Tachi-s México
Supplier Quality Manual

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2nd Edition (May 29th, 2018): Document review
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Tachi-S México

Purchasing Department

Control production Department

Quality Assurance Department

TACHI-S México

April 10th, 2019

Dear Supplier:

This Quality Handbook has the purpose of stablish the work procedures between customer and supplier, which allow the standardized control of the quality of all the parts acquired by Tachi-s Latin America (hereinafter referred to as "Tachi-S"). At the same time, we look to strengthen and ease the tasks performed by the companies involved.

For its elaboration, the 20.1th edition of the Tachi-S Co., Ltd Manual was taken and adapted to the necessities of the Latin America Region, with the objective of acting with certain during the execution and supervision of the tasks of the suppliers, allowing the compliance of the specifications required by Tachi-S. However, its review and modification will continue, in order to improve its content.

The use and implementation of this Manual is obligatory for all suppliers of Tachi-S in the Latin America Region, without exception. In case of doubts or clarifications, the Quality Assurance Department or Quality Control Departments can be contacted.

Please sign this letter and send it back by e-mail to your SQA contact. If we do not receive it signed, or there is not notification of disapproval within 30 days period, we will assume every requirement and specific instructions is clear and accepted.

We appreciate your attention.

Respectfully

Efrain Silva Torres
Quality Director of Regional Head Quarter
Tachi-S Latino America

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- About quality records retention

As quality records retention cycles of each customer requirements are different, we separate by following displays. Supplier should keep each retention cycles and should keep Tachi-S retention.

Table 1. Records retention cycles

Retention of records of Tachi-s suppliers	
Document type	**Retention Period**
Revision and implementation of engineering changes	20 years
Internal Audits	20 years
Maintenance Records	20 years
Corrective Action Records	20 years
Product traceability	20 years
Records that represent quality assurance	20 years
Related to regulatory requirements	20 years
FMEA and Control Plan	20 years
Validation records of production design and validation.	20 years
Verification and calibration records	20 years
Special agreements	15 years
Work Instructions	15 years
Other Records	5 years

TACHI-S México

GLOSSARY

SQC: Representative of Tachi-s on charge of Supplier Quality Control

SQA: Representative of Tachi-s on charge of Supplier Quality Assurance

QA: Quality Assurance

QC: Quality Control

AIAG Automotive Industry Action Group

QRQC: Quick Response Quality Control

APQP: Advanced Product Quality Planning

Cross-functional team: Activity team with all departments in each function: Design development division, Production division, Sales division, Purchasing division etc.

Tachi-s Mexico Supplier Quality Manual

1. Preface

1-1 Purpose

The purpose of this standard is to provide a quality control standard to ensure that the parts Tachi-s purchases from suppliers meet the specifications requested by Tachi-s.

1-2 Scope

This standard is to be apply to the quality management system that suppliers should establish and to the parts that Tachi-s purchases from suppliers.
Regarding supplied parts, the basic purchase agreement must be observed.

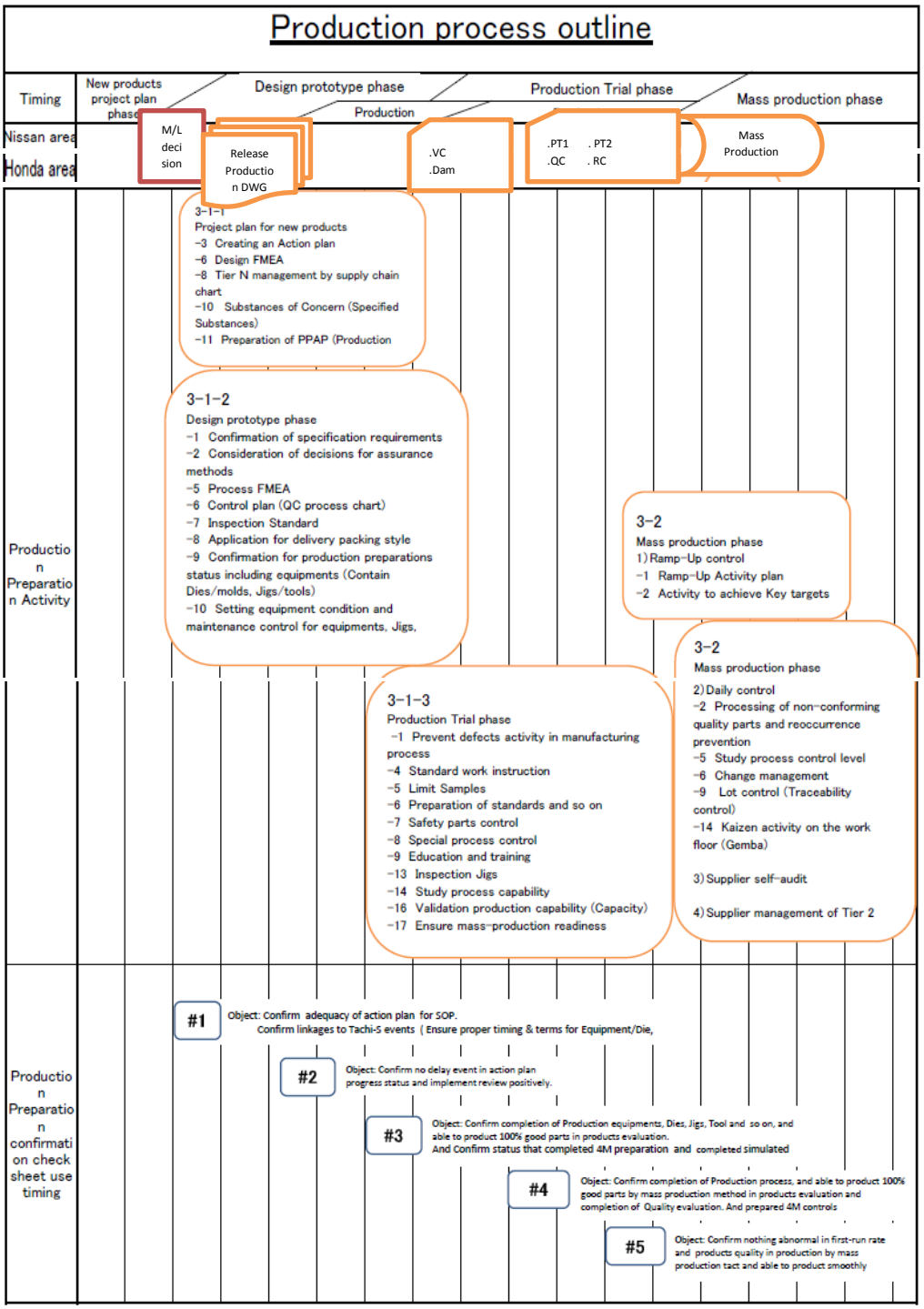
1-3 Definition of terms

The definition of terms in this standard is as follows.

Specifications requested by Tachi-S	(1) Drawings (including CAD data, DXF), specifications, regulations (inspection standard and JIS standards, etc.), standards, and other similar documents that Tachi-S has developed and lent to a supplier. (2) Drawings prepared by a supplier and received by Tachi-S (drawings proposed by a supplier). (3) Other items determined through discussion between Tachi-S and a supplier.
Special characteristics CC	Protect and reduce the damage level of occupants in a collision, and / or ensure protection after Shock. CC
Special characteristics SC	Product characteristics or process control characteristics in which defective manufacturing may not cause an accident causing injury or death or a vehicle fire but that may have a significant effect on customer satisfaction. SC
Special important part CC S	A part in which the level of control must be raised to stabilize the applicable quality directly in welding processes. CC S
Supplied parts	Refers to parts that Tachi-S supplies for a supplier to produce a part.

TACHI-S México

1-4 Production process outline



2. Basic concept for quality assurance

2-1 Quality assurance for products purchased by Tachi-S

Upon the purchase of parts, Tachi-S follows the basic principle of purchasing parts from a supplier who is capable of providing a sufficient level of quality assurance. More specifically:

1) Tachi-S provides a supplier with requirements to guarantee the quality assurance for a part that the supplier delivers; and
2) Tachi-S checks that a supplier has been consistently providing a sufficient level of quality assurance through inspections, the submission of a monthly score card, and periodical audits.

2-2 Delivered products suppliers Quality assurance

Suppliers shall establish a quality assurance system that meets the requirements below permanently deliver quality-assured parts.
Therefore, when there are any defects, suppliers shall assume the responsibility.

1) Company policy and quality assurance system

Suppliers shall clarify both their company policy for quality assurance and their actual quality assurance system.

The above-mentioned quality assurance system must consider the following points.

(1) Developing a quality system aiming to meet the requirements of the ISO 9001/IATF 16949 standard. As the minimum requirement, the requirements of the ISO 9001/IATF 16949 standard must be understood and integrated into the quality assurance system.

To consult this minimum requirements click: https://www.iatfglobaloversight.org/wp/wp-content/uploads/2016/12/Minimum-Automotive-Quality-Management-System-Requirements-for-Sub-tier-suppliers-2ndEd-rev2.pdf

The related certifications must be sent to the Supplier Account Manager, indicating validity date, update and cancellation.

Goals International Automotive Task Force

- The goals is to develop a Quality Management System as a preventive tool taking actions to minimize risks and maximize improvement opportunities associated to organization context and objectives; emphasizing continuous improvement, ensuring to have **quality management values**, which enable increase customer satisfaction, preventing defects and reducing variation and waste in supply chain.

Quality Management Values:

a) Customer focus

b) Leadership
c) Commitment of people
d) Process focus
e) Improvement
f) Decision making based on evidence
g) Relationship management

(2) The quality assurance system must be such that the required quality is achieved through adequate activities in design prototyping phase and production trial phase (hereinafter referred to as "quality assurance for new products").

(3) The system must enable the consistent and stable production and delivery of parts that fully meet the specifications that Tachi-s request (hereinafter referred to as "quality assurance in the mass-production phase").

2) The system and document management system

Suppliers shall establish an organization and document management system to fully conduct operations based on the quality assurance system and shall administrate these operations. Suppliers shall submit documents promptly, when Tachi-S requests.

3) Selecting a responsible person for quality assurance

Suppliers shall select a responsible person for quality assurance who manages and supervises the quality assurance activity implementation status.

4) Selecting a person in charge of environment

The providers must select a person in charge of the management of the substances of interest and must carry out an adequate management (IMDS), the person in charge must be trained and will be responsible for sending the information required by Tachi-s before the first ones phases VC- Lot, DAN 1, etc. according to each OEM.

2-3 Selection and notification of person responsible for quality assurance

1) Qualifications required for the responsible person for quality assurance and the selection of that person.

Responsible person for quality assurance	Person who is delegated responsibility and authority with regard to substantive coordination regarding quality assurance throughout the whole company (In principle, a

	director, general manager, or person with an equivalent job position should be selected.)
Deputy responsible person for quality assurance	Should be selected for each factory or business site as necessary; this is to be a person who can perform substantive activities with regard to the quality assurance for the parts to be delivered.

2) Selecting of the main contact person and person responsible for quality assurance at business sites.

Contact person for quality assurance	Contact person to/from Tachi-S
Responsible person at business sites	Responsible person for quality assurance at a factory or business site.

3) Selecting a person in charge of environment.

Responsible person for environment	Person who can take substantive responsibility in environment-related matters on behalf of the company; Tachi-S must be notified only when this is a person other than the responsible person for quality assurance above.
Contact person related to the environment	A practical contact person to/from Tachi-S must be selected; Tachi-S must be notified only when this is a person other than the contact person related to quality assurance above.

4) Notification to Tachi-S

The responsible person for quality assurance and the contact person related to quality assurance are to notify the respective procurement sections in charge by using the Supplier Contact Directory. Environment and IMDS contact in charge must be included into same document (Document 1 from part 8. Attached forms).

Supplier Contact Directory shall be updating twice a year and send on months of May and November; and must be sent to Tachi-s Mexico through the purchasing staff. If before actualization is a mayor change in main contacts; actualization shall be send to purchasing area.

3. Basic Concepts for Purchasing

3-1 IMMEX Program

Suppliers with the IMMEX Program are required to comply in a timely manner with the following requirements:

- The provider must provide the IMMEX Program Number to your Business Window.
- As a supplier with IMMEX program, perform the order closures, provide information in the days 1 or 2 of the time marked by the authority for the closing of pediments.
- Provide Certificates of Origin or, where applicable declaration of origin.
- Provide material data sheets as well as their tariff fractions, each time a new part number is generated.
- Provide Foreign Trade Contacts.

3-2 Request for authorization for membership or supplier modification

Purchasing Tachi-s generates the Request for authorization for membership or supplier modification, where you request the general data and documents necessary to generate your file. Refer to Attached form 32.

3-3 Steel recovery with stampers

The sending of remission covering the steel receipt delivered by the Service Centers at the supplier's premises must be sent via e-mail with legible stamps and signatures within a period of not more than two business days after the receipt of the raw material.

3-4 Compliance with Applicable Standards and Laws.

Suppliers are required to comply with all applicable regulations and laws each time a new business is assigned, or the purchase volume is increased by part numbers carry over.

3-5 Request for Quotation

Upon receipt of an RFQ from Tachi-s it is necessary for suppliers to send the quotes in the official format set out in this Manual. Refer to attached form 34.

4. Minimum requirements to be a supplier of Tachi-s Mexico

The Purchasing area considers approved suppliers, when the supplier meets the following minimum requirements:

- Submit sound financial statements, to confirm that there are no risks in the operation of the company.
- Ensure that it meets the minimum requirements of ISO/ IATF 16949 (current version). The certification requirement of the suppliers is determined, according to the classification thereof, taking the criticality and characteristics of the material they supply.
- That in your QCD evaluation you have reached a grade greater than or equal to 80%.

Purchasing convenes a Committee session, to present candidate suppliers and the option that meets all requirements and standards.

5. Quality Assurance Requirements

Suppliers shall have the responsibility to meet the specifications that Tachi-S requests for all parts that suppliers deliver to Tachi-S. To fulfill this responsibility, suppliers shall deploy and conduct activities for quality assurance based on the previous section, "2. Basic concept for quality assurance."

5-1 Quality assurance for new products

Before the project is assigned to the supplier, a risk evaluation will be performed by Tachi-s, considering items in Table 2. Red items determine automatically a supplier as a "Risk supplier". The result of this evaluation defines if the project will be assigned to the supplier and the type of requirements supplier shall complete during trial and SOP events (ANPQP / APQP).

Table 2. Risk criteria

i.	**New manufacturing method or technology new facility**		
ii.	Important CC, SC and/or LUX characteristics		
iii.	**New supplier**	For TSM	
		Detail for If Yes	TSJ Experience
			Other TACHI-S Experience
iv.	Product Technical Complexity		
v.	**Score Card level 3 or 4**		
vi.	PPAP: poor performance during development phases and not on-time.		
vii.	C-Speed: answer customer complains >5 days.		
viii.	**Recurrence fails.**		
ix.	Change management not notified to TSM.		
x.	**Affecting warranty claim**		
xi.	IMDS release during development phases and update for design changes, process change, raw material change, legal name change, changes on IMDS platform**.**		

In case the supplier is new, and has not record with Tachi-s, a QCD audit will be performed for the areas of quality assurance, purchasing and production control (corporate).

Regarding the design prototyping phase and production trial phase, suppliers shall establish procedures for implementation related to "quality assurance for new products" covering the following items, and manage based on these procedures, ANPQP or APQP, depending on the customer requirements.

5-1-1 Project plan for new products

-1 Object parts

Newly designed parts and newly ordered parts are to be the objects.

-2 Selection of person responsible for project

Select a person responsible of the project and another for the quality assurance. If the same person will perform both activities, please notice in the "Supplier contact directory".

The responsible person for project plans shall establish an activity organization (cross-functional team) and promote their activities.

-3 Creating an Action plan

Clarify the quality target, the quality evaluation standard, etc., to be achieved in the design prototyping phase and production trial phase. To achieve these, establish a concrete "Supplier Master Schedule."

Accommodate Tachi-S schedule.

* Refer to Attached form 7), "Supplier Master Schedule."

(1) Record-keeping: "Supplier Master Schedule," etc. according to Table 1. Records retention cycles for **"Tachi-S"**.

-4 Progress evaluation of each phase

The responsible person regarding the design prototyping and production trial of new products shall evaluate the activity plan implementation status of each phase and transition period including Tier 2 and subsequent suppliers. And during the evaluation, clarify problems and take measures as necessary.

For the activity evaluation in each phase, use Attached form 20), "Production Preparation confirmation check sheet #1-#5."

-5 Defect prevention activity in design stage

Predict potential causes of quality defects in design and investigate how to eliminate them.

For the study, use the following tools and execute the check.

① Design FMEA (Usable FTA)

② Past failure (Lessons Learned = Kakotora) checks, etc.

(1) Elimination of difficult operations

With the cooperation of the production division, eliminate difficult operations and improve them not only from the viewpoint of an experienced operator but also from the viewpoint of a less-experienced operator, in order to eliminate quality variations due to difficult operations. The term "difficult operation" refers to operations requiring high levels of skill (Blind operation, Chafe operation like little adjusting, operations requiring difficult judgments etc.), operations requiring difficult postures, heavy operation and so on.

-6 Design FMEA

A Design FMEA is a tool to aid design improvement activities in clarifying defects in the design phase, including the design of production methods, and to take measures to prevent defects. This is to reflect the request of customers regarding products in the design prototype phase.

It is also important to reflect past problem-solving know-how. For this reason, establish procedures for implementation related to Design FMEA and manage based on the procedures.

(1) Clarification of potential design failure mode

The cross-functional team shall clarify potential design failure modes and the effects of their related causes for new designs, new functions, and new production methods, etc., also by utilizing the Past failure (Lessons Learned = Kakotora).

(Conform to the evaluation standards of the latest AIAG version.)

(2) Problem-solving execution

Analyze the causes (or mechanisms) of potential issues and take effective and appropriate measures from the three angles of design/quality evaluation/process, in order to minimize the possibility of trouble occurrence.

(3) Update of Design FMEA

When a design specification change occurs, due to a design change or problem-solving, review and update the contents of the Design FMEA appropriately depending on the scale of change.

(4) Record-keeping: Records related to "Design FMEA" according to Table 1. Records retention cycles for **"Tachi-s"**.

-7 Evaluation by testing

(0) Design review phase

The supplier must perform a Design review concept in early stage to assure that is capable to develop a tool, gauge or product meeting requirements, otherwise must communicate Tachi-s Procurement and Quality Assurance Departments.

(1) Design prototype phase

Check that all of the requested specifications are completely met for the reliability test and store the records of the test plan and results.

(2) Production trial phase

Check that the product produced by the regular production process meets the requested specifications.

① Reliability test (flame retardant properties of surface materials/resin, functions, strength, and durability), etc.
② Data that Tachi-S and a supplier decide as necessary

(3) Mass production phase
Periodical test data as set in the inspection standard

(4) Record-keeping: "Test Result Data" according to Table 1. Records retention cycles for **"Tachi-S".**

-8 Tier N management by supply chain chart

In order to attain the QCD target for the products to be delivered to Tachi-s and to prevent any quality issues due to a change by a tier N without notice, discern the supply chain structure of the component parts and conduct visualized management. Conduct management so as to be able to make a report when Tachi-S requests.

(1) Items to be managed
① Product configuration (clarifying parts and materials at each level)
② Properties of suppliers (supplier name, factory name, location, transaction experience)
③ Presence or absence of new products
④ Properties related to production (new properties, such as factories, along with production processes, production methods, technologies)
⑤ Presence or absence of development performance (Using performance not included) (parts with achieved results, manufacturer and model, type of vehicle)
* Refer to Attached form 8), "Supply chain chart."

-9 Confirmation for design prototype preparations status

During the new product quality assurance ramp-up activities, it is indispensable to check the accuracy of the activity plan up to the SOP and to check the preparation status of whether progress is delayed or not, along with other statuses, in order to ensure that the activities are on track.
For this purpose, use the following checklist for checking and evaluating the preparation status in order to execute appropriate correction.
* Refer to Attached form 20), "Production Preparation confirmation check sheet (#1, #2)."

-10 Substance of Concern (Specified substances)

Suppliers shall clarify the actions to be taken for regulations (including administrative guidance and industry self-regulation, etc.) related to substances of concern, establish procedures for implementation related to the "management of substances of concern," manage based on these procedures, and submit the MDS through the online IMDS system (Industria de Asiento Superior SA de CV IMDS inbox: 66908).

(1) Scope
To be applied to all parts and material delivered to our Company, considering the OEM requirements (time, corrections, etc.)
This includes all goods delivered (spot by, protype stage, mass production, etc.) to our company, including components for delivered parts, as well as secondary materials and auxiliary materials for production, such as labels, ink (printing), tape, resin pigment, rubber, banding, and packaging bags.
If engineering change (or any other change) is applied, the MDS must be updated and sent again through the IMDS.

(2) Regulations related to substances of concern contained in products
Regulations on substances that can affect the environment or human health
Example: Regulations on SOCs: Regulations by European ELV Directives/RoHS Directive VOC regulations: Regulations on volatile organic compounds causing air pollution.

(3) Definition of substances (specified substances) subject to regulation
Principally, the following are to be targeted: Substances specified to be prohibited or regulated in GADSL, along with Class I Specified Chemical Substances specified in the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (Japan) (hereinafter referred to as the "Chemical Substance Control Law"). In addition, the following are to be included: Substances specified in the laws and regulations of each country, and substances specified to be prohibited or regulated upon our request.
With regard to the details of specified substances, observe the drawings.

Specified substances are classified two types of P: Prohibited substance and D: Declarable substance.
① P: Prohibited substance
Substances classified into P must not be contained in parts or materials delivered to our company by an amount exceeding the regulatory level (content rate) except when the exemption clause is to be applied.
② D: Declarable substance
Substances classified into D have a high possibility of being classified as P in the near future. Therefore, it is necessary to study alternative technologies.

(4) Items to be executed by suppliers
① Add measures for regulations regarding substances of concern in the "Inspection Results Report" and describe the inspection results.

Table 3. Example of a description in the inspection results report.

Measures for regulations on substances of concern.	1. Product environmental information (material component) inspection results report	( )
	2. Proof of non-inclusion (evidence from vendor by type of goods) (Check an applicable item.)	Judgment
	[1] Purchased material (table of ingredients/analysis data, others [ ])	( )
	[2] Purchased secondary material (table of ingredients/analysis data, others [ ])	No change
	[3] Purchased part (initial product inspection results, others [ ])	
	Measures when the above methods are not available (number of items :) (actual measurement by the supplier itself, others [ ])	

② Attach evidence (chemical substance analysis table or others) for the non-inclusion of substances of concern to be regulated along with the "inspection results report" at the time of the new creation of an applied part, design change, or process change, etc. Note that products supplied by Tachi-S are excluded.
However, if a component analysis table or others are undisclosable due to a reason related to the know-how of a supplier, etc., identify it and attach the certification of the non-inclusion of substances of concern to be regulated.

There is no restriction on the certification format (see Attachment 23 & 24).
(5) Definition of terms

- IMDS: International Material Data System
  Internet system used to register information and make reports for the collection and analysis of part/material information in the automotive industry.
- Recommendations IMDS 001 – General Structure.
- Directive End of Life of Vehicles 200/53/EC + Annex II.
- GADSL: Global Automotive Declarable Substance List: List of declarable substances and prohibited substances in IMDS.
- REACH (Registration, Evaluation, Authorization and Restriction of Chemicals).
- RoHS (Restriction of Hazardous Substances).
- Conflict Minerals.

-11 Preparation of PPAP (Production Part Approval Process) related documents

Prepare and submit the PPAP documents considering level 3 or the level indicated by SQA members according to AIAG 4.1 Submission levels prior to Production Trial (name depend on Customer, or otherwise SQA agreed) based on the "PPAP correspondence table",
Submit these documents when Tachi-S requests.
* Refer to Attached form 16), "PPAP correspondence table."
To meet requirement 17 from PPAP need to be agreed with SQA.

NOTE: PPAP shall be updated considering the requirement of the Manuals PPAP & APQP of the AIAG.

-12 Validation production capability (Capacity)

Suppliers shall examine and confirm on the desk the maximum level of their own production capability (capacity) in the mass production process (main and sub processes).

(1) Validation
Confirm that approximately 100% +/-20% of production is possible when the target production volume per month based on the annual vehicle production volume suggested by customers is regarded as 100%.
Measures for that must be submitted to the Production Control department from Tachi-s.
(Validate resources, shifts, equipment, and overtime hours, etc.)

-13 Control of initial products

Suppliers shall establish procedures for implementation related to the "control of initial products" covering the following items for identification and quality checks of initially delivered products and manage based on the procedures.

(1) Object area
Newly designed parts, newly ordered parts, design-changed parts, process-changed parts, repair parts, and countermeasure parts, etc., are to be the objects.

(2) Execution of initial product quality checks

① Newly designed parts, newly ordered parts
Check the quality in each phase using the inspection standard established based on drawings, etc., and submit the inspection results report.

② Design-changed parts, process-changed parts
Check the quality based on the inspection standard and in relation to changed points and submit the inspection results report.

③ Rework parts, countermeasure parts

Check the quality of rework parts due to specification changes and for parts in which problems have been solved based on the inspection standard and in relation to rework or countermeasures points and submit the inspection results report.

④ Submission of a sample that has been used for a quality check

When order is given by a Tachi-S Quality Control Manager, submit the sample (simple part, cut sample, etc.) that has been used for the quality check.

(3) Procedure for initial product delivery to Tachi-S

① Submission of an initial product delivery notice

- Submit the initial product delivery notice along with the inspection results report to the SQA contact via the receiving contact, basically at the time of initial product delivery.

* For the preparation of the initial product delivery notice, follow Supplement 6), "Initial products control guidance."

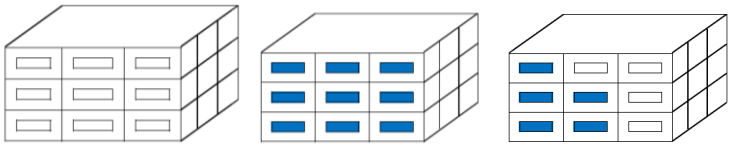
NOTE: Certification per shipment during mass production shall be submitted by e-mail to the SQC or attached to the material.

② Indication of initial products

- Attach the PPSA to the prototype products and the initial product tag (C8-05-01) for initial mass products.
- The indication of initial products must be made for every delivery location.

③ Prohibition of mixing new parts and old parts in one package

- The mixture of initially delivered new parts (parts with new specifications or countermeasure parts) and old parts is prohibited even when the old parts are allowed to be delivered.



New parts only Old parts only Mixture of new parts and old parts

OK Prohibited

(4) Record-keeping: "Initial Product Delivery Notice," "Inspection Results Report," "Control Book," "PPSA" etc., according to Table 1. Records retention cycles for **"Tachi-S"**.

5-1-2 Design prototype phase

In order to surely realize the requests of customers and the requirements shown in drawings in the production process, and to ensure quality, it is necessary to sufficiently study equipment, production methods, and methods for quality assurance. It is also important to reflect past problem-solving know-how. For this reason, establish procedures for implementation related to "process design" and manage based on the procedures.

-1 Confirmation of specification requirements

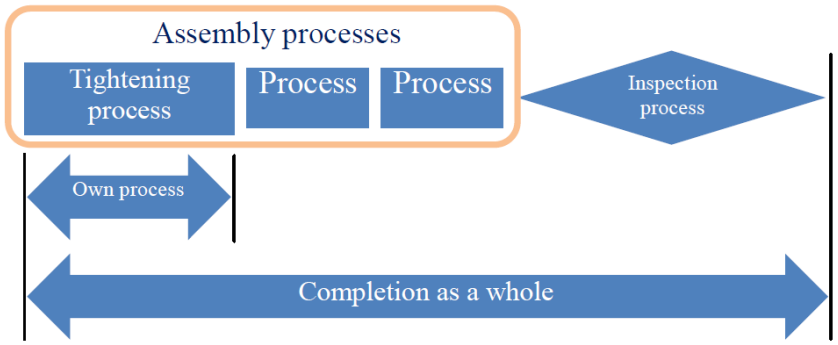
To ensure that the "production process" satisfies the requirements shown in drawings, execute a check using the following tools.

①Market research
②Past failure (Lessons Learned = Kakotora) check
③Process FMEA, etc.

-2 Consideration of decisions for assurance methods

The company should study the "how" and "where" of ensuring quality based on "own-process completion," in order to satisfy the quality requirements, production volume, and delivery date, and to reflect these in the QA table, QC process chart, inspection standard, and error-proof system, etc.

The intention of "Own-process completion" is that the operators can easily judge good part condition at the end of operation in own-operations (processes) and never pass (make) defective product.



-3 QA table

QA table is a document used to extract the important points regarding the design quality of a part indicated for Tachi-S requested parts as a predicted failure mode in each process, and to visualize the assurance of "Never make defective product." and "Never pass defective product.".
Make QA table and use it as a tool of assurance in the QC process chart and Standard Work Instruction, for the early stabilization of process quality.

-4 Defect prevention activity in process design stage

Study how to predict possible causes of quality defects in the production process and study how to eliminate such causes.
For the study, use the following tools.
① Process FMEA
② Past failure (Lessons Learned = Kakotora) check, etc.

(1) Elimination of difficult operations
Eliminate difficult operations and improve them not only from the viewpoint of an experienced operator but also from the viewpoint of a less-experienced operator, in order to eliminate quality variations due to difficult operations.

For hard-operation, refer to Item 5-1-1 -5 "Prevent defects activity in design step." P6.

-5 Process FMEA

A Process FMEA is a tool for process improvement activities to clarify possible defects in the production process and to take measures for preventing their occurrence or being passed through.
In order to surely reflect the requests of customers and the requirements shown in drawings in the production process, and to ensure quality, it is necessary to use the tools of a Process FMEA to prevent the occurrence of possible defects or such being passed through.

It is also important to reflect the past problem-solving know-how. For this reason, establish procedures for implementation related to Process FMEA and manage based on the procedures.

(1) Prevention of defects in the production process
At the time of designing the production process, the cross-functional team shall take measures to prevent the occurrence of possible quality problems in each operation process by utilizing past troubles, etc.
Reflect those measures in the control plan, work instruction, and other related forms.

(2) Error-proof
Take mechanical countermeasures such as the use of an error-proof, if the Risk Priority Number (RPN) is high.
If the detection level is high, countermeasures must also be taken for the controls implemented to be effective.
(Do this in conformance with the evaluation standards of the AIAG, latest version.)
RPN: Abbreviation of Risk Priority Number, RPN = Severity (S) x Occurrence frequency (O) x Detection rate (D)
For AIAG, refer to 5-1-2 "Design prototype phase," Item -2 "Design FMEA."

(3) Update of Process FMEA
When a process change occurs due to a design change or due to problem-solving, review and update the contents of a Process FMEA appropriately depending on the scale of change.

The FMEA must be reviewed at least once a year, additionally it should be reviewed every time there is an engineering change, customer complaints, etc.

(4) Record-keeping: Records related to "Process FMEA" according to Table 1. Records retention cycles for **"Tachi-S".**

-6 Control Plan

In order to surely realize the requests of customers and the requirements shown in drawings in the production process, and to ensure quality, it is important to completely reflect product characteristics and process control characteristics in the control plan.
For this reason, establish procedures for implementation related to the "control plan" and manage based on the procedures.
The control plan is a document that describes all of the production/process control methods to be implemented throughout the production processes, from the parts receiving to the product shipment, and it clarifies requirements for the high quality product. The control plan is to be submitted to Tachi-S.

(1) The control plan includes the following items.

① Process number, process name, equipment name, jig name
② Appropriate control methods and check frequency for product characteristics (all of the special characteristics and main characteristics) based on drawings
③ Appropriate control methods, check frequency, and display of special characteristics marks for process control characteristics
④ Clarification of specifications, tolerance, and measurement methods
⑤ Match of processes related to receiving, production, inspection, and shipment shown in the process flow chart
⑥ Check of the accuracy of all measurement devices and a check of the functions of monitoring devices and error-proof systems
⑦ Handling and countermeasures in case of abnormality

(2) Consistency in forms
Use the same process numbers for all of the related forms (example: control plan, process flow chart, work instruction, and Process FMEA, etc.)

(3) Record-keeping: "Control Plan" according to Table 1. Records retention cycles for **"Tachi-S"**.

-7 Inspection Standard

In the inspection standard, assurance details are clarified based on the instructions shown in drawings, and the inspection standard is to be submitted to Tachi-S by part.

(1) Items of the inspection standard

① Inspection items, importance, inspection frequency (100% sampling), inspection methods, judgment criteria, and items to be periodically inspected or tested (frequency), etc.

Supplier at least once a year a full report must be delivered for each part number supplied.

② For items for which sensory evaluation is needed, for example, color or grain; and the standard sample and limit sample are to be set.

(2) Record-keeping: "Inspection Standard" according to Table 1. Records retention cycles for **"Tachi-S"**.

-8 Application for delivery packing style

Suppliers shall study the Packaging Data Specifications (PDS) to ensure quality maintenance (no quality degradation) or require Tachi-s Production Control the Packaging Data Specifications (PDS) to Tachi-S and shall also be careful in handling. Tachi-S must approve by related departments as Quality, Production Control and Engineerin). If during SOP is necessary, review it should be negotiated between both parties, (supplier and Tachi-s), depends on part number apply.

(1) Items to be described

Supplier code, name of department in charge, company or factory name, contact information, model name, container name, hand held container (HHC), length (L), width (W), height (H), SNP, gross weight including package (kg), part number, part name, weight of single part (g), RFQ or Volume in units, Pieces per car (usage) deliverable date, and others

Also, study measures for securing safety and preventing damage/dirt.

(2) Approval Packaging Data Specification

The Tachi-S administration section shall consult with the quality control section and related sections and ensure that no problem exists. Then, the Tachi-S administration manager shall examine the delivery packing style, and the QC Manager shall approve it.

* Refer to Attached form 13) "Packing Data Specification."

The retention of this record will be the duration of the project. For service parts and EOP, packing style must accomplish with approved Packing Style; if variations are needed, those must have an agreement with Tachi-s Production Control.

SNP at End of Production shall be adaptable as a customer specific requirement.

-9 Confirmation for production preparations status including equipment (Contain Dies/molds, Jigs/tools)

To proceed with production preparation activities in accordance with the plan, establish procedures for implementation related to "production preparation progress management," covering the following progress checks in each phase, and manage based on the procedures.

* Definition of term

- Equipment: Main production equipment's like machine processing, welding, press, plastic mold etc., and included inspection equipment. (Dedicated, General-purpose)
- Dies/molds: Inclusive term die/mold for processing products. (Press, hammering, plastic, forming and so on)
- Jigs: Units for using fixing, positioning, control and guidance of cutting tool, Inspection Jigs, etc.

- Tools: Tools type of using for attachment, taking off, separating of Jigs & machines parts fastening and so on.

(1) Understand the production preparation status

Set a target to be attained for each phase based on the production preparation activity plan of the "new product quality assurance activity plan" and execute the evaluation of the progress status and take follow-up measures by using the following tools. Before starting mass production activity, make a judgment for transferring to mass production.

* Refer to Attached form 17) "Production Preparation progress confirmation plan" – evaluate achievement for main items

* Refer to Attached form 20) "Production Preparation confirmation check sheet (#3, #4, #5)" – evaluation of overall progress

Design prototype phase: #3

Prototype production phase: #4, #5

(2) Receiving audits

Cooperate when Tachi-S executes a check of the production preparation status and a follow-up in each phase.

(3) Timing

For each phase (timing), refer to Item 1-4 "Production process outline."

(4) Record-keeping: "Production Preparation progress confirm plan," "Production Preparation confirm check sheet," etc., according to Table 1. Records retention cycles for **"Tachi-S".**

-10 Setting equipment condition and maintenance control for equipment, Jigs, Tools

To ensure that the functions of the equipment, jigs and tools work effectively, establish procedures for implementation related to the "control of equipment, jigs, and tools," covering the following condition settings and control, and manage based on the procedures.

(1) Establishment of a condition table

When the control of equipment conditions including the conditions of welding, foaming, molding, heat treatment, and surface treatment, etc., significantly impact to quality, establish a condition table as optimum conditions.

(2) Management of equipment, jigs, and tools

In order to ensure that jigs and tools play their roles effectively, set appropriately the clamping method and dimension of locating pins, etc., to prevent negative effects such as abrasion.

(3) Filling out of forms and the keeping of records

Before starting production, check that equipment, jigs, and tools are proper condition by using the condition checklist and daily check sheet, etc., and record them.

(4) Training

Perform the training necessary for proper maintenance control, considering safety and ergonomic installations for all operators.

(5) Record-keeping: "Equipment Condition Checklist," "Daily Check sheet," etc., according to Table 1. Records retention cycles for "Tachi-s".

-11 Inspection Jigs

Inspection jigs are measurement devices used to judge whether parts meet the drawings and inspection standard. Therefore, suppliers shall design measurement devices as part of their responsibility.

* Refer to Attached form 18) Gauge specification and approval sheet

(1) The required values shown in drawings must be met. Make sure of these when designing measurement devices.

(2) Verify the accuracy of inspection jigs and record them as inspection results reports and keep photocopies of the reports with the inspection jigs as a set.

(3) Manage inspection jigs using daily check sheets even **the jigs are not used daily.**

-12 Environment control in inspection area

During inspections, secure appropriate lighting and take measures for preventing surrounding noise so that sensory inspections are not inhibited.

(1) Lighting

Secure a level of lighting that enables the detection of defects without fail. 800 lux or more is desirable. Measure and record the lighting level regularly to maintain the appropriate lighting and keep them.

(2) Sound

Secure an environment that enables the detection of abnormal noise without fail. For this purpose, secure an environment where no negative effect on sensory inspection judgment is present. Negative effects include the operating noise of nearby equipment and assembly operation noise, etc.

(3) Ergonomic facilities

It must have as a purpose the adaptation of the facilities, machines and work tools to the anatomy of the people who work in their companies within the inspection areas that allow them to perform an easy, efficient and safe analysis of the processes and products according with the specifications.

*Take care regulations for workers safety.

-13 Substance of Concern (Specified substances)

* Refer to 5-1-1 “Project plan for new products,” Item -10.

-14 Unify management of issues & countermeasures in prototype

Conduct unified management by using a "quality stabilization control chart" so that neither incomplete nor the missing of defect-corrective actions in the production trial phase. The cross-functional team shall direct activities regarding measures to be taken.

(1) Management using a "quality stabilization control chart"

Conduct unified management by using a "quality stabilization control chart" for taking secure measures.

* Refer to Attached form 22) “Project Development Record.”

(2) Record-keeping: "Project Development Record" according to Table 1. Records retention cycles for **“Tachi-S”.**

5-1-3 Production Trial phase

In order to surely meet the requests of customers and the requirements shown in drawings in the production process, as well as to ensure quality, it is necessary to sufficiently study equipment, production methods, and methods for ensuring quality in the production process (mass production process) and present to Tachi-s through a periodical progress meeting, lead by the supplier (review with SQA contact).

For this reason, establish procedures for implementation related to "production preparation" and manage based on the procedures.

-1 Defect Prevention activities in manufacturing process

Study the prediction of the possible causes of quality defects in the production process, along with how to eliminate them.

(1) Check items of the production process

Check difficult operations in the production process and check the possibility of Past failure (Lessons Learned = Kakotora) on site.

① Check that no difficult operation exists in the process.

② Check that systems are in place to prevent assembly mistakes or missing parts in the process.

③ Execute a check based on the Past failure cases (Lessons Learned = Kakotora).

(2) After the check, reflect the changed or revised contents into the control plan, standard work instruction, and other documents.

-2 Control plan

* Refer to 3-1-2 "Design prototype phase," Item -6.

-3 Inspection Standard

* Refer to 3-1-2 "Design prototype phase," Item -7.

-4 Standard work instruction

It is important to clearly define the following by using photographs and illustrations for easy understanding based on the request of customers, the control plan, and the operation requirements table. The job procedure, standard stock amount, key points in operation, equipment, jigs and tools, quality characteristics, parts to be used, operation time judgment criteria, and influence rate, etc., in each production process are to be defined.

For this reason, establish procedures for implementation related to the "standard work instruction" and manage based on the procedures.

The standard work instruction is to be used for the check, and everyone should be able to perform the same operation and observe the job procedure through the education/skill training for new operators and through operation observation.

(1) Consistency in forms

Use the same process numbers, symbols, and terminology, etc., for all of the related forms (example: control plans, process flow charts, and inspection standards, etc.).

(2) Record-keeping: "Standard work instruction" according to Table 1. Records retention cycles for **"Tachi-S".**

-5 Limit Samples

For appearance/sensory limit samples, actual samples or photographs are to be used for quality-level definition; as there is no other appropriate method for this.
(Example: Scratches, color, winkles, grain, gloss, and shape, etc.)

(1) Indication on limit samples

1.- Limit sample creation date
2.- Allowed limit level
3.- Type of vehicle and part name
4.- Effective period
5.- Signature by customer

(2) Agreement on limit samples

The responsible person shall sign each limit sample and make an agreement with us (Tachi-S) or the OEM.

(3) Prepare a Control Book and use it for management.

-6 Preparation of standards

Suppliers shall establish procedures for implementation related to the "preparation of standards" and manage based on the procedures, in order to prepare and streamline the standards necessary for continuous production and shipment of products that satisfy the requirements in properly managed processes.

(1) Main forms related to standards: To be made for each part and each process in the production trial phase, all parts to be targeted.

① Inspection standard
② Control plan
③ Standard work instruction (manual)
④ Inspection criteria
⑤ Limit sample
⑥ Daily check sheet, etc.

(2) Consistency in standards

Ensure consistency in standards ①, ②, and ③.

(3) Observation of standards

Thoroughly inform (educate) the operation details of the above-mentioned standards for the standards to be observed.
Provide training for operators and operation observation, and record this.

(4) Management of standards
Assign a responsible department for the creation, verification, and management of the standards, respectively.
The department responsible for management shall manage the condition of preparation and the streamlining of standards (revision or retirement, lack of equipment, etc.).

(5) Procedure for Tachi-S
① Submit the inspection standard and control plan for safety parts, important parts, and parts that the QC Manager specifies to the QC Manager via the procurement department in charge no later than one week before the delivery of a production prototype.
* Refer to Supplement 2), "Guideline on Creating a QC Process Table"
* Refer to Supplement 3), "Guideline on Creating an Inspection Standard"

-7 Safety parts control
In order to ensure the quality of safety parts and manage the process control characteristics and product characteristics, suppliers shall establish procedures for implementation related to "safety parts controls" and manage based on the procedures.

(1) Indication of identification marks of safety parts
Display the identification mark of "safety parts" on necessary standards and forms.
For identification on delivery packing, put the identification mark on the "delivered part lot card" (only when a lot card is attached) or delivery packing label, and indicate it on the container, such as the pallet or returnable box.
* For the identification mark of a "safety part," refer to Item 1-3 "Definition of terms."

(2) Execution of lot control
Assign a lot number and indicate it on the product itself.
For details, follow 5-1-3 "Production trial phase," Item -12 "Lot control Management," and Supplement 7), "Guidance on Assigning a Lot Number."
If supplier use a different system to assign lot number to material, is needed that it accomplish with traceability needs specified in 5-1-2 "Prototype production phase" Item -12 "Lot control Management".

(3) Securing and maintaining process capability
Concerning process capability index and process rejection rate, the following process control level or higher must be attained.

Process capability index: Cpk ≥ 1.33 or 1.67 (depends of the OEM) * For New Projects this data should be delivered before off process

revision (PT2 for Nissan; Dan 2 for Honda, PP for Aki Seat and HVPT for Toyota).

Process rejection rate: P < 0.01%
* Note that all products delivered to Tachi-S must be free of defects.

(4) Operator education
For operation processes that handle safety parts, assign operators who have completed education based on the internal rules.
Particularly, for processes with safety characteristics, assign designated operators. **For this operators, es necessary to have evidence of education and/or certification given; and have a special identification to distinguish from other operators.**

(5) Handling of reworked parts
When parts have been rework, designated operators must perform the reworking operation. The designated operators shall conduct the inspection of the safety and significance characteristics of reworked parts and shall undergo an inspection by a third party as well. In addition, use an indication for the reworked part on the part itself and keep records of rework, for the identification of reworked parts.

(6) Execution of self-audits
The responsible person for conducting the audit prescribed in Item 3) of 3-2 shall conduct an audit of the management implementation status of relevant parts once or more a year, in principle.

(7) Record-keeping: "Lot Control Book," "Record of Inspection/Test Result," and "Quality Defect History," etc., related to safety parts according to Table 1. Records retention cycles for **"Tachi-s".**

-8 Special process control
In order to consistently administrate the stable management of special processes where inspection is difficult through general inspections or tests, suppliers shall establish procedures for implementation related to "special process control" and manage based on the procedures.

Target process	Welding
	Following metallic treatment: Melt welding, electric resistance welding, brazing, soldering
	Tightening
	Bolt/nut tightening (specified portion)

	Heat treatment
	Following metallic treatment:
	Hardening, tempering, carburizing & quenching, carburizing & tempering, normalizing, annealing, high-frequency hardening, high-frequency tempering, nitriding, soft nitriding, flame hardening, flame tempering
	Surface treatment
	Following metallic treatment: Electroplating
	Riveting treatment
	Following metallic treatment: Spin riveting, press riveting
	Sewing
	Specified portions of the trim cover (Reinforce close, etc.)
Inspection and recording	Execute the inspection of control characteristics for each lot and record the results.
	As for heat-treated parts, execute the testing for hardness for each heat treatment lot and record the results.
	* If those inspections are not executed, clarify the reason for assurance.
Observation	Establish an operation standard for special processes and enforce it.
	* Also enforce the management items for daily checks.
Recording	For processes that can cause significant influence on quality, define the optimum conditions and record the results.

* The above processes must be performed by designated operators.

-9 Education and training

In order for a manager/supervisor to give education and training to operators (included inspectors) based on the standard work instruction and manual, etc., suppliers shall establish procedures for implementation related to "education and training," and manage based on the procedures.

(1) Operator education
① Planning for the education/training of operators
② Creating and preparing educational materials
③ Basic education for new operators/helpers and operators after an absence (of one month or longer)

④ Education on actual operations (standard work instruction) and operation observation
To be continued until operators acquire enough skill
(Evaluate operators by I=>L=>U level and educate them until they stably attain level L [at which an operator can perform operation without the help of others] or higher. If supplier use a different system to evaluate operator's skills and it meets this manual requirement, it can be used to cover this point.)
⑤ Education for the handling of abnormality
⑥ Recognition of qualifications
⑦ Education records

(2) Thorough education on change management
Also, in the case of a change in operation associated with a design change or process change, be sure to give education on the change, and assess the skill of operators and assign appropriate operators to actual operations.

(3) Record-keeping: Records of the "Education/Training Plan" and "Skill Evaluation Table," etc., according to Table 1. Records retention cycles for **"Tachi-s".**

-10 Management of measuring equipment accuracy
Suppliers shall manage the accuracy of measurement equipment to evaluate whether parts meet the drawings and inspection standards, along with whether they meet the requirements on process management, quality improvement, or other quality matters.
For this purpose, establish procedures for implementation related to "measurement equipment accuracy management" and manage based on the procedures.

(1) Measurement equipment (measurement equipment that has influence on the product adequacy assessment)

① Measurement devices (caliper gauge, height gauge, angle gauge, and push-pull gauge, etc.)
② Monitoring equipment (equipment for monitoring and detecting proper or incorrect operations, etc.)
③ Standard instruments (weight, block gauge, and standard solution, etc.)

(2) Check/inspection work
① Daily check: Check before starting operation (appearance, function, etc)
② Periodical check/inspection: Check/inspection to be executed periodically (appearance, function)
③ Calibration: Calibration of measurement equipment by using a standard instrument or other devices.

(3) Certificate of calibration
Prepare the following three items: Certificate of Calibration, Inspection Results Report, and Traceability System.

The equipment must have a system Traceability and the laboratory where calibrations / verifications are carried out must be certified according to ISO/ IEC 17025 or equivalent.

(4) Record-keeping: "Records Related to Measurement Equipment" according to Table 1. Records retention cycles for **"Tachi-s".**

-11 Measurement System Analysis (MSA)
Suppliers shall execute the evaluation and verification of repeatability and reproducibility, in order to secure measurement accuracy.
For this reason, establish procedures for implementation related to "measurement system analysis" and manage based on the procedures.

Guideline	To be based on "AIAG MSA Study Guide, Last Edition" The evaluation points are "repeatability" and "reproducibility." To be based on the analysis procedure and assessment criteria of "Average & Range Method"		
Preparation	① Preparation of MSA analysis (data sheet) Refer to the separate sheet of the supplement for "Measurement System Analysis," along with entry examples. ② Preparation of the MSA analysis report Refer to the separate sheet of the supplement for "Measurement System Analysis," along with entry examples.		
Assessment criteria	Gauge R&R assessment		
	%GRR	10% or less	Accepted
		Over 10% to 30%	Conditionally accepted (accepted if the approval of the customer is obtained regarding significance, gauge cost, and repair cost, etc.)
		More than 30%	Measurement system needs to be improved
Improvement	As a result, if assessed as "no good":		

① Prohibit the use of the relevant measurement system until it is improved and assessed as OK.

② Depending on the analysis result, the QC Manager should refer to the separate sheet of the supplement for "Measurement System Analysis."

-12 Lot control (Traceability control)

Suppliers shall figure out the production history and completely execute "first in first out" according to production dates for the purpose of minimizing the target range in case of trouble occurrence. FIFO system will be applied.
Also, in order to speed up the investigation of the cause in case of trouble occurrence, establish procedures for implementation related to "lot control" and manage based on the procedures.

(1) Object parts

In principle, execute lot control for parts to be delivered to Tachi-S.
① Safety parts and parts specified in drawings: Lot control must be executed.
② Other parts: Follow the direction of the Tachi-S QC Manager.

(2) Indication of lot number

Assign a lot number for easy search and tracking of part history.
① Indication on the product itself (finished products): In principle, indicate the lot number on the product itself (finished products). The indication must be made by a method difficult to be erased, such as marking or printing, etc.
② Indication on the delivery packing label: In principle, indicate the lot number on the delivery packing label.

(3) Record of lot control

Suppliers shall prepare and store a "Lot Control Book" to speed up the search and tracking of part history where necessary.

① In the Lot Control Book, enter the following by part: Receipt date, lot number, model number, manufacturing date, inspection date, shipment date, and quantity, etc.

(4) Search for target lot

With regard to safety parts and parts directed by the Tachi-S QC Manager, conduct management so that the target lot can be found within approx. two hours after being directed by Tachi-s.

(5) Method of lot control

① Lot control: Method of assigning the same lot number to a group of products for management
② Individual management: Method of assigning a specific number to a single product for management

(6) Lot unit

Depending on the characteristics of the part, configure a lot for the respective important processes throughout the entire processes, including material procurement, processing, assembly and shipment, and manage it.
Set a lot size in a manageable range. In principle, set production per day as one lot.

(7) Traceability control

For easy tracking and to minimize the target range for trouble occurrence, establish a system to execute "first in first out" according to production date for all of the processes, including deposits.

(8) Procedure for Tachi-S

Before the delivery of safety parts or parts directed by the Tachi-S QC Manager, suppliers shall submit the "delivery packing style" and "lot number definition" to the Tachi-S QC Manager.

(9) Record-keeping: "Lot Control Book," etc., according to Table 1. Records retention cycles for **"Tachi-S".**

-13 Inspection Jigs

* Refer to 3-1-2 "Design prototype phase," Item -11.

-14 Study process capability

Process capability refers to the capability of the process to produce conforming parts, including variation, in a stable manner.

(1) Purpose

The purpose of the process capability study is to check the process capability.

As needed make a process capability study plan and execute the process capability study.

①	Safety characteristics/important and function characteristics	Process capability index: Cpk ≥ 1.33
②	General characteristics	Process capability index: Cpk ≥ 1.00

*In some cases, Cpk depend from OEM requirement.

Form for reference: Process capability study result report

(2) Timing of the process capability study and submission
Check that all process capability indexes are met one and half months before the production transferring judgment meeting at Tachi-S. To do this, study the process capability immediately after the production tools and production process are prepared, and improve the process as necessary.
Submit the process capability study result when Tachi-S requests.

(3) Record-keeping: "Process capability study result report" according to Table 1. Records retention cycles for **"Tachi-S".**

-15 Environment control in inspection area
* Refer to 5-1-2 "Design prototype phase," Item -12.

-16 Validation production capability (Capacity)
* Refer to 5-1-1 "Project plan for new products," Item -12.

-17 Ensure mass-production readiness
Suppliers shall be responsible for ensuring a certain level of mass production (productivity, quality) in the prototype production phase.
Verify that the productivity and quality can be attained in the mass production allowed time.
If the productivity and quality cannot be attained, eliminate bottleneck operation processes and problems, take measures, and confirm that the measures have been completed.
Submit records when Tachi-S requests.
(Guideline: Approximately one-hour or 30-unit continuous production in the mass production allowed time.)

(1) Timing of implementation
The above-mentioned action must be completed one and half months before the production transferring judgment meeting at Tachi-S, at the latest.

(2) Condition for implementation
The above-mentioned action must be implemented under the final conditions of the 4Ms ("man," "material," "machine," "method").
All of the processes (including material supply, etc.) must be covered.

(Receiving=> Material supply => (Change Over) => Assembly => Inspection => Shipment)

(3) Preparation details

① All of the operators involved with production must be well-educated and have acquired the necessary skill.
② All of the manufacturing/inspection instruments and devices must be maintained and calibrated.
③ All of the forms for processes must be prepared (proper product design level) and kept in appropriate locations.

(4) Check items
① Cycle time for all processes
② Detection of bottleneck processes
③ First-run rate, OK rate, etc.
④ Die tooling change and set-up time

(5) Organization of problems and improvement
According to the result of checks for "ensuring of a certain level of mass production," take measures for the improvement of all of the problems to be improved.

-18 Equipment condition control
* Refer to 5-1-2 "Design prototype phase," Item -10.

-19 Confirmation for production preparations status including equipment

(Contain Dies/molds, Jigs/tools)
* Refer to 5-1-2 "Design prototype phase," Item -9.

-20 Evaluation by tests
* Refer to 5-1-1 "Project plan for new products," Item -7.

-21 Equipment Control
In order to meet the requests of customers and requirements shown in drawings and to assure quality in the production process, it is necessary not only to determine the appropriate equipment specifications but also to conduct management appropriately. For this reason, establish procedures for implementation related to “equipment control” and manage based on the procedures.

(1) Process preparation phase
Prepare and fill out the "equipment daily check sheet" or others for each piece of production equipment and manage the list.

The target production equipment is the following: Welding equipment, molding equipment, press equipment, painting equipment, tightening equipment, assembly equipment, and inspection equipment, etc.

(2) Daily control in the mass production phase

① Figure out the management status of the above-mentioned equipment and continuously check that they are in good condition.
② Devise a periodic maintenance plan and execute it.
② In case of abnormality, take measures promptly and ensure recovery.
③ Be sure to have a proper reserve of replacement parts for maintenance and repair and keep records.

-22 Processing non-conforming quality parts and reoccurrence prevention

If the supplier finds a quality defect in delivery parts to Tachi-S or the occurrence of a quality defect that could have been passed through to Tachi-S, it is indispensable to figure out the accurate situation and to take appropriate measures promptly (including improvements). For this purpose, establish procedures for implementation related to "handling of quality-non-conforming parts and reoccurrence prevention," and manage based on the procedures.

In case Tachi-s finds out defective parts in its plants or at customer facilities, a Notification of failure will be sent to the supplier (a sample of the failed part(s) will be provided whenever is available).

After receiving the notification of failure, supplier shall proceed as indicated in Figure 1, following SQC/SQA instructions (except by prototype products, which require immediate support).

Figure1. Time line for attending the failure

Once the supplier receives the urgent failure notice, it has three business days to sign for acceptance and send to Tachi-S quality area, at the same time supplier has 5 business day for inspection (sorting) 100% of the material to determinate quantity OK or NG.

Tachi-s according to the quantities of NG detected in the inspection, immediately prepares and issues a rejected material sheet, the signature and acceptance of this must be immediate once the supplier receives it and must determine the provision of this and / or the return form.

Provision material:
Scrap Subset
Scrap in TSM

Return to supplier floor:
TSM route
Provider path
Extraordinary freight

Once the Urgent Failure Notification is sent to the supplier, Tachi-S safeguard the material for a period of no more than 20 days. If the supplier does not remove the material from Tachi-S facility, We will not be responsible for any damage.

NOTE: Tachi-s reserves the right to initiate sort, scrap, rework or repair activities without prior authorization from the Supplier to protect production build.

The supplier must pay the sorter for inspection, repair and / or rework that Tachi-S assigns, as well as the expenses of the services and the use of the area if the system is within the Tachi-S facilities.

The following are required to be met by the contracting company that assigns Tachi-S for Inspection, repair and/ or rework:

General requirements:

- Bring your own tooling for the assigned activity.
- Bring your own PPE complete and in good condition.
- Personnel insurance sheets updated and in order.
- Properly filling out attendance records.
- Reports delivered of reworked material (daily while the service is being performed).
- Development of standard work instructions (HMTE).
- Staff availability and care for 24/7.
- Response time to reported faults containment of 2 hrs. at a minimum.
- Ensure that the correct draw of the material will be made with the personnel that comes.
- Have a Supervisor in charge of reviewing staff activities and performance, as well as informing the Plant Manager about the status of services.
- Service warranty, "0" incidents reported per customer.
- Comply with the Safety, Hygiene and Quality Standards of the plant where the service is performed.
- Meet set schedules.
- Maintain order and cleanliness in the service area.

Quality requirements:

- HMTE issuance validated by supplier and/or TSM within 24 hrs of opening the draw.
- In case of leakage by guaranteed material, inspected, reworked the service provider must be responsible and deliver clean point, otherwise the charge made by a second supplier guaranteeing us said material will be deducted.
- If the required rework is not delivered in a timely manner, a penalty of 5% of the total value of each invoice issued corresponding to the rework that is executed will apply.

Cost requirements:

- Submit your proposal in Mexican pesos.
- The cost must include the labor, transfer and supplies needed to perform the service.
- Cost Break down by regular day from Monday to Saturday, costs on Sundays, holidays and overtime.
- When the service requires special supplies will be quoted separately.
- Payments will be made via electronic transfer, to the account that the vendor indicates.

Services requirements:

- Daily delivery of the report at the close of the shift.
- Attention to the indications of the plant requesting the service.
- Weekly delivery of report with your respective invoice sent with the window of each floor for your Authorization.
- The Sorting staff shall not operate vehicles or machinery owned by the "Customer", except where there is a written request from the latter.
- In case of requiring any Tachi-s tools to have control and supervision of the good condition of the tool used in the services.
- The service supervisor must confirm their entire workforce on a daily basis if this is not, immediately implement a contingency plan for unscheduled fouls.

Note: When Tachi-S places a sorter within its facilities as a result of NG material by suppliers, all expenses incurred will be charged to the supplier.

An administration fee of 15 **% minimum** will be issued at that time at the discretion of the Tachi-S Supplier Quality representative and/or Quality Manager per event. Additionally, any associated costs incurred by Tachi-S or by Tachi-s customer whenever a supplier's non-conforming material is found, will be charged to the supplier.

Remarks: In case of having a client claim, the supplier will be responsible for covering the expenses generated to Tachi-S, as well as covering the fine or penalty issued by the client.

In the event where analysis results are inconclusive after 30 days (or within the timeframe set by Tachi-S), Tachi-S will determine the disposition of the material, including the cost ownership.

If additional time is required for the Supplier to appeal for charges, the supplier shall submit a written communication to request more time or a meeting.

In case of any quality problem in the products delivered to Tachi-S, customer and / or end user, the supplier is responsible for covering all the expenses that are generated from it.

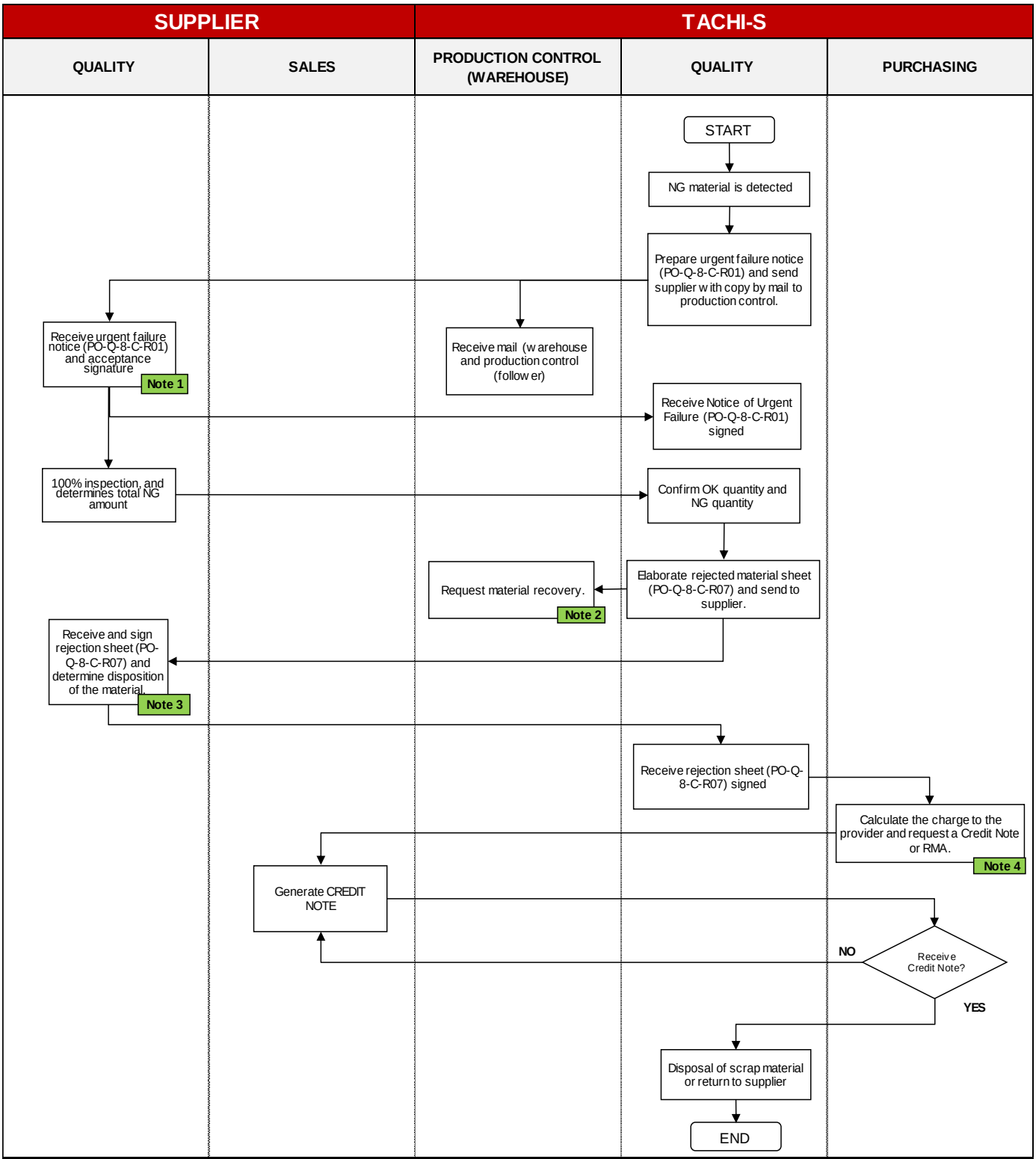
Costs include administrative expenses such as: material storage time, transportation, some modifications when notified that NG material is available, etc. When you have a line stop for material with NG conditions and / or lack thereof as a result of the supplier, the supplier will also be responsible.

All incurred costs for warehouse, transportation, sorting, customer claims, overtime or any other related cost linked to No conforming parts will be charged to supplier according to Credit Note (Suppliers National) and / or RMA (Foreign suppliers) summary explained in pages 121 and 122.

When Tachi-S requests a supplier to issue the credit note for expenses generated by the NG material, including administrative restrictions and other expenses, if it does not receive a response within the first 4 days of its issuance, a Note of charge that will be applied to your discount in the supplier's checking account.

For material NG, supplier needs to follow “No conforming part flow” steps assigned to supplier in order to give material disposition.

NON CONFORMING PART FLOW



NOTE: Field quality performance and Cost Recovery Concerns will be a significant factor in new product sourcing decisions.

(1) Information conveyance

Clarify the procedure of defect handling along with the reporting route, from the detector of the quality defect (including Tachi-S information) to the responsible person for quality assurance and Tachi-S and clarify the system of association with related departments.

Note that the responsible person for quality assurance shall assess the significance of the quality defect and decide on the method of countermeasures.

(2) Maintaining production at Tachi-S

Suppliers shall communicate through the part receipt contact of Tachi-S control production department and SQC to secure and supply parts to maintain production at Tachi-S. The handle of inventory at suppliers and Tachi-S shall be discussed.

(3) Handling and improvement

① For any defects, check the product itself and investigate causes, and execute appropriate handling and improvement.

Also, it is necessary to take temporary countermeasures until the permanent countermeasures are taken.

② If there are concern about quality-non-conforming parts being passed through, the responsible person for quality assurance shall direct the production stoppage.

③ Clarify the method of countermeasures against defects concerning special characteristics and record the results of the actions taken.

(4) Defects passed through to Tachi-S

For any quality defect that could have been passed through to Tachi-S, assess the situation immediately and take appropriate action, and at the same time, make a (report it must include containment action) to the Tachi-S SQC and follow their direction.

(5) Countermeasures for the reoccurrence prevention

① Countermeasures for reoccurrence prevention for individual cases

Assess causes of occurrence and for passing through quality defect from the perspective of the relevant product itself, the process, and human elements (operators and managers), and take permanent countermeasures.

In addition, execute the same countermeasures for similar parts.

Also, perform training for operators and inspectors (and persons concerned), as well as operation observation.

② Countermeasures for reoccurrence prevention in terms of systems

In order to prevent the occurrence of a defect due to a same cause, take countermeasures in terms of work systems (procedures, technical standards, management standards, and organization, etc.).

③ Execution of audits

The responsible person for quality assurance shall execute an audit on the validity of the defect handling executed and on the countermeasure for preventing reoccurrence, as well as on the continued observation of the measures.

④ Procedure for the initial delivery of countermeasure products

For the initial delivery of products for which defects have been handled and countermeasures have been taken, conduct the delivery procedure by following Item 3-3 "Control of initial products."

(6) Procedure for initial delivery

In the case where a defect has been handled and countermeasures have been taken, conduct the procedure for initial delivery for the delivery of countermeasure product.

Submit the initial product delivery notice and inspection results report, etc.

(7) Special acceptance

For any quality defects that could have been passed through to Tachi-S, assess the situation immediately and take appropriate action, and at the same time, make a report to the Tachi-S SQC and purchasing, and follow their direction.

If making a special acceptance, submit the "Waiver form" to the Tachi-S SQC, purchasing, production control in charge beforehand. The highest authority to approve Waiver is QA Manager, be aware of it due to can be invalid.

Note: All the special acceptances requested by the supplier must arrive through the purchasing department, who is in charge of internal monitoring (tracing).

(8) Report on details of improvement taken

When requested for an answer on the details of defect improvements taken by filling out Attached form 26), "Inspection Quick Notice and Correction Records" (issued by Tachi-S), suppliers shall enter details in Attached form 27) "Analyze Report (Countermeasure report for the prevention of reoccurrence, 8D report)", and submit it along with the answer in "Inspection Quick Notice and Correction Records" to the SQA / SQC within the time limit determined by Tachi-s.

-23 Unify management of issues & countermeasures in prototype phase

* Refer to 4-1-2 "Design prototype phase," Item -14.

-24 Tier N management by supply chain chart

* Refer to 5-1-1 "Project plan for new products," Item -8.

-25 Substance of Concern (Specified substances)

* Refer to 5-1-1 "Project plan for new products," Item -10.

-26 Control of initial products

* Refer to 5-1-1 "Project plan for new products," Item -13.

5-2 Quality assurance for mass production phase

1) Ramp-Up control

Suppliers shall establish and execute a "ramp-up activity plan" to secure quality and delivery requirements, while striving for early stabilization and transitioning to daily control early in the mass production start-up (SOP) phase (approximately 3 months). For this purpose, establish procedures for implementation related to "ramp-up control" and manage based on the procedures.

Plan shall be received by Tachi-S SQC during pre-production stage, reviewed, approved and followed up. It should be signed back to the supplier at the beginning and end of the activity.

-1 Ramp-Up Activity plan

(1) Establish the ramp-up activity plan including the following items.

① Objective model and part number
② Name of supplier and manufacturing plant
③ Period of ramp-up control activities
④ Target value (delivery quality, process quality, receiving quality, equipment failure)
⑤ Organization (Total responsible person, quality control responsible person, production control responsible person, production responsible person, etc.)
⑥ Feedback system for information-sharing (for early countermeasures against causes and improvement)
⑦ Ramp-up control items (receiving inspection, inspection within process, increase of Shipping inspection frequency [100% inspection], special inspection)
⑧ Assessment criteria for closing ramp-up control activities

* Refer to Attached form 21) "Ramp-Up Activity plan"

(2) Record-keeping: "Ramp-Up Activity plan" according to Table 1. Records retention cycles for **"Tachi-S".**

-2 Activity to achieve Key targets

(1) Especially, take the following points into account for early quality stabilization.

① Increasing the frequency of sampling, adding inspection items, and executing special inspections, e.g., sampling inspections

② Sharing problem information among related departments and investigating causes for early problem-solving
③ Evaluating the process capability index and process rejection rate, and striving for process improvement based on the evaluation result.

-3 Audit to close "Ramp-up Activity"
Tachi-s QC team shall check and evaluate the ramp-up control status and confirm that the closing conditions are satisfied by an audit. Tachi-s may decide to re-audit the Supplier once all corrective actions have been implemented, or may at the engineer's discretion, re-assess the non-conformances on the next scheduled audit or visit.

NOTE: The performance during development stage may require the indispensable support through a resident at Tachi-S facilities.

(1) Record-keeping: Records of closing ramp-up activity according to Table 1. Records retention cycles for "Tachi-s".

-4 Control of initial products
* Refer to 5-1-1 "Project plan for new products," Item -13

2) Daily control

-1 Quality target achievement management
Suppliers shall set a target with regard to delivery defects, process defects, and receipt defects (see Table 4. PPMs per commodity).

Establish procedures for implementation related to "daily control" for quality improvement and manage based on the procedures.

(1) Target management
Establish an organizational execution plan to attain the target and set up periodical meetings (monthly, etc.) to manage the improvement progress.

Table 4. PPMs per commodity

ITEM	CODE	COMMODITY	PPMs Target 2020	PPMs Target 2021
1	A-001	Cables (Electric)	7	7
2	A-002	Cables (Mechanical)	7	7
3	A-003	Electrical (Harness)	7	7
4	A-004	Electrical (Heaters)	7	7
5	A-005	Electrical (Motors)	7	7
6	A-006	Electrical (Switches)	7	7
7	A-007	Fasteners (Bolts, nut, screw)	7	7

8	A-008	Foam (Chemicals)	7	7
9	A-009	Foam (Molded)	7	7
10	A-010	Foam (Pour in place)	7	7
11	A-011	Hard board (Molded)	7	7
12	A-012	Hard board (Sheet)	7	7
13	A-013	H-Clips (Plastic)	7	7
14	A-014	Mechanism (Active HR)	7	7
15	A-015	Mechanism (Lifter)	7	7
16	A-016	Mechanism (Lock)	7	7
17	A-017	Mechanism (Lumbar)	7	7
18	A-018	Mechanism (Recliner)	7	7
19	A-019	Mechanism (Track)	7	7
20	A-020	Mechanism (Walk in)	7	7
21	A-021	PIP (Pour in place)	7	7
22	A-022	Plastic (Bags - Covers)	7	7
23	A-023	Plastic parts (Multishot)	7	7
24	A-024	Plastic parts (Blowed)	7	7
25	A-025	Plastic parts (Injected)	7	7
26	A-026	Plastic parts (Press Molded)	7	7
27	A-027	Rubber products	7	7
28	A-028	Safety (Air bag)	7	7
29	A-029	Safety (Buckle)	7	7
30	A-030	Staples	7	7
31	A-031	Trim cover	7	180
32	A-032	Trim sub-assemblies	7	180
33	A-033	Rotary mold injection	7	7
34	A-034	General Frame Subassy	7	6
35	A-035	Light asssy	7	7
36	A-036	Plastic Overmolded	7	7
37	A-037	Control Climate System (CCS)	7	7
38	F-001	Casting	7	7
39	F-002	Coating (paint, chrome, zinc)	7	7
40	F-003	Coating (plastic, PVC)	7	7
41	F-004	Machinery	7	7
42	F-005	Metal (Coil)	7	7
43	F-006	Metal (Sheet)	7	7
44	F-007	Metal (Springs)	7	7
45	F-008	Metal Large Parts	7	7
46	F-009	Metal Medium Parts	7	7
47	F-010	Metal Small Parts	7	7
48	F-011	Pipes (Formed)	7	7

49	***F-012***	Pipes (Mills)	7	7
50	***F-013***	Welding and frame assy	7	*6*
51	***F-014***	Wires (Bended or stamped)	7	7
52	***F-015***	Wires (Coil)	7	7
53	***F-016***	Cold forging	7	7
54	***F-017***	*Stabilizer Weight (DINAMIC DUMPER)*	*7*	*7*
55	***M-001***	*Lubricants*	*7*	*7*
56	***M-002***	*Weld gas*	*7*	*7*
57	***M-003***	*Weld wire*	*7*	*7*
58	***M-004***	*Plastic pack & containers*	*7*	*7*
59	***M-005***	*Carton pack & containers*	*7*	*7*
60	***P-001***	*Foam (Chip-Recycled)*	*7*	*7*
61	***P-002***	Foam (Slabs)	7	7
62	***P-003***	*Glue*	*7*	*7*
63	***P-004***	*Sensors (Position)*	*7*	*7*
64	***P-005***	*Sensors (Weight)*	*7*	*7*
65	***P-006***	*EPP core foaming*	*7*	*7*
66	***P-007***	*Foam (Wadding)*	*7*	*7*
67	***T-001***	Carpet (Coil)	7	7
68	***T-002***	Carpet (Cut-Molded)	7	7
69	***T-003***	*Fabric (Non visible) SCRIM*	*7*	*7*
70	***T-004***	Fabric (Non woven)	7	7
71	***T-005***	Fabric (Safety) / NYLON	7	7
72	***T-006***	Fabric (Visible)	7	*100*
73	***T-007***	Foam (Lamination)	7	*100*
74	***T-008***	*Isofix buttons*	*7*	*7*
75	***T-009***	*Labels and tags*	*7*	*7*
76	***T-010***	*Laces, straps & ropes*	*7*	*7*
77	***T-011***	*Leather (Cut pieces)*	*52*	*52*
78	***T-012***	*Leather (Hide)*	*52*	*52*
79	***T-013***	*Paper cord*	*7*	*7*
80	***T-014***	*Plastic (Fasteners)*	*7*	*7*
81	***T-015***	Extruded and co-extruded	117	7
82	***T-016***	*Stickers*	*7*	*7*
83	***T-017***	Thread	7	7
84	***T-018***	Velcro	7	7
85	***T-019***	Vinyl	7	7
86	***T-020***	Zippers	7	7
87	***T-021***	*Leather lamination*	*7*	*7*
88	***T-022***	*Trim air flow spacer*	*7*	*7*
89	***T-023***	*Embroidery*	*7*	*7*

90	*0-111*	OTHERS	7	7

-2 Processing of non-conforming quality parts and reoccurrence prevention

* Refer to 5-1-3 "Production Trial phase," Item -22.

-3 Safety parts control

* Refer to 5-1-3 "Production Trial phase," Item -7.

-4 Special process control

* Refer to 5-1-3 "Production Trial phase," Item -8.

-5 Study process control level

In order to improve and manage the quality of the products, figure out the control level for the process by using the process capability index to promote improvement. Thus, execute activities for the improvement of the process control level.
The process control level must be at least the level of the following value.

(1) Assessment criteria

①	Safety characteristics/important and function characteristics	Process capability index: Cpk ≥ 1.33 Process rejection rate: P < 0.01%
②	General characteristics	Process capability index: Cpk ≥ 1.00 Process rejection rate: P < 0.30%

- For important items, utilize control chart, etc.
- All products delivered to Tachi-S must be free of defects.

(2) Handling
If the process capability (Cpk) index and process rejection rate (P) do not satisfy the above conditions, take measures for improvement. If it is not possible to satisfy the process capability, execute the 100% inspection.

(3) How to deal with the process capability index
① When the average value of the Cp measurement data equals the median value of the standard (variation)
② When the average value of the Cpk measurement data does not equal the median value of the standard (deviation, misalignment)
In this standard, Cpk is to be adopted.

Reason: In most cases, the average value of the measurement data does not equal the median value of the standard, and even when Cp is OK, Cpk is sometimes "no good," possibly resulting in defects being passed through.

-6 Change management

Change needs to be conducted with due consideration to the influence on the production process and quality due to process changes, along with influence on quality due to design specification changes. For this reason, establish procedures for implementation related to “change management” and manage based on the procedures.

For process change or design change by Tier 2 and subsequent tier suppliers, suppliers shall also conduct "change management" based on Supplement 4) "Process Change Guideline" and "Change point control Procedure," along with Supplement 5) "Engineering Change Guideline" for permanently stabilizing quality, as well as periodically checking the understanding of the "Change
Point Control Procedure" by the Tier 2 and subsequent tier suppliers.

(1) Management of process change

① Scope

I	New introduction, modification, or transferring of equipment (molds, jigs, and tools)	- Change in production process or production site, etc. - New introduction, modification, or transferring of machine and equipment, etc.
II	Change in methods	- Change in processing condition, production method, or process sequence, etc. - Casting, forging, heat treatment, welding, Surface treatment, and molding, etc. - Change in special process method or condition, etc.
III	Change in materials	- Quality of material, grade, manufacturer, and secondary material, etc.

* When Tier 2 or subsequent tier suppliers have executed a change of I, II, or III above.
* Refer to Supplement 4) "Process Change Guideline" and "Change point control Procedure," along with Supplement 5) "Engineering Change Guideline."

② Advance check

- Clarification of the reason for the change or contents to be changed (including target part)
- Study quality targets and how to ensure quality (including plans)

While investigating how to ensure quality, clarify the process FMEA, trial period, method, quantity of samples, quality check process capability study, internal audit, undergoing of the audit, preparing of standards, target part list, education given to operators and inspectors, control of initial products, and risk verification.

- Making an execution plan and completing it. (for every equipment introduction step, including production volume and production start timing, etc.)

③ Details of activities

Execute activities based on the quality target and how to ensure quality in "process change."

In addition, execute the following items.

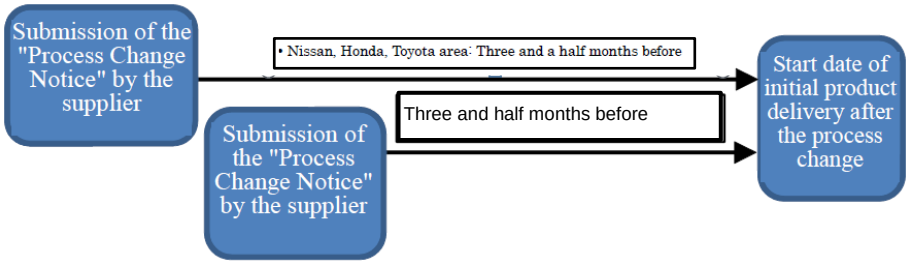
- Record check results related to the change.
- Check that the quality levels before the change and after the change are the same.
- Check that the risk verification results and workaround plan related to the change have surely taken root.

- Assess whether or not the execution of the process change is allowed based on the results of the internal audit (voluntary audit).
- When a Tier 2 or subsequent tier supplier is changed, review and check the "Tier N management by supply chain chart."
  * Refer to 5-1-1 "Project plan for new products," Item -8.
- Execute activities by following the method of "ramp-up control."
  * Refer to 3-2 "Quality assurance in the mass production phase," Item 1).
- When requested by Tachi-S, respond promptly.

④ Procedure for Tachi-S

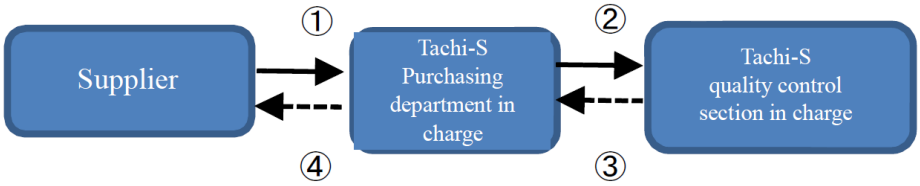
- In principle, the due dates for the submission of the "Process Change Notice" are as follows.

I	Nissan, Honda, Toyota area	Submitted to Tachi-S **three** and a half months before the start date of initial product delivery
II	Others than the above **(Tier N)**	Submitted to Tachi-S **three** and half months before the start date of initial product delivery



- When a change of process and / or engineering is required by any supplier, it must be sent through department purchases, three and a half months before the start date of the initial delivery of the product (three and a half months before the date planned to adopt change).
- Once the purchasing area receives notification of any engineering change from the supplier, it will be the area responsible for issuing the format used according to the application corresponding to the customer or depends of the OEM for filling.
- For urgent matters, contact Tachi-S Purchasing and follow their direction.
- In principle, a process change cannot be executed during the ramp-up activity period (approximately three months).

⑤ Forms route



⑥ Receiving audits

When Tachi-S deems necessary, suppliers shall undergo an audit by Tachi-S on activities and results for a process change.

⑦ Record-keeping: Records related to process change management according to Table 1. Records retention cycles for **"Tachi-S".**

(2) Management of design change

① Scope

- Change of specifications that Tachi-S requests
- Design change required due to a process change

- Change in material/material grade (including components/blending) or material manufacturer (to be included in the material change under the same specifications)
- Others that suppliers assess as critical

② Activity Details

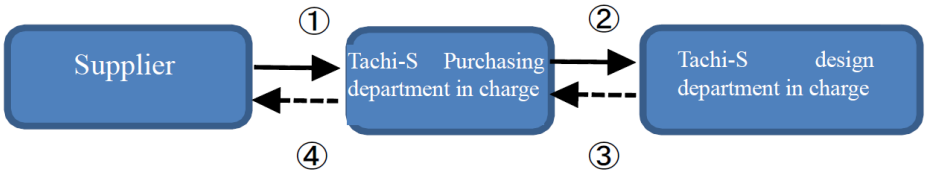
- Evaluate the adequateness of the design change, etc.
- Execute activities to ensure appropriate quality appropriately depending on the scale of the design change.
- Execute activities by following the methods of "ramp-up control."

③ Tachi-S Procedure

Regarding the preparation and submission of the "Design Change Application," devise an adoption schedule considering the schedules of adequateness evaluation before the change and process change procedure, in principle.

* Refer to Supplement 6) "Initial products control of guideline."

④ Forms route



⑤ Record-keeping: Records related to design change management according to Table 1. Records retention cycles for "**Tachi-S".**

-7 Preparation of standards and so on

* Refer to 5-1-3 "Production Trial phase," Item -6.

-8 Education and training

* Refer to 5-1-3 "Production Trial phase," Item -9.

-9 Lot control (Traceability control)

* Refer to 5-1-3 "Production Trial phase," Item -12.

-10 Equipment Control

* Refer to 5-1-3 "Production Trial phase," Item -21

-11 Management of measuring equipment accuracy

* Refer to 5-1-3 "Production Trial phase," Item -10.

-12 Periodic inspection and Testing

Based on the quality agreement, check that products manufactured by mass production processes satisfy Tachi-S requested specifications.

(1) Test

- Reliability test (flame retardant property of Trim/resin, functionality, strength, and durability), etc.
  Periodic data that Tachi-S and a supplier assesses as necessary
- For the above-mentioned test, observe the "inspection standard," etc.
- When requested by Tachi-S, promptly submit the results and data.

-13 Control of initial products

* Refer to 5-1-1 "Project plan for new products," Item -13

-14 Kaizen activity on the work floor (Gemba)

Suppliers shall continuously perform daily improvement activities to enhance process quality.

(1) Improvement activities

For process defects (including chronic defects), conduct daily meetings (QRQC meetings, etc.) with the attendance of related departments to decide on the handling of and measures against defects, and follow up on any progress.

(2) Prevention

Give feedback to upstream processes to prevent reoccurring defects and utilize it to prevent-occurrence-activities.

-15 Tier N management by supply chain chart

* Refer to 5-1-1 "Project plan for new products," Item -8.

-16 Substance of Concern (Specified substances)

* Refer to 5-1-1 "Project plan for new products," Item -10.

-17 Quality record management

Suppliers shall show or submit quality records according to Tachi-S request. For proper management of the quality record using the procedures that the suppliers have set, establish procedures for implementation of “quality record management” and manage based on the procedures.

(1) Objects

Quality records concerning safety parts and special processes
Quality records concerning general processes

(2) Quality record

Welding destruction check sheet, daily check sheet for equipment, inspection results report, skill training plan table, shipment management table, production order, finished product inspection check sheet, start-up check sheet for measuring equipment, record of macro welding inspection, and record of reworking, etc.

(3) Discarding
Discard the quality records when the storage period has expired after destroying them to render them unreadable.

(4) Record-keeping: Quality records
The storage period differs depending on the customer. Observe the respective storage period as shown below.
For other customers, observe the storage period for Tachi-S **Table 1.**

3) Supplier self-audit

In order to check and evaluate the quality assurance function in each phase of product development and design through to mass production, and to ensure that products meet the quality requirements that.

An evaluation of the aspects, Quality, Delivery and Supplier Capability is carried out for the evaluation of its viability, in the corresponding areas of the QCD Supplier Pre-approval and Evaluation Organization.

Tachi-S requests are permanently and stably manufactured and delivered, establish procedures for implementation related to "auditing," covering the following items, and manage based on the procedures.
Additionally, in order to ensure that the quality management system properly functions throughout the entire company, periodically execute an internal quality audit.

-1 Selection of person responsible for the Audit

The person responsible for quality assurance shall nominate a person responsible for conducting each type of audit.
This person shall perform the following tasks.

① Making and executing an audit plan, and following up on the execution results
② Cooperation in audits by Tachi-S

-2 Audit types

Quality assurance system audit	Check and evaluate systems, standards, administration, and implementation status, etc., to assure product quality in each phase of product development and design through to mass production and use in the market, based on the items that Tachi-S requests.
Process audit	Check and evaluate whether the process control (level) is adequate and whether the standards are observed.
Product audit	Check and evaluate the status of achievement for product quality that is specified in the product standard (or specifications shown in design drawings, etc.), which includes the Tachi-S requirements.

Audit of process changes	When processes are changed due to design change and process change, etc., check and evaluate whether a process control level equal to or higher than the conventional one can be achieved.
Audit of Tier 2 suppliers	Plan and execute audits following the methods of each item above for Tier 2 suppliers.
Internal audit of quality management system	Periodically check and evaluate whether the QMS (Quality Management System) functions properly throughout the entire company, by conducting an internal audit.

-3 Audit management

Establishing evaluation standards	Establish evaluation standards that clarify the items to be evaluated, details to be checked and required levels, before executing audits, and then implement the evaluation.
Planning of audits	The audit responsible person shall make an annual management plan for each audit type and execute it. (Extraordinary audits are to be planned on a case-by-case basis.)
Execution of audits and follow-ups	The person responsible for the audit shall execute the audits in accordance with the plan by following the procedures, as well as following up on the progress of improvement and the validity of improvement effect.

4) Supplier management of Tier 2 and under Tier 2

In order to manage Tier 2 and subsequent tier suppliers so that the that Tachi-S quality requirements are securely realized in the work of Tier 2 and subsequent tier suppliers, establish procedures for implementation related to “supplier control” and manage based on the procedures.

-1 Definition of term

① Supplier (Tier 1 supplier): Supplier receiving a parts order directly from Tachi-S.

② Tier 2 and subsequent tier suppliers: Refers to a supplier that provides components to the Tier 1 supplier or a company to which processing or inspection, etc., is outsourced by the Tier 1 supplier; includes subsequent tier suppliers, these are collectively referred to as "Tier 2 and subsequent tier suppliers.".

-2 Selection and agreement

When a supplier utilizes Tier 2 supplier, the supplier shall decide the criteria for selection, and shall then make an agreement with them.

-3 Quality assurance requirements

(1) In principle, the requirements that a supplier requests from Tier 2 and subsequent tier suppliers are to be the same as this standard, but the supplier may adapt standards according to the actual conditions of the Tier 2 and subsequent tier suppliers, if necessary.

Inspection standard	Based on the quality requirements for parts, stipulating the details for the preparation and submission of the inspection standard (check sheet) related to inspections conducted by the Tier 2 and subsequent tier suppliers.
Control plan	Stipulating the details for preparation and submission of the QC process chart in which the quality assurance methods executed by the Tier 2 or subsequent tier suppliers in the production department, inspection department, and management department are described, in the order of production process and in a manner such that quality assurance work throughout the entire processes can be understood.
Process change (design change)	Stipulating the notification method when Tier 2 or subsequent tier suppliers change a process.
IMDS	Tier 2 suppliers shall assure Tier N got training and have ability to submit on time and according to IMDS rules.
PSW	PSW's from Tier N should be included into the PPAP package to Tachi-s. PSW's should have MDS ID number into it to be approved.
Control of initial products	Stipulating the notification method when Tier 2 or subsequent tier suppliers deliver initial products.
Handling for the occurrence of defects	Stipulating the handling method when a quality defect occurs in Tier 2 or subsequent tier suppliers.
Ramp-up control	Stipulating the quality assurance activities that Tier 2 or subsequent tier suppliers execute in the ramp-up control.

(2) Utilizing noted points

When utilizing Tier 2 or subsequent tier suppliers, suppliers shall pay due attention to the following concerning quality assurance, as well as clarify the allocation of roles between the supplier and the Tier 2 or subsequent tier supplier concerning quality assurance.

① Clarification of quality requirements for products provided by Tier 2 or subsequent tier suppliers and necessary conditions concerning production (particularity in production methods, etc.)

② Evaluation of the capability of Tier 2 and subsequent tier suppliers

i. Manufacturing technology (experience and result of production, production technology, equipment, and qualification, etc.)
ii. Production capability (capability of undertaking more production volume or earlier delivery dates, process capability to secure quality, etc.)
iii. Quality control capability (quality assurance system and others)

-4 Audit and coaching

Suppliers shall conduct a quality audit of Tier 2 and subsequent tier suppliers periodically or as necessary for checking and evaluation, and shall give instructions for defects. Tachi-S may attend the audits as necessary.

-5 Safety parts application

The selection and utilization of Tier 2 or subsequent tier suppliers falls under the decision of suppliers on their own responsibility. However, when utilizing Tier 2 or subsequent tier suppliers for safety parts (vital parts), submit the "Use Notice of Tier 2 or under Tier 2 Suppliers" to the quality control section via the procurement department in charge in advance, and then follow the necessary directions.
(If the application of this prescription is not appropriate due to special reasons, it may be omitted.)
* Refer to Attached form 2) "Use Notice of Tier 2 or under Tier 2 Suppliers."

-6 Tier N management by supply chain chart

* Refer to 5-1-1 "Project plan for new products," Item -8.

5) Score card

To evaluate and verify that suppliers are under necessary parameters to accomplish with necessities of supply chain required by Tachi-S; monthly scorecard will be applied, where performance of three items are review: **Quality, Cost and Delivery**. It applies to all suppliers that deliver material and/or service that influences directly on Tachi-s product.

Area will send to supplier monthly scorecard results with a resume of performance by categories as next:

Rank	Category	Level	Status indicator		Escalation process
95-100	Outstanding	L1 	OK	Meets expectations	General supervisar
80-94	Good	L2	Monitoring Plan	Meets expectation	

60-79	Regular	L3	Improvement plan	Marginal	General Manager
<59	Poor	L4	Running Change	Improvement Required	President

L1: Suppliers to consider for new projects.

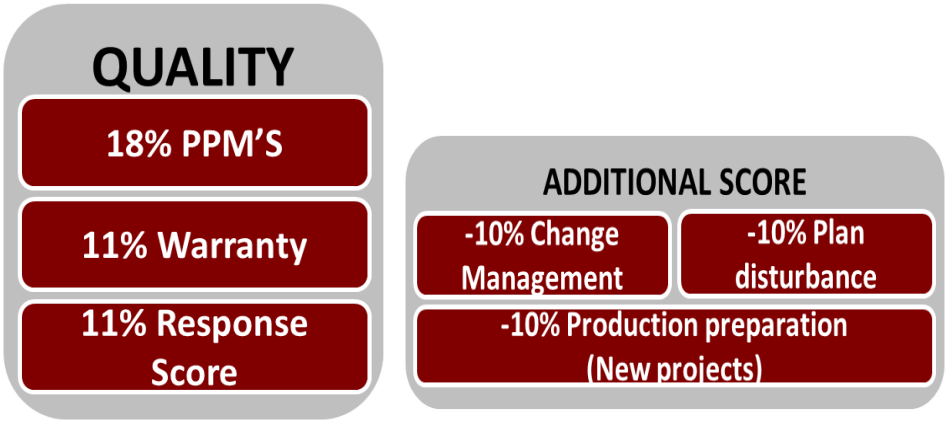
L2: Supplier who needs a Monitoring plan to reach a better level

L3: Supplier needs improvement, if supplier has three consecutive months as L3, it will fall in business hold, and it cannot quote for new projects. Supplier needs to present an improvement plan.

L4: Risk supplier, needed to present an improvement plant by company director or president; supplier will be on business hold and if there is no improvement, Tachi-s reserves the right of change supplier.

As quality Tachi-s also evaluate the Change Management affectations to the plants, Plant disturbance and Production preparation issues for New projects, in case of object, it's necessary inform to purchasing department TSM * Refer to 5-1-1 "Project plan for new products," Item -8.

Score Card evaluation:



6. Audit by Tachi-S

- Tachi-S shall conduct audits of suppliers based on the annual management plan or may conduct extraordinary audits as necessary in order to check that suppliers are addressing quality assurance activities based on the "Quality Control Standard for Suppliers."
- Supplier will be notified during the first month of the year about the day(s) schedule for the audit. Any adjustment must be agreed with the SQC.
- Self-Assessment results shall be submitted one month prior to annual audit to Tachi-S QC Manager and SQC, in case of been L3 or L4.
- When requests for improvement or recommendations are made during audits by Tachi-S, suppliers shall submit the improvement plan into 30 days after assessment to Tachi-S and implement improvement based on the improvement plan.
- Tachi-S shall execute follow-up audits on the progress status of improvement, as needed.

To review the content of a general audit, Refer to attachment 29. "Audit format".

7. Review

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8. List of submitted documents (Forms)

List of submission documents

Symbol o: With attachment

Item		Documents	Description and Submitting Timing	Applicable			Attachment	Submission Dept. and No. of Documents	Format	Examples of description
				All	Designated	Applicable				
Notification	1)	Supplier Contact Directory	Submitted at the start of business and upon a change of Response person for QA etc.	●			1	Purchasing dept	o	PENDING
	2)	Use Notice of Tier 2 or under Tier 2 Suppliers	When outsourcing the manufacture of Safety parts (important parts) based on the standard requested by Tachi-S for "Use Notice of Tier 2 or under Tier 2 Suppliers", notification shall be issued before 3.5 months before every using. (Except Nissan, Honda and Toyota groups: Before 1.5 months)			●	2	Purchasing dept	o	o
	3)	Process Change Notice	Submitted before 3.5 monthes before changing a process. (Except Nissan, Honda and Toyota goupes: Before 1.5 months)			●	3	Purchasing dept	o	PENDING
	4)	Process Change Deployment Plan	Submitted before 3.5 monthes before changing a process. (Except Nissan, Honda and Toyota groupes: Before 1.5 months)			●	4	Purchasing dept	o	o
	5)	Design Change Application	Submitted before proposing or applying for an design change.			●	5	Purchasing dept	o	PENDING
	6)	Special acceptance	Submitted before proposing Deviation Authorization because of economic efficiency of parts.			●	6	Purchasing dept	o	PENDING
Production Trial	7)	Supplier Master Schedule	Submitted when requested by Tachi-S.		●		7	Quality	o	PENDING
	8)	Supply Chain Chart	Submitted when requested by Tachi-S.	●			8	Purchasing dept	o	PENDING
	9)	Design FMEA results	Submitted when requested by Tachi-S.		●		Any form	Quality		
	10)	QA Table	Submitted before Tachi-S requested deadline		●		9 or Any form	Quality	o	o
	11)	Control plan (QC Process Chart)	Submitted before Tachi-S requested deadline		●		10 or any form	Quality	o	
	12)	Process FMEA results	Submitted when requested by Tachi-S.		●		11 or any form	Quality		
	13)	Inspection Standards	Submitted by 1 month before delivery of a prototype and, subsequently, each time revisions are made.	●			12	Quality	o	PENDING
	14)	Delivery Packing Style Application	Submitted before Tachi-S requested deadline	●			13	Production Control	o	PENDING
	15)	Inspection Results Report	Parts and characteristics designated in inspection standards shall be reported at a predetermined timing Submitted it that attached to product & through e-mail.			●	14	Quality	o	PENDING
	16)	Prototype part shipping authorization & Hatsumono	Upon deliverly of initial products	●			15	Quality & Production Control	o	PENDING
	17)	PPAP Correspondence Table	Submitted PPAP documents when requested by Tachi-S.		●		16	Quality		
	18)	Production Preparation Progress Confirm Plan	Submitted when requested by Tachi-S.		●		17	Quality	o	PENDING
	19)	Gauge specification and approval sheet	Submitted when requested by Tachi-S.		●		18	Quality	o	PENDING
	20	Process Capability Study Result Report	Submitted when requested by Tachi-S.		●		19	Quality	o	o
	21)	Reliability test plan and result reports	Submitted when requested by Tachi-S.		●		Any form	Quality		
	22)	Production Preparation Confirm Checksheet #1-#5	Submitted when requested by Tachi-S.		●		20	Quality	o	o
	23)	Ramp-Up Activity Plan	Submitted when requested by Tachi-S.		●		21	Quality	o	o
	24)	Project development record	Submitted when requested by Tachi-S.		●		22	Quality	o	PENDING
Substance of Concern	25)	Substance of Concern Noninclusion Analyze Result Report	Environmentally hazardous substance noninclusion analysis data, such as qualitative and quantitative analysis result report, ingredient performance report {Data without an approval stamps (or signature), analysis laboratory name, sample name, part number (product model), mass, material, analysis method, analysis date, or analysis results is invalid.} Submitted upon a request by Tachi-S or upon delivery of inicial products	●			23	Quality	o	o
	26)	Evidence Form	Record containing a series of quantitative analysis values, including qualitative analysis values, for each part material {Result report of the above 27)}	●			24	Quality	o	
	27)	Actual State Sheet Indicating Noninclusion in Delivered Parts	Submitted upon delivery of inicial products and when requested by Tachi-S	●			25	Quality		
	28)	Inspection Quick Notice and Correction Records	Issued by Tachi-S Submit it that attached "Analyze report" when requested report.		●		26	Quality	o	
	29)	Analyze Report (Countermeasure Report for Prevention of Reoccurrence, 8D report)	Submitted it that attached to "Inspection Quick Notice and Correction Records" report.		●		27	Quality	o	PENDING
	30)	Audit format	Submitted one month before Tachi-s audit			●	28	Quality	o	

NOTE: It is requested that a ball-point pen, not a pencil, should be used to fill in a submitted document.
(It is requested that, for a document written with a pencil, you should copy the document and affix a seal on the copy before submission.)

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9. List of Quality Assurance activities on each phase in Supplier

< Improvement classification >
① New adding
② Required contents enhancing

Quality Assurance Activities list in each phase of suppliers

P-Plan = Project plan
DP-phase = Design prototype phase
PT-phase = Production trial phase
MP-phase = Mass Production phase

Class ①	Class ②	Items	Main works	Relevant documents	P-Plan	DP-phase	PT-phase	MP-phase	Remarks
		1 Preface							
		1-1 Purpose							
		1-2 Scope							
		1-3 Definition of terms							
		1-4 Production process outline							
		2 Basic concept for quality assurance							
		2-1 Quality assurance for purchased products by Tachi-S							
	○	2-2 Delivered products suppliers Quality assurance	・Goal of TS16949		○				
		2-3 Selection and notification of person responsible for quality assurance	・Selecting a responsible person for quality assurance ・Selecting a person in charge of environment	・Notification of the Responsible Person for Quality Assurance ・Notification of Person in Charge of Environment	○ ○				
		3 Requirements on quality assurance							
		3-1 Quality assurance for new products							
		3-1-1 Project plan for new products							
		-1 Object parts			○				
		-2 Selection of person responsible for project			○				
		-3 Creating an Action plan	・Action plan	・New Products Quality Assurance Action Plan	○				
		-4 Progress evaluation of each phase	・Transition judgement by self-evaluation		○	○	○		
	○	-5 Defect prevention activity in design stage	・Design FMEA ・Past failure(Lessons Learned = Kakotora) checks ・Hard operation elimination		○				
○		-6 Design FMEA	・Past failure (Lessons Learned = Kakotora)	・Design FMEA results	○	○	○	○	
		-7 Evaluation by tests	・Reliability test	・Reliability test plan and result reports	○	○	○	○	
○		-8 Tier N management by supply chain chart	・Tier N management	・Supply Chain Chart	○	○	○	○	
○		-9 Confirmation for design prototype preparations status	・Plan progress confirmation	・Production Preparation Confirm Checksheet	○				
○		-10 Substance of Concern (Specified substances)	Substance of Concern non-inclusion management * Submit at other phases	・Substance of Concern Non-inclusion Analyze Result Report ・Evidence Form of above report ・Actual State Sheet Indicating Non-inclusion in Delivered Parts	○	○	○	○	
○		-11 Preparation of PPAP (Production Part Approval Process) related documents	・PPAP requipment documents	・PPAP Correspondence Table			○		
○		-12 Validation production capability (Capacity)	・Validation approximately 150% of production capacity		○		○		
	○	-13 Control of initial products	・Initial quality check ・Display initial parts * Submit at other phases	・Initial Product Delivery Notice ・Inspection Results Report	○	○	○	○	
		3-1-2 Design prototype phase							
		-1 Confirmation of specification requirements				○			
○		-2 Consideration of decisions for assurance methods	【Drawing base】 ・QA table ・QC process chart ・Inspection Standards ・ Error-proof system			○			
○		-3 QA table		・QA Table		○			
○		-4 Defect prevention activity in process design stage	・Hard-operation elimination ・ast failure(Lessons Learned = Kakotora) check			○	○	○	
		-5 Process FMEA		・Process FMEA results		○	○	○	
		-6 Control plan (QC process chart)	・QC process chart	・Control plan (QC Process Chart)		○	○	○	
		-7 Inspection Standard	・Inspection Standard	・Inspection Standards		○	○	○	
	○	-8 Application for delivery packing style	・SNP	・Delivery Packing Style Application		○	○	○	
○		-9 Confirmation for production preparations status including equipments (Contain Dies/molds, Jigs/tools)	・Production Preparation KPI control ・Production Preparation progress Evaluation	・Production Preparation Progress Confirm Plan ・Production Preparation Confirm Checksheet		○	○		
○		-10 Setting equipment condition and maintenance control for equipments, Jigs, Tools	・Establishing optimum condition			○	○	○	
○		-11 Inspection Jigs	・Chack by inspection gauges			○	○	○	(For over sea supliiers)
○		-12 Environment control in inspection area	・ illuminance (Approximately 800 Lux) ・Noise			○	○	○	
○		-13 Substance of Concern (Specified substances)	* Refer to above 3-1-1Item -10.			○	○	○	
○		-14 Unify management of issues & countermeasures in prototype	Sure countmeasure for issues	・Quality Stabilization Control Chart		○	○	○	

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Class ①	Class ②	Items	Main works	Relevant documents	P-Plan	DP-phase	PT-phase	MP-phase	Remarks
		3 3-1-3 Production Trial phase							
		-1 Defