether or not application is required, ensure to contact and confirm with JATCO without making your own judgement.

(This applies to all production process including sub tier suppliers)

|  |
| --- |
| -Relocation of facility  -Rework by non-regular process.  -Addition, Replacement and Modification of mould(remodel) |

**S.R. - 6: Guide for Lot Control**

3. Types and application of Lot Control

|  |  |  |
| --- | --- | --- |
| Individual control | Method of control by assigning a unique number to each individual part. | “Priority Parts”  Parts instructed by JATCO |
| Group control | Method of control by assigning a number to each manufactured group (lot). | Other than above |

4. Lot Configuration

1. For “Individual control Parts”, material charge, processing lots, heat treatment lots and shipping lots shall be related to each other.
2. Except “Individual control Parts”, lots shall be organized based on certain batches of (1) same part number, (2) same specifications, (3) same material, (4) same machine/equipment used for production, (5) production/machining shift or date, etc.

6. Identification of Lot Numbers

|  |  |  |
| --- | --- | --- |
| Item | Individual Control Parts | Group Control Parts |
| Scope | Priority parts, Parts instructed by JATCO | All parts except those specified at left. |

7. Records of Lot Control

Lot control records shall be retained so that the supplier can quickly trace/search the product history when necessary.

|  |  |
| --- | --- |
| Record | The lot number, die number, the dates of manufacturing, inspecting, delivery, and the product amount shall be recorded in the record sheet for each product. |
| Search | It shall be possible to complete searches of Individual Control parts within two hours from the time of request. |

9. Establishing Lot Numbers; detail

1. Individual Control Parts
   1. The number of digits shall be 10 digits or less and shall be composed of numerals and alphabet letters.
2. Group Control part
   1. The number of digits shall be 10 digits or less , and composed of numerals and alphabet letters.

**S.R. - 7: Guide for Control of Priority Parts and QA table(Quality design sheet) characteristics**

1. Outline

This guide prescribes the procedures for Priority Parts and QA table(Quality design sheet) characteristics.

In order to ensure the quality of Priority Parts and QA table(Quality design sheet) characteristics, the following control shall be done.

1. Definition of Priority Parts and QA table(Quality design sheet)※ characteristics.

※The QA table(Quality design sheet) The QA table (Quality Design Document) is the addition of the following to the conventional QA table.

　　　　　　　　　・Agreement on the Importance of Characteristics; Jatco Development and Supplier

　　　　　　　　　・Confirmation and agreement of consistency with standards and forms;

Supplier in-house(Production technology with Manufacturing)

1) Priority Parts have important characteristics related to safety of vehicle and law. Special control shall be executed for quality control and production control of Priority Parts.

2) Parts with QA table(Quality design sheet) characteristics have Critical safety characteristics related to important fit of function of the unit or requirement from customer. Special control shall be executed for quality control and production control of parts with QA table(Quality design sheet)characteristics.

QA table(Quality design sheet)characteristics include QA-Characteristics and Semi-QA

Characteristics.

(importance ; QA-Characteristics > Semi-QA Characteristics > General characteristics)

1. Selection of “Quality Design Sheet characteristics” and QA table(Quality design sheet) characteristics

First, JATCO select important characteristics from the following point of view, and notify/

shares by “Quality Design Sheet” the purpose of the Design section to the Supplier’s Quality

Assurance person in charge.

Please share these characteristics with the production plant, and indicate the result in the QA table (Quality Design Sheet) and submit it at the time of submission of S.R.-13.

Next, the JATCO design department selects highly sensitive characteristics from the "Quality Design Sheet" and supplier shows from the JATCO supplier quality assurance department

in the QA Table(Quality design sheet).

1. Characteristics related to judge to “Q” in the design FMEA

The QA Table(Quality design sheet) is used as a tool to transfer the design intent to the production engineering and production departments, and suppliers shall establish controls for those characteristics with a reliable process quality assurance.

If there is anything unclear about the contents of the QA Table(Quality design sheet),

*<Related Guide/Form>*

[*QA Table(Quality design sheet) (Form-38)*](file:///C:\md0\gen\SHOP\Quality\qd0\gen\★00.%20各自専用\関根\QD0\Local%20Settings\Temporary%20Internet%20Files\OLKD\Forms\Form38.xls)

1. Agreement on the items described in the QA table (Quality design sheet)

In regards to Quality Design Sheet items, agreement between supplier and Jatco

(R&D and QA Dept.) is made prior Design Notice Release.

1) Important Characteristics

Agreement on the severity of characteristics and failure modes related to defined characteristics between JATCO R&D and suppliers.

2) Control of defined Characteristics

Supplier should consider appropriate control method based on the severity of defects, occurrence frequency and degree of detection according to the concept of process FMEA.

Jatco (QA Dept. & R&D) and supplier shall agree on control method based on it’s the result. (Alternative characteristics, measurement method etc.)

3) Characteristics/characteristics Value

Drawing and QA table (Quality design sheet)

Supplier agree the possibility to produce on the quality control　method of listed characteristics.

Agreement on the characteristics/characteristics value that supplier can produce and ensure the quality including the characteristics defined in the drawing and QA table (Quality design sheet).

Note

For the area where the items are changed due to design modification, it should be re-approve prior issuance to QA table(Quality design sheet). Proposal for control method shall be prepared in advance.

5. Indication of the QA Characteristics in a documented standard.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Important characteristics | QA Table(Quality design sheet)characteristics  See “QA Table(Quality design sheet):Form38”from JATCO | | | Semi-QA characteristics/  General Characteristics |
| Critical safety characteristics | Requirement characteristics from customer  (S-Characteristic) | Other than Critical safety characteristics and Special Characteristics |
| Marking for Drawing | Environed by “□” | Environed by “Wave line” | - | - | - |

1. Control of “Quality Design Sheet”, “Important characteristics” and “QA　Characteristics　and　Semi-QA　Characteristics in QA Table (Quality design sheet)”.

The supplier shall conduct the following activity in order to assure compliance of required “Important characteristics” and “Characteristics in QA Table(Quality design sheet)” by the responsible supplier quality assurance department of JATCO. Confirmation result of “Characteristics in QA Table(Quality design sheet)” shall be submitted in accordance with instructions from JATCO.

1) Clarification of Process Control Points

In order to ensure assurance of “Critical Safety Parts Characteristics" and “QA table (Quality design sheet) Characteristics”, check the conformity with the process control characteristic value

1. Description and Indication to documented standards

Please include the documents used in actual work (FMEA, inspection standard, control plan, process instruction, check sheets, etc.) Indicate “Critical safety parts” and QA table (Quality design sheet) characteristics, enhance the awareness of the worker.

1. “Quality Design Sheet” and “QA Table(Quality design sheet) characteristics” for Workers’ Education and Evaluation of Understanding level.

There are “reasons for the importance of characteristics” and the “problems that may occur as a result of not compliance with the specifications (What can go wrong with vehicle and trouble caused for the customer) listed on the QA Table(Quality design sheet). Based on these explanations, education shall be conducted regarding to function/importance of characteristics and process control points (measurement points and methods, etc.). Through this education, the workers’ awareness of rule-observance and sensitivity to abnormalities shall be increased. The results shall be recorded.

4) Please evaluate the process capacity during the safe launch period.

*<Related Guide/Form>*

[*Characteristics in QA Table(Quality design sheet) Understanding Check Sheet (Form-27)*](file:///C:\md0\gen\SHOP\Quality\Quality%20technology\07)Standardization\001.%20新)継続(永久版)\01-2.%20取引先のための品質管理基準書(英語版)@JC\4-2版(2012年3月1日発行\Forms\Form27.xls)

7. Ensuring and Maintaining Process Capability

* 1. Process-capability control for “Important characteristics” and “Characteristics in QA Table(Quality design sheet)” shall be kept based on “Guide for New Product Quality Procedure for Production Preparation Stage”. Process capability shall be confirmed every 3 month as a rule. When JATCO requests, process capability shall be informed to JATCO. JATCO directs a target part.
  2. SPC (Statistical process control) should be used for daily control of “Important characteristics” and “Characteristics in QA Table(Quality design sheet)”. For further confirmation

　If you do not need to manage with SPC, it is as follows.

-Capability Analysis above of 2 (Cpk and Ppk) (Capability Analysis needs to be

performed according to 4.10. 7)　 ④)

-Content Value. (E.g. Number of turns, number of contaminant count etc.)

-100% Inspection Processes.

- Characteristics that could be agreed with JATCO.

In above case please describe in the remarks column of “Inspection Standard” that

SPC is unnecessary.

If Cpk becomes 2 or less in the process capacity evaluation every 3 months,

please resume SPC.

*<Related Guide/Form>*

[*“Guide for New Product Quality Procedure for Production Preparation Stage” (S.R.-13)*](file:///C:\md0\gen\SHOP\Quality\Quality%20technology\07)Standardization\001.%20新)継続(永久版)\01-2.%20取引先のための品質管理基準書(英語版)@JC\4-2版(2012年3月1日発行\Forms\Form15.xls)

9. Record Retention

Lot control records, inspection and test result reports, concern history records, etc. for “Characteristics in QA Table (Quality design sheet)” shall be kept for 10 years.

10. Self-Audits

As a rule, audits for Priority Parts and parts with “Characteristics in QA Table (Quality design sheet)” shall be conducted at least once every 6 months and audit records shall be kept. Audit result shall be submitted to JATCO, when JATCO requested.

**S.R. - 8: Guide for Initial Product Control**

2. Scope

5)Other parts specified by JATCO (reworked parts, countermeasure parts, the proposed use for concession, others)

4. Production Trials （VC lot, PT 1, PT 2 )

3)Preparation and Submission of Inspection Report

Inspection reports shall be prepared using the “Initial Product Delivery Notice” the “Initial Product Quality Confirmation Report”, “All characteristic on drawing report” shall be attached at the time of delivery. Products identification shall be provided so that correspondence with the results of inspection and measurement correlation is possible.

If you receive instructions from JATCO, you can also send by electronic document file.

5. Initial Sample

3)Preparation of Inspection Report

Inspection reports shall be prepared using the “Initial Product Delivery Notice”, the “Initial Product Quality Confirmation Report”, and the “Process Capability Study Report” and “All characteristic on drawing report” shall be attached at the time of delivery.

If you receive instructions from JATCO, you can also send by electronic document file.

6. Initial Product of Volume-Production

1. Preparation and Submission of Inspection Report

The inspection report shall be prepared using the “Initial Product Delivery Notice” and the “Initial Product Quality Confirmation Report (n=5)” and “Process Capability Study Report” shall be attached at the time of delivery.

And submit process capability data

If you receive instructions from JATCO, you can also send by electronic document file.

**S.R. - 10: Guide for Handling of Nonconforming Part**

4. Procedure for JATCO

3)Reporting Recurrence-Prevention Countermeasures

Regarding the case of the Report on Defect Recurrence Prevention

(8D-report),Two months and three months later, Please confirm that

the measures are maintained at your site.

Then fill in the results in the 8D-report and submit.

**S.R. – 12: Guide for New Product Quality Procedure for Development Stage**

2. Quality Assurance Activities for the Development Stage

|  |  |  |
| --- | --- | --- |
| Item | Contents | Concrete Examples |
| Verification of Quality Assurance Methods | -Study how, and at what process, all specifications and production quality objectives will be assured.  -Compare specifications, etc. with current products and similar products and make clear how to assure the difference. | -Quality matrix  -Manufacturing Method Matrix of part by part  -QA Table(Quality design sheet), QA Table(Quality design sheet) (B)  -Quality List 3  -Control plan  -4M list |

3. Documents to be submitted to JATCO

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No | Documents to be submitted | Category of Subject Parts and Submission | | Time of Submission | | | Submit to | Document Format |
| Parts Level | Submission Level | Before DR UD Lot | Before DR UC Lot | Before Production DR |
| 8 | QA Table(Quality design sheet) | Group 1 | S\* | - | Yes | Yes | 3 | 38 (Specified Format) |
| Group 2 |
| Group 3 |
| 17 | QA Table(Quality design sheet) B | Group 1 | S\* | - | Yes | Yes | 2 | 41(Specified Format) |
| Group 2 |  |
| Group 3 |

**S.R. – 13: Guide for Production Preparation Stage**

2. Activities for Production Preparation

|  |  |  |  |
| --- | --- | --- | --- |
| Item | | Contents | Example |
| ・・・ | | ・・・ | ・・・ |
| Study of Quality Assurance Methods | | -Study how, and at what stage, all requirements and production quality objectives will be ensured.  -Compare manufacturing methods, etc., between current parts and similar parts. Make clear the methods to ensure the quality assurance at the different points. | -Quality List 3  -QA Table(Quality design sheet) B  -Manufacturing Method Matrix  -Quality Matrix  -Control Plan  -4M List |
| ・・・ | | ・・・ | ・・・ |
| Evaluation of Prototype | Dimension and Characteristics | -Verify that the dimensions and initial characteristics indicated on the drawing and control plan all meet the specifications. | -Initial Product Quality Confirmation Report |
| Study of Process Capability | -Study the process capability and confirm that the characteristics meet objectives.  -Study shall be done using the parts with final specifications, and the parts produced by the volume production process. | -Process Capability Study Report  -Parts Karte  -QA Table(Quality design sheet) |

3. Ensuring Process Capability

1. The process capability shall be achieved the targets on the chart below:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Category of control | | Achievement target | | Control Method |
| PpK | Cpk |
| Characteristics of Important characteristics | | 1.67or higher | 1.67 or higher | Control Chart, etc. |
| Characteristics in QA Table(Quality design sheet)  \*4 | Critical safety characteristics , Requirement characteristics from customer  (S-Characteristics) | 1.67 or higher | 1.67 or higher | Control Chart, etc. |
| Other than above items (\*) | 1.33 or higher | 1.33 or higher | Control Chart, etc. |
| Semi-QA　Characteristics/  General Characteristics | | 1.33 or higher | 1.33 or higher | Check sheet, etc. |

The target of process capability index may be changed to “1.67 or higher” about \* item about JATCO request items.

\*4　　　See “QA table(Quality design sheet):Form38”from JATCO. There is QA table Characteristics and Semi-QA Characteristics.

If you have no “QA table　(Quality design sheet)”, please confirm it’s presence by asking JATCO Supplier quality assurance department.

1. Milestone of production preparation stage

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Milestone | Definition | Process condition | Production parts by sub tier supplier | | |
| Mould and Die | Equipment | Process (Operator, etc.) |
| VC-Lot | Production trial 100% Off-Tool for dies | Off-Tool for dies ※ | 100% Off-Tool | - | - |
| ・・ | ・・ | ・・ | ・・ | ・・ | ・・ |
| Volume Production  (SOP) | Start of production | PSW approval has been done. | PSW approval has been done with sub tier supplier. | ← | ← |

　Off-Tool for dies ※　：Some projects may require off tools

Off tool : Trial using same mass production equipment, die, Jig

Off Process: Trial using not only same mass production equipment, die, Jig, but also layout operator cyclic times etc. are

Same condition with Mass production.

Note;

As a general rule, PT1 ~ SOP ~ SLP  
Prohibit design / process change.  
If you need to these change,  
Please consult with JATCO supplier quality assurance department.

5．Documents Submission to JATCO

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Documents to be submitted | Submission Category | | Submission Timing | | | | | | | Submit  to: | Document  Format |
| Parts Level | Submi-ssion  Level | UC　Lot | Design Release | Before  VC Lot | Before PT1 | Before  PT2 | PSW | Before  SOP |
| 1 | Quality Assurance Plan for New Product | Group 1 | S | - | Yes | Yes | Yes | Yes | Yes | Yes | 2 | 3  (Reference  format) |
| Group 2 |
| Group 3 |
| 2 | Reliability Test Plan and Report | Group 1 | S | - | Yes | Yes | Yes | Yes | Yes | - | 2 | 5  (Prescribed  format) |
| Group 2 |
| Group 3 | R |
| 3 | Control Plan | Group 1 | S | - | - | Yes | Yes | Yes | Yes | - | 2 | 6, 7  (Reference  format) |
| Group 2 |
| Group 3 |
| 4 | Process FMEA | Group 1 | S | - | Yes | Yes | At Time of Change | | | | 2 | 8  (Reference  format) |
| Group 2 | S | - |
| Group 3 |
| 5 | Quality Control Indices for Production Preparation | Group 1 | R | - | - | Yes | Yes | Yes | Yes | - | 2 | 9, 10  (Reference  format) |
| Group 2 |
| Group 3 |
| 6 | Parts chart  Parts development history | Group 1 | S | - | - | Yes | Yes | Yes | Yes | - | 2 | 11, 12  (Reference  format) |
| Group 2 |
| Group 3 |
| 7 | Initial Product Delivery Notice | Group 1 | S | - | - | Yes | Yes | Yes | Yes | Yes | 1  (Note1) | 13  (Prescribed  format) |
| Group 2 |
| Group 3 |
| 8 | Initial Product Quality Confirmation Report | Group 1 | S | - | - | Yes | Yes | Yes | Yes | Yes | 1  (Note1) | 14  (Reference  format) |
| Group 2 |
| Group 3 |
| 9 | Process-Capability Report | Group 1 | S | - | - | Yes | Yes | Yes | Yes | - | 2 | 15  (Reference  format) |
| Group 2 |
| Group 3 |
| 10 | Inspection of All Characteristics in the Drawing | Group 1 | S | - | - | Yes | Yes | Yes | Yes | Yes | 1  (Note1) | Supplier’s  format) |
| Group 2 |
| Group 3 |
| 11 | Approval Report for Limit Sample | Group 1 | S | - |  |  | Yes |  |  |  |  | 17  (Reference  format) |
| Group 2 |
| Group 3 |
| 12 | Plan of Special Activity During Launch period | Group 1 | S | - | - | - | - | - | Yes | - | 2 | 33  (Reference  format) |
| Group 2 | R |
| Group 3 |
| 13 | Notification and Description of Design/Process Change | Group 1 | S\* | - | - | - | - | - |  | Yes  (At Time of Occurrence) | 2 | 21, 22  (Prescribed  format) |
| Group 2 |
| Group 3 |
| 14 | Notification of Delivery-Parts Lot Control | Group 1 | S\* | - | - | - | Yes | - | - | - | 2 | 23  (Reference  format) |
| Group 2 |
| Group 3 |
| 15 | Inspection Standard | Group 1 | S | - | - | - | Yes | At Time of Change | | | 2 | 24 - 26  (Reference  format) |
| Group 2 |
| Group 3 |
| 16 | Evaluation Sheet for Understanding Characteristics in QA Table(Quality design sheet) | Group 1 | S\* | - | - | - | - | - | Yes | - | 2 | 27  (Prescribed  format) |
| Group 2 |
| Group 3 |
| 17 | Initial Sample | Group 1 | S | - | - | - | - | - | Yes | - | 1  (Note1) | - |
| Group 2 |
| Group 3 |
| 18 | Process Preparation Plan and Report | Group 1 | S | - | - | Yes | Yes | Yes | Yes | - | 2 | 31  (Reference  format) |
| Group 2 |
| Group 3 |
| 19 | Contamination Task Sheet（Map） | Group 1 | S\* | - | Yes | Yes | Yes | Yes | Yes | Yes | 2 | 32  (Prescribed  format) |
| Group 2 |
| Group 3 |
| 20 | Report on Defect Prevention | Group 1 | S\* | - | - | Yes (At Time of Occurrence) | | | | | 2 | 30  (Prescribed  format) |
| Group 2 |
| Group 3 |
| 21 | Manufacturing Method Matrix | Group 1 | R\* | - | Yes | Yes | At Time of Change | | | | 2 | 37  (Prescribed  format) |
| Group 2 |  |
| Group 3 |
| 22 | QA Table(Quality design sheet) | Group 1 | S\* | - | Yes | Yes | Yes | Yes | Yes | Yes | 2 | 38  (Prescribed  format) |
| Group 2 |
| Group 3 |
| 23 | Quality Matrix | Group 1 | R\* | - | Yes | Yes | At Time of Change | | | | 2 | 36  (Prescribed  format) |
| Group 2 |  |
| Group 3 |
| 24 | Quality List 3 | Group 1 | R\* | - | Yes | Yes | Yes | At Time of Change | | | 2 | 40  (Prescribed  format) |
| Group 2 |  |
| Group 3 |
| 25 | QA Table(Quality design sheet) B | Group 1 | R\* | - | Yes | Yes | Yes | At Time of Change | | | 2 | 41  (Prescribed  format) |
| Group 2 |  |
| Group 3 |
| 26 | Design Review Record | Group 1 | R | - | Yes | Yes | Yes | - | - | - | 2 | Supplier’s Document |
| Group 2 |
| Group 3 |
| 27 | Standard Operation Manual | Group 1 | R | - | - | - | Yes | - | - | Yes | 2 | 45  (Reference  format) |
| Group 2 |
| Group 3 |
| 28 | Report of production preparation condition | Group 1 | R | - | - | - | Yes | Yes | - | - | 2 | Supplier’s Document |
| Group 2 |
| Group 3 |
| 29 | Minutes of Review Meeting by Senior Managements | Group 1 | R | - | Yes | Yes | Yes | Yes | - | - | 2 | Supplier’s Document |
| Group 2 |
| Group 3 |
| 30 | Supply Chain Registration Control Sheet | Group 1 | S | - |  | Yes | Yes | At time of Change | | | 2 | 47  (Prescribed  format) |
| Group 2 |
| Group 3 |
| 31 | Supplier/CUS | Group 1 | S\* | Used at when making a sudden request for a design change subsequent to ordinary orders, etc. | | | | | | | 4 | 48  (Prescribed  format) |
| Group 2 |
| Group 3 |
| 32 | Nonconformity and Pending Item List | Group 1 | S\* | - | Yes | Yes | Yes | Yes | - | - | 4 | 39  (Prescribed  format) |
| Group 2 |
| Group 3 |
| 33 | Process Audit Improvement Plan and Report | Group 1 | S\* | - | - | Yes | Yes | Yes | Yes | Yes | 2 | 46  (Prescribed  format) |
| Group 2 |
| Group 3 |
| 34 | Gage R&R Report | Group 1 | R\* | - |  |  | Yes | Yes | Yes | Yes | 2 | 18,19  (Reference  format) |
| Group 2 |
| Group 3 |
| 35 | PSW/PPAP | Group 1 | S | - | - | - | Yes | Yes | Yes | - | 2 | 2  (Prescribed  format) |
| Group 2 |
| Group 3 |
| 36 | Criteria & Process Risk Evaluation Sheet | Group 1 | R\* | -  - | Yes | Yes | Yes | Yes | Yes | Yes | 2 | 56  (Prescribed  format) |
| Group 2 |  |
| Group 3 |
| 37 | Production Method Parameter QFD List | Group 1 | R\* | - | Yes | Yes | Yes | Yes | Yes | Yes | 2 | 57  (Prescribed format) |
| Group 2 |  |
| Group 3 |
| 38 | Production Know-how Matrix | Group 1 | R\* | - | Yes | Yes | Yes | Yes | Yes |  |  | 58  (Prescribed format) |
| Group 2 |  |
| Group 3 |
| 39 | New Engineering ＆New Manufacturing Method List | Group 1 | S\* | Yes | Yes | Yes | Yes | Yes | Yes | Yes | 2 | 59  (Prescribed  format) |
| Group 2 |
| Group 3 |
| 40 | Run@Rate | Group 1 | S | - |  |  |  |  | Yes |  | 2 | 50  (Prescribed  format) |
| Group 2 |
| Group 3 | S\* |
| 41 | Status received MDSs (IMDS) | Group 1 | S | - |  |  |  |  | Yes |  | 2 | It is based on an IMDS input guide. (Prescribed  format) |
| Group 2 |
| Group3 |
| 42 | Copy of IATF certifications | Group 1 | S | - |  |  |  |  | Yes |  |  |  |
| Group 2 |
| Group3 |
| 43 | 4M List | Group 1 | S | Yes | Yes | Yes | Yes | Any time when changing | | | 2 | 61  （Specified Format） |
| Group 2 |
| Group 3 |

Parts Level

Group 1: Priority Parts, Critical safety parts, special parts (regulation parts, OBD characteristic parts, \*specified parts)

Group 2: General parts

Group 3: Standard parts (bolt, nut, etc.), raw materials (forged parts, cast parts, etc.)

\* specified parts: Parts using new mechanisms, new manufacturing methods, or new materials, or parts specified by JATCO.

**S.R. - 14: Guide for Special Activity during Launch Period**

3. Preparation and implementation of the “Plan for Special Activity during Launch Period”

Note;

As a general rule, PT1 ~ SOP ~ SLP  
Prohibit design / process change.  
If you need to these change,  
Please consult with JATCO supplier quality assurance department.

*<Related Guide/Form>*

[*Plan for Special Activity during Launch Period (Form-33)*](file:///C:\md0\gen\SHOP\Quality\Quality%20technology\07)Standardization\001.%20新)継続(永久版)\01-2.%20取引先のための品質管理基準書(英語版)@JC\4-2版(2012年3月1日発行\Forms\Form33.xls)

*~~Application for Special Activity during Launch Period（Form-33B）~~*

4. Implementation procedure of the Special Activity during Launch Period

3)Preparation procedure of Plan for Special Activity during Launch Period

* 1. The supplier shall implement 100% or more frequent inspection and more frequent process-capability study in order to evaluate quality system .(ex: Evaluation of cutter life cycle, die/gauge/jig life cycle clean cycle of welding torch, etc.)

(5)To clarify problem by upgrade of following activities and prevent the outflow

of failures.

* + Implementation of 100% or more frequent inspection and more frequent process-capability study for QA Table(Quality design sheet) characteristics; QA characteristics, Semi QA Characteristics and characteristics for customer assemble, monitor CPK value not less than 1.33 and other characteristic may affect during assembled in transmissions.
  + Quick countermeasure of clarified problem and improvement of quality assurance method for QA Table(Quality design sheet) characteristics.

**S.R. - 15: Guide for Controlled Shipping**

3. Implementation Items

4) Exit criteria of control shipping

(3)The tasks about “Improvement Plan and Report for control shipping” have been closed

・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・

In the case of a recurrence, we may request controlled shipping again.

4．Others

　　　　　　　　　　　　・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・

**S.R. – 17: Guide for Inspection Standard and Limit Sample**

2. Inspection standard

1. Format

　(4)　Notes

- Described in the remarks column QA table characteristics

-　Also, if Cpk is 2 or more, etc., and the SPC is unnecessary, please

described in the remarks column of “Inspection Standard” that the SPC

is unnecessary.

Please refer to S.R-7 for characteristics that do not require SPC.

**S.R. - 20: Guide for Establishment of Parts Cleanness Standard**

2. Evaluation Characteristics and Criteria for Contamination

2) Criteria for Contamination

(2) Contamination Weight

Standard value shall be less than the weight (W) calculated by the following formula.

a) Iron parts 　　　 WFe =0.07√AFe : formula 1

b) Aluminium parts　 WAl =0.03√AAl  : formula 2

c) Non-metallic parts WNon=0.01√ANon : formula 3

W: Standard for contamination weight (mg)

A: Surface area of the part (cm2)

\*In regard to the component parts made by 2 or more materials, it shall be calculated by multiplying the above material, a), b) and c) respectively by ratio of areas of each part and summed them up. (For example; W=WFe+WAl)

**Others; Correction of the word**

1.Incoming inspection ―＞　Receiving　inspection

2.repair/remade　　　　　―＞　rework

Revision No.　4-8

Established or Revised date　2020/5/11

Reason for Revision and Key Description

　　　-On　the　case　of　your dealing with multiple JATCO site　(Japan / Mexico / Thailand /

Guangzhou / Suzhou), “Change Control” had been specified.

-Collection for Definition of Terminology

-Specified Suppliers　document form can be submitted to JATCO.

-About FMEA, “AIAG”, ”VDA” and “AIAG&VDA” is acceptable

-QA-table(Quality Design Sheet) had been changed because of addition item.

　　　・Revision of　Forms; Please refer to the following "form" for the target form.

The red letters of the following descriptions were added or modified.

**Table of Format**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Title | Revision No. | Date of Establishment or Revision | Ver. No. |
| Form-4 | Design FMEA　(AIAG、VDA、AIAG&VDA　acceptable) | 4 | 1/12/2009 | V1 |
| Form-8 | Process FMEA　(AIAG、VDA、AIAG&VDA　acceptable) | 4－4 | 31/3/2016 | V3 |

1.2 Quality Assurance of Products Purchased by JATCO (\*1)

\*1: ‘JATCO’ includes JMEX/JGZ/JTL/JSZ

When purchasing parts from our suppliers, it is presupposed that we will buy from suppliers who can guarantee 100% of the products. From our basic philosophy of mutual trust and respect of one-another’s independence, the arrangement regarding quality assurance is shown as below:

Master Purchase Agreement

Supplier Quality Assurance Manual

Requirements regarding quality assurance activities

Inspections and audits by JATCO

Claim Compensation Agreement/Procedure

3. Definition of Terminology

|  |  |
| --- | --- |
| Initial Production “Hatsumono” | First delivered lot of VC-lot;one of Design prototype, or PT1 and PT2 and mass-production parts. Including production after any change of design and/or production process. |

**S.R. - 4: Guide for Change Control**

1. Outline

The procedure for change control, including the contents below, shall be documented and maintained in order to prevent any trouble caused by lack of control and consideration at Design and Process change

2. Control of Design Changes

3)Application to JATCO

(3)Where to submit the application

If you are dealing same product with each JATCO site (Japan / Mexico / Thailand / Guangzhou / Suzhou), please apply individually to each JATCO site.

(Please get PSW individually on a commercial basis.)

3. Control of Process Changes

1. Application to JATCO

②　Where to submit

The responsible each JATCO site of supplier quality assurance department.

If you are dealing with multiple JATCO site　(Japan / Mexico / Thailand /

Guangzhou / Suzhou), please apply individually to each site.

Please get PSW individually on a commercial basis.

④　Proceed with the process changes after receiving indication from JATCO.

Supplier shall submit the Part~~s~~ Submission Warrant (PSW) before volume production. Supplier shall start volume production after approved by the responsible supplier quality assurance department of JATCO each site.

The submitted and approved documents shall be kept for a period of five years from the end of production orders (EOP).

⑥　If JATCO site have multiple factory and when supplier already deliver product to other factory of JATCO same site, Copy of Notification of Design or Process change and Part~~s~~ Submission Warrant shall be submitted with initial product delivery notice and Initial product quality confirmation report.

JATCO site are Japan / Mexico / Thailand / Guangzhou / Suzhou.

**S.R. - 5: Guide for Production Part Approval**

5. Submission Contents

　　　　　　The submitted documents are shown in the “Submitted Documents table”

On the following pages.

Forms that are “reference” in the “Format” column of the “Documents to be submitted” can be submitted in your company form.

1. PPAP Documents to be Submitted

When JATCO receives “Notification of Design / Process Change”, JATCO informs the submission document requirement to supplier using that document. (“Indication of Design / Process Change”)

JATCO indicates submission document for new parts using “Guide for New Product Quality Procedure for Production Preparation Stage (S.R-13)”.

JATCO may require documents other than “Submission document table” based on a customer's demand. (Ford, Renault, etc.)

Submission document table

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No. | Document to be Submitted | Format | Document Format | Supplementary Rule No. | Design change | Process change |
| 1 | Part Submission Warrant | Prescribed | Form - 2 | ５ | \* | \* |
| 11 | Process FMEA(AIAG or VDA or AIAG&VDA　acceptable) | Reference | Form - 8 | 13 | \* | \* |
| 25 | Design FMEA(AIAG or VDA or  A IAG&VDA　acceptable) | Reference | Form - 4 | 12 |  |  |

**S.R. - 8: Guide for Initial Product Control**

3. Prototyping (Development Trials, VC-lot)

1. Inspection and Testing

4. Production Trials （~~VC lot,~~ PT 1, PT 2 )

1. Inspection and Test
2. Others

If JATCO site have multiple factory and when supplier already deliver product to other factory of JATCO same site, Copy of Notification of Design or Process change and Part~~s~~ Submission Warrant shall be submitted with initial product delivery notice and Initial product quality confirmation report.

For example, in the case JATCO-Mexico has site1 and sit

**S.R. – 12: Guide for New Product Quality Procedure for Development Stage**

* 1. Documents to be submitted to JATCO

The submitted documents are shown in the “Submitted Documents table”

on the following pages.

Forms that are “reference” in the “Document Format” column of the “Documents to be submitted” can be submitted in your company form.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No | Documents to be submitted | Category of Subject Parts and Submission | | Time of Submission | | | Submit to | Document Format |
| Parts Level | Submission Level | Before DR UD Lot | Before DR UC Lot | Before Production DR |
| 2 | Design FMEA | Group 1 | S\* | Yes | Yes | Yes | 3 | 4 (Reference Format) (AIAG or VD A or AIAG&VDA　acceptable) |
| Group 2 |  |
| Group 3 |
| 15 | Process FMEA | Group 1 | S\* | - | Yes | Yes | 2 | 8 (Reference Format) (AIAG or VDA or AIAG&VDA acceptable) |
| Group 2 |
| Group 3 |

**S.R. – 13: Guide for Production Preparation Stage**2.

2.　　　　Activities for Production Preparation

1. Activities for ensuring quality at the production preparation stage shall take the following items into consideration.

|  |  |  |
| --- | --- | --- |
| Item | Contents | Example |
| Design prototype;　VC-lot  Production trial(~~VC lot~~, PT1 and PT2) | -The supplier shall conduct prototyping which complies with product specifications and required schedule of JATCO. Set the volume so that process capability can be grasped. | -Quality Assurance Plan for New Product |

4.Milestone of production preparation stage

\*\*Other type of Milestones events may exist and these will be notified by JATCO.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Milestone | Definition | Process condition | Production parts by sub tier supplier | | |
| Mould and Die | Equipment | Process (Operator, etc.) |
| VC-Lot | Production trial 100% Off-Tool for dies | Off-Tool for dies ※ | 100% Off-Tool | - | - |
| PT1 | Production Trial 1  (Production preparation) | 100% Off-Tool & Off-Process  (Equivalent for volume production) | Same left | ← | ← |
| PT2 | Production Trial 2  (Production preparation) | 100% Off-Tool & Off-Process (~~PSO/~~PPAP/PSW have been ready.) | Same left | ← | ← |

Off-Tool for dies ※　：Some projects may require off tools

　　Depending on the project, JATCO may require PT1 equivalent as “Pre-PT”.

5．Documents Submission to JATCO

The supplier shall submit the documents below to JATCO.

The submitted documents are shown in the “Submitted Documents table”

On the following pages.

Forms that are “reference” in the “Document Format” column of the “Documents to be submitted” can be submitted in your company form.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Documents to be submitted | Submission Category | | Submission Timing | | | | | | | Submit  to: | Document  Format |
| Parts Level | Submi-ssion  Level | UC　Lot | Design Release | Before  VC Lot | Before PT1 | Before  PT2 | PSW | Before  SOP |
| Quality Assurance Plan for New Product | Group 1 | S | - | Yes | Yes | Yes | Yes | Yes | Yes | 2 | 3  (Reference  format) |
| Group 2 |
| Group 3 |
| Reliability Test Plan and Report | Group 1 | S | - | Yes | Yes | Yes | Yes | Yes | - | 2 | 5  (Prescribed  format) |
| Group 2 |
| Group 3 | R |
| Control Plan | Group 1 | S | - | - | Yes | Yes | Yes | Yes | - | 2 | 6, 7  (Reference  format) |
| Group 2 |
| Group 3 |
| Process FMEA  (AIAG or VDA or AIAG&VDA) | Group 1 | S | - | Yes | Yes | At Time of Change | | | | 2 | 8  (Reference  format) |
| Group 2 | S | - |
| Group 3 |
| Quality Control Indices for Production Preparation | Group 1 | R | - | - | Yes | Yes | Yes | Yes | - | 2 | 9, 10  (Reference  format) |
| Group 2 |
| Group 3 |

6．　Process FMEA for prevention of Critical/Significant failures occurrence

5）Use of ranking tables.

Ranking tables are based in AIAG Reference Manual - FMEA 4th ed. (or latest version)

or VDA or AIAG&VDA. Always confirm the use of latest version.

**S.R. - 20: Guide for Establishment of Parts Cleanness Standard**

1. Outline

This guide prescribes the procedures for Establishment of parts cleanness standard.

Basically　give priority to the drawing instruction.　If there is no instruction in the drawing,

at first please contact with the responsible person of JATCO R&D

**Revision No.　4-9**

Date of Revision　21/10/01

Revision Reason/Contents

* Correct the discrepancy of requirements with the standard "LOGISTICS REQUIREMENTS FOR SUPPLIERS" issued by the JATCO production control department.

・ Rename from lot control to traceability control. Addition of requirements.

* Addition of precautions when setting in-process defects to the target value during the Safe Launch Period.

・ Correction of other errors, incorporation of customer requirements, correction of confusing

expressions , etc.

【Revision Details】

4．6　Purchasing

・Addition of requirements for polymer materials

In addition, for the identification and display method for parts using high Polymer materials (thermoplastics, thermosetting plastics, thermoplastic elastomers, rubber, Synthetic fiber), follow "JES M9003 (Method of identifying and displaying materials used for polymer parts)".

4．8　Part Identification and Traceability

・Modification of word：【New】 Traceability control　← 【Old】 Lot control

4．10　Inspection and Testing

・Correction of confusing expression:

【New】Supplier shall perform below inspection and report its result to JATCO if JATCO requested.

←　[Old] Suppliers shall submit the following inspection results to JATCO if JATCO requested.

・Correction of errors：【New】Supplier Quality Assurance Department

　←　【Old】Supplier Quality Assurance

4．15　Handling, Storage, Packaging and Delivery

・Addition of notes in standard for packaging. Correct the discrepancy of requirements with the standard.

　　　【New】(4) Supplier are responsible to apply anti-rust measures for parts or packaging to prevent

from rusting within the period required by JATCO.

For details, please refer to "LOGISTICS REQUIREMENTS FOR SUPPLIERS (\*)" issued by

JATCO's Production Control Department.

←　【Old】Suppliers are responsible to apply anti－rust measures for parts or packaging to prevent rust

on parts during 2 weeks after delivery to any JATCO plant.

・Correction of errors：【New】LOGISTICS REQUIREMENTS FOR SUPPLIERS

←　【Old】LOGISTICS REQUIREMENTS TO SUPPLIERS

・Clarify responsibility for nonconformity：

7) JATCO will charge the cost to the supplier for any non-conformity within the warranty period (rust, damage, contamination, etc.).

・Addition details of storage for standard.

※「LOGISTICS REQUIREMENTS FOR SUPPLIERS」

The details can be confirmed on JATCO Supplier Portal site.

If you cannot find “LOGISTICS REQUIREMENTS FOR SUPPLIERS“

Please contact SCM (Production control) department.

S.R. - 4: Guide for Change Control

4．　Application to Jatco

　・Addition of application documents：「List of Changing Point」

　・Add related Guide/Form：

・Notification Design / Process change (Form-21)

・Description of Process Change(Form-22A)

　 ・4M List (Form 61)

・List of Changing Point (Form-63)

S.R. - 5: Guide for Production Part Approval

5． Submission Contents

・Addition of documents to the list of document to be submitted：

Lot Control Card(※2)　(attach to the initial sample product.)

・Addition of note：※2 Lot control parts is the target. (Refer to “S.R.-6: Guide for Traceability Control”)

・Revise the Submit to：

【New】 2) Submit to: Supplier Quality Assurance Department of JATCO

However, the following shall be submitted to Plant Quality Assurance Department.

5. Initial Product Delivery Notice 6. Initial Product Quality Confirmation Report

31. Initial Sample Parts 32. Lot Control Card

← 【Old】 2）Submit to: Supplier Quality Assurance Department of JATCO

(Only the initial samples to be submitted to the Plant Quality Assurance Department)

S.R.-6: Guide for Traceability Control

・Modification of word：【New】Traceability　←　【Old】Lot

3．　Types of application of Traceability Control

・Addition and modification of description

【New】

|  |  |  |
| --- | --- | --- |
| Individual(Serial)  control | Method of control by assigning a unique number to each individual part.  Note;5.4) JATCO shall instruct Special control to supplier. | ~~“Priority Parts”~~  Parts specified by JATCO |
| Group(Lot) control | Method of control by assigning a number to each manufactured group (lot).  Note;5.4) Special control may be instructed. | Other than above |

←【Old】

|  |  |  |
| --- | --- | --- |
| Individual(Serial)  control | Method of control by assigning a unique number to each individual part. | “Priority Parts”  Parts specified by JATCO |
| Group(Lot) control | Method of control by assigning a number to each manufactured group (lot). | Other than above-mentioned |

4. History Management of Traceability Control

・Modification of word：【New】History Management of Traceability Control　←　【Old】 Lot Configuration

　　　　　　 【New】Serial Control　←　【Old】Individual control、

【New】Lot Control　←　【Old】Except individual control

・Addition of word：~the connection between each process, such as material charge, processing lot,

heat treatment lot, and shipping lot, should be identified for each individual product.

　　　　　　　　 ～please coordinate with Jatco Supplier Quality Assurance Department

5．Establishing Serial Numbers, Lot Numbers

・Addition of word: 5．Establishing Serial Numbers, Lot Numbers

　　　　　　　　 ～The supplier shall set the Serial Number or Lot Number so that the parts quality

history can be tracked and searched.

　　　　　　　　 2）～Serial numbers or Lot numbers~

　　　　　　 3）Product Serial numbering or lot-numbering shall be established based on

“Section 9”. If you need to discuss about Serial-numbering or Lot numbering,

please contact JATCO Supplier Quality Assurance Department.

・Deletion of Text: “Section 9” is the basis for establishing lot-numbering; however it may be possible

for the supplier to use its own numbers, depending on the supplier’s situation.

・Modification of word: 【New】 Supplier Quality Assurance Department

← 【Old】 Production Quality Assurance Department

6．Display of Serial・Lot Numbers

・Addition of wording: 5. Display of Serial・Lot Numbers

Individual (Serial) Control Parts Group (Lot) Control Parts

・Modification of word: 【New】 Display the Serial・Lot Numbers ← 【Old】 Lot display

・Addition of text: Attach a \*Lot control card to the parts specially specified by JATCO.

\*Lot control card indicates lot number. (Including 2D Barcode, QR code, etc)

7．　Records of Traceability Control

　・Modification of word: 【New】 Records of Traceability Control ← 【Old】 Records of Lot Control

【New】 searches of Traceability Control parts

← 【Old】 searches of Individual Control parts

9．Example of Establishing Serial numbers, Lot Numbers

・Changed and added wordings：【New】9. Sample of Establishing Serial numbers, Lot Numbers

　 ← 【Old】 9. Establishing of Lot number (details)

　 1）Individual (Serial) Control Parts　2）Group (Lot) Control part

B）Example of Identification sequence

10． Report to JATCO

・Modification of word: 【New】 Traceability Control Parts　←　【Old】 Individual Control Parts

S.R. - 7: Guide for Control of Priority Parts and QA table　(Quality design sheet) characteristics

・Added quick reference table

S.R. - 8: Guide for Initial Product Control

　・Specify handling for standard parts.

The supplier shall conduct the necessary tests and inspections to prove that the part satisfies the drawing and other specifications(\*1).

(\*1) In case there are parts indicated as standard parts in the drawing and other specifications, the specifications specified in the corresponding technical standard (JDS, NDS, etc.) are also included.

　・Process Capability Study Report requirements for VC lots, which are required in other chapters,

are also added in this chapter.

Major characteristics of Process Capability Study: n=30 or more

　・Requirements for contamination evaluation and destructive inspection, which are required in other chapters, are also added in this chapter.

Contamination and Destructive Inspection: An evaluation for N=30 or more may be required.

S.R. - 10: Guide for Handling of Nonconforming Part

・　Abolition of 3months follow-up on Report on Defect Recurrence Prevention Summary(8D Report)

【New】 monitoring of measures compliance status at the production shall be check

two months later.

←【Old】　two to three months～

S.R. – 12: Guide for New Product Quality Procedure for Development Stage

S.R. – 13: Guide for Production Preparation Stage

　・Addition of Requirements

|  |  |  |
| --- | --- | --- |
| Item | Contents | Concrete Examples |
| Confirmation of Specifications Required | -Make clear the market requirements based on market appraisal of current products and similar products. |  |
| Confirmation of Drawing and other Specifications | -Check the contents of the drawings and specifications presented by JATCO Design team, and confirm that the dimensions and initial characteristics required for parts manufacturing are specified without any deficiencies / unclear points.  -If there is a part specified as a standard part in the drawing / specification, check the corresponding technical standard (JDS, NDS, etc.) and check if there are any deficiencies / unclear points in the dimensions and initial characteristics.  ・ If there are any deficiencies / unclear points, contact JATCO immediately to resolve them. | -Drawing  -Technical Specifications of Product  -Technical Standards (JDS, NDS etc.) |
| Establishing Objectives | -Establish design-quality objectives, study design measures to achieve the objectives  -Make clear the factor or item being controlled at each phase and the objective for each stage | -Quality List 2  -Quality matrix |

S.R. – 13: Guide for Production Preparation Stage

　・Addition of word

|  |  |  |
| --- | --- | --- |
| Dimension Data and Initial Characteristics | -Verify that the dimensional data and initial characteristics specified in the drawings, technical standards (JDS, NDS, etc.) and inspection standards satisfy the criteria. | -Initial Product Quality Confirmation Report |

・Addition of Lot Control Card in the documents to be submitted



S.R. - 14: Guide for Special Activity during Launch Period

4．Implementation procedure of the Special Activity during Launch Period

・Addition of precautions when setting in-process defects to target values

\*Clarify the definition of in-process defect rate when setting it.

For example, In-house process has a defect rate of each equipment,

and subcontractors have a defect rate of each line etc.

・Modification of word：【New】Traceability Control　←　【Old】 Lot Control

Form2 Part Submission Warrant

Form21 Notification of Design/Process change

・Addition of documents to be submitted: Lot Control Card (Attach to initial sample)

Form30 Report on Recurrence Prevention Measures (8D Report)

　・Abolish the column for the results of the 3-month confirmation.

**Revision No.　4-10**

Date of Revision　‘23/3/28

Revision Reason/Contents

・Regular review of description

・Other error corrections, incorporation of customer requirements,

correction of ambiguous expressions, etc

.

【Revision Details】

Added the following red letters or sentence.

**S.R. - 2: Guide for Control of Documents, Data, and Quality Records**

3. Control of Documents

4. Control of Data and Quality Records

However, if there is a customer's Individual request, please follow the instructions.

**S.R. - 4: Guide for Change Control**

3. Control of Process Changes

3)Process change for which application to JATCO is necessary

(For example, "BCM (Business Continuity Management)" or

Reproduction after long-term stop production, etc.)

1. Application to JATCO
   * 1. Documents to be submitted are “Notification of Design/Process change”,

If there are multiple target parts, enter the representative part number

in the part number column of the "Notification of Design / Process Change (Form 21).

And enter the aditional information to ”Design・Process change applicable parts/model list (Form 22C).

Form 22C is a reference form, but please be sure to fill in the "part name",

"Jatco part number" and "Jatco delivery destination" in the form as mandatory items.

(7) For process change, regardless of JATCO or Supllier convenience,

If 3-months over since the due date entered on the "Notification of Design

/ Process Change (Form 21)“, and the "Part Submission Warrant(Form 2)"

has not been submitted to JATCO, the project will be cancelled.

Suppliers should contact to Supplier Quality Assurance Section

before overdue 3-months or at the time of the change.

*<Related Guide/Form>*

Design・Process change applicable parts/model list (Form-22C)

**S.R. - 5: Guide for Production Part Approval**

5.Submission Contents

1）PPAP Documents to be Submitted

・JATCO instructs "Notification Design / Process change" on the necessary materials for

"Part Submission Warrant(PSW)" and returns it as "Design / Process change instructions". Please submit the document with "〇" in the instruction column of "Design / Process change instructions" to the designated department.

Document, format list :Removed columns for selection of submissions

**S.R. - 6: Guide for Traceability Control**

　　Plant Quality Assurance → Supplier Quality Assurance

**S.R. - 7: Guide for Control of Priority Parts and QA table　(Quality design sheet) characteristics**

9. Record Retention

However, if there is a customer's Individual request, please follow the instructions.

Quick reference table for S.R.-7

Process capability at VC lot is limited to “(Only at Jatco request)”

**S.R. - 8: Guide for Initial Product Control**

3. Prototyping (Development Trials, VC-lot)

1. Inspection and Testing

Process Capability Study: n≧:30 (Only if requested by Jatco)

6. Initial Product of mass-Production

3) If JATCO site have multiple factory and when supplier already deliver product to

other factory of JATCO same site, Copy of Notification of Design or Process change and

Parts Submission Warrant shall be submitted with initial product delivery notice and

Initial product quality confirmation report.

For example, in the case JATCO-Mexico has site1 and site2.

Delete other text “7.Others”

Follow the procedure for initial product control when implementing the process change.

Parts Submission Warrant (PSW) and Initial Product Delivery Notice (IPDN) shall be attached to initial product delivery parts. And Consult with the plant quality assurance department for the method of initial product delivery.

**S.R. – 12: Guide for New Product Quality Procedure for Development Stage**

　　2. Documents to be submitted to JATCO

Parts Level

Group 1: Priority Parts, Critical safety parts, QFD activity implementation parts

special parts (regulation parts, OBD characteristic parts, \*specified parts)

**S.R. – 13: Guide for Production Preparation Stage**

5．Documents Submission to JATCO

Parts Level

Group 1: Priority Parts, Critical safety parts, QFD activity implementation parts

special parts (regulation parts, OBD characteristic parts, \*specified parts)

**S.R. - 20: Guide for Establishment of Parts Cleanness Standard**

Added

*<Related Guide/Form>*

*Contamination Task Sheet　(Form 32(1))*

*Process Control Check sheet for Residual Burr/chips by manufacturing method　(Form 32(2))*

*Documentation procedures and example of Contamination Map　(Form32　contamination map)*

**S.R.-21　Guide for Purchased Parts DR**

Added

*<Related Guide/Form>*

*・Process Flow　（Form 6）*

*・4M List　（Form 61）*

*・Concern List　（Form 65）*

*・Inspection Standard　(Form 24, 25)*

*・Process FMEA　（Form 8）*

*・Control Plan　（Form 7）*

*・Process Capability Study Report　（Form 15A/B）*

**Format change**

Form 8　Process FMEA　(AIAG、VDA、AIAG&VDA　acceptable)

Form 13　Initial Product Delivery Notice

Form 14　Initial Product Quality Confirmation Report

Form 21　Notification of Design / Process Change

Form 22C　Design・Process change applicable parts/model list ※Newly added

Form 23　Notification of Delivered-Parts Lot Control

Form 28　Special adoption processing application form

Form 32　Contamination Task Sheet

Form64　Production Capacity Plan ※Newly added

Form65　Concern List ※Newly added

**Revision No.　4-11**

Date of Revision　‘24/1/31

Revision Reason/Contents

・Regular review of description

・Other error corrections, incorporation of customer requirements,

correction of ambiguous expressions, etc

.

【Revision Details】

Added the following red letters or sentence.

1. General Rules

4.13 Control of Nonconforming Part

4)If you have no choice but to correct a non-conforming product, please do the following:

・rework : correct the non-conforming product and correct the NG characteristics to OK)

・Re-Process:Remove a part mid-process & reinjecting it through some “Provisional

Operation” or through an operation outside the production line.

(The part could be OK or NG before take out of the process)

　 Create rework instructions and Re-Process instructions.

　 Obtain approval from the supplier's quality assurance manager.

　 Obtain approval from JATCO's purchased product quality assurance department.

　 If a process change occurs, process change application procedures must be

completed and mass production approval must be obtained.

Rework and Re-Process instruction shall be made available for viewing to the responsible personnel. For those parts that with QA table (Quality design sheet) characteristics, 100% inspection shall be performed and retain the records for 10 years. Important security part process are prohibited to be reworked.

5)If you wish to reuse materials or component parts due to rework, etc., please do the following.

Determine whether each material or component can be reused.

Specify materials and components that can be reused.

Create instructions for removing reused materials and components from finished parts.

Obtain approval from the supplier's quality assurance manager.

Obtain approval from JATCO's purchased product quality assurance department.

**S.R. - 1: Guide for Assignment and Notification of Responsible Person for Quality Assurance**

4. Report to JATCO

3)In the case of a company name change, please contact Purchasing Division and then submit ‘Report on Assignment/Change of Responsible Person for Quality Assurance’(Form-1)

**S.R. - 5: Guide for Production Part Approval**

5. Submission Contents

List of Documents and Sample parts, etc to be Submitted

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Documents and Sample parts, etc | Format | Document Format | S.R. No. |
| 33 | QA table (Quality Design Sheet) | Specified | Form 38 | 13 |

**S.R. - 7: Guide for Control of Priority Parts and QA table　(Quality design sheet) characteristics**

7. Ensuring and Maintaining Process Capability

(2) After Special Activity during Launch Period, SPC (Statistical process control) should be used for daily control of “Important characteristics” and “Characteristics in QA Table (Quality design sheet)”. For further confirmation

If you do not need to manage with SPC, it is as follows.

-Capability Analysis above of 2 (Cpk and Ppk) (Capability Analysis needs to be

performed according to 4.10. 7)　 ④)

-Content Value. (E.g. Number of turns, number of contaminant count etc.)

-100% Inspection Processes.

- Characteristics that could be agreed with JATCO.

Note:Please agree with JATCO regarding the conditions for process capability calculation based on the following.

-Number of measurements n≧100

-Extraction target: 25 or more lots with a production period of 2 weeks or more

and including lot-to-lot variation

\*If production is low, the number should be 30 or more.

(Cumulative number from evaluation start lot)

**S.R. - 8: Guide for Initial Product Control**

6. Initial Product of mass-Production

3)If JATCO site have multiple factory and when supplier already deliver product to

other factory of JATCO same site, Copy of Notification of Design or Process change and

Parts Submission Warrant shall be submitted with initial product delivery notice and

Initial product quality confirmation report. Also, please contact the production quality assurance department of the delivery factory in advance.

For example, in the case JATCO-Mexico has site1 and site2.

List of factories

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Company | JATCO | JMEX | JTL | JGZ | JSZ |
| Country/Area | Japan | Mexico | Thailand | China | China |
| Plant | Fuji Area A/1/2/3/4  Fujinomiya  Kanbara  Kakegawa  Yagi  JE (JATCO Engineering)  Fuji Area 4/Kanbara | Site1  Site2 | Thailand | Guangzhou | Suzhou |

S.R. – 11: Guide for Special adoption processing

S.R. – 12: Guide for New Product Quality Procedure for Development Stage

Parts Level

Group 1: Priority Parts, Critical safety parts, QFD activity implementation parts

special parts (regulation parts, OBD characteristic parts and specified parts\*)

S.R. – 13: Guide for Production Preparation Stage

Parts Level

Group 1: Priority Parts, Critical safety parts, QFD activity implementation parts

special parts (regulation parts, OBD characteristic parts and specified parts\*)

S.R. - 14: Guide for Special Activity during Launch Period

3. Preparation and implementation of the “Plan for Special Activity during Launch Period”

A “Plan for Special Activity during Launch Period” shall be prepared and implemented keeping the following points in mind. (Each production line include Tier N suppliers) The responsible person shall control and follow the plan.

In case of the following parts, the supplier shall submit the “Plan for Special Activity during Launch Period” with “PSW” for confirmation of JATCO. JATCO may request additional activity details, so please respond accordingly.The supplier shall notify the result to JATCO, when Special Activity during Launch Period finishes.

4. Implementation procedure of the Special Activity during Launch Period

2) Setting of quality targets

The responsible person shall set (percentage) defective delivered to JATCO, percentage of defect in the process and percentage of achievement of the tasks as quality targets.

The following items are required.

0 major defects, 0 major defects, 0 defective deliveries at JATCO and customers

1. Preparation procedure of Plan for Special Activity during Launch Period

The responsible person shall prepare the Plan for Special Activity during Launch Period using the following items as reference in order to evaluate quality system and stabilize the quality level promptly of volume production. Please incorporate confirmation of process capability of QA characteristics, control chart management data, and factorial management items into the activity plan.

5) Setting of criteria to remove the Special Activity during Launch Period

The responsible person at the supplier shall set the criteria to remove the Special Activity

during Launch Period.

The criteria shall include following items.

* + 1. The quality assurance system of volume production is verified.
    2. The quality targets (reject rate at process of supplier, delivery claim at Jatco and custmer, Critical/Significant Failures, etc.) are achieved.The following items are required.

0 major defects, 0 major defects, 0 defective deliveries at JATCO and customers

Supplier in-process defective target value or less

Other indicators shall be determined in consultation with JATCO.

* + 1. The tasks about quality assurance have been closed.
    2. All failures found during special inspection has been closed.

6) Submission of materials during Special Activity during Launch Period

Please submit the following documents every month during Special Activity during Launch Period.

Results materials: Process capability of QA characteristics and control chart management data

Factor-based materials: Confirmation results of factorial management items of processes

related to QA characteristics

Additional items may be requested from JATCO.

7)Judgment to remove the Special Activity during Launch Period

Required materials to submit

Plan for Special Activity during Launch Period

(7. Listing the decision result of the cancellation decision committee and the signature of

the supplier's judge)）

Process capability control chart control data for QA table characteristics

**S.R. – 16: Guide for Control Plan**

4. Format

2) Control plan shall include following items.

- Process flow, Process name (including rework process, handling, etc.), Equipment.

- Control characteristic (Special control target of Results and Elements), Control value, Severity, Frequency, Control method (Measurement tool, inspection tool, etc.), Confirmation method, Responsible department, Record method and Inspection frequencies.

- Reaction plan for occurrence of abnormal situation

- Check item for equipment, manufacturing condition: Different format is possible to use, but relationship with control plan have been clarified.

-If recycled materials are used, please indicate so in the notes section of the relevant process.

S.R. – 17: Guide for Inspection Standard and Limit Sample

3. Limit Sample

1. Submission and Acceptance
   1. When establishing a limit sample, send two samples and ~~two copies of~~ the “Approval Report for Limit Sample” as a general rule to the responsible supplier quality assurance department of JATCO. If samples could not be sent, paste a photo on the sketch area of the “Approval Report for Limit Sample” (Form-17).
   2. JATCO will return the approved limited sample application form and one limited sample product for the supplier’s use . JATCO will keep a copy (copy or electronic data) of the approved limited sample application form and one limited sample product.
   3. The limit sample shall be used as a quality standard during inspections, in the same way as the inspection standard.
   4. Apply for a renewal following the procedure in (1) when the term of validity ends, or if the judgment criteria have been changed for the applicable characteristic, or if JATCO has requested a change.

S.R. - 20: Guide for Establishment of Parts Cleanness Standard

3. Procedure

2) Contamination Measurement Method

(2) Measurement Method

e) Number of contaminations and Size Measurement

・A number of the contamination on the used filter or other specified JATCO which is

0.4 mm2 or over shall be counted and measure size by using microscope ( ×10 or

×20or×40 ) or digital microscope.

Please compare the measurement results with JATCO to ensure consistency.

The format of the materials is optional.

**Format change**

Form 1　Report on Assignment/Change of Responsible Person for Quality Assurance

Form 2　Part Submission Warrant

Form 13 Initial Product Delivery Notice Form 21　Notification of Design / Process Change

Form 17 Approval Report for Limit Sample

Form 21 Notification of Design / Process Change

Form 24 Inspection Standard (Individual - 1)

Form 25 Inspection Standard (Individual - 2)

Form 26 Inspection Standard (Group)

Form 28 Special adoption processing application form

Form 33 Plan for Special Activity during Launch Period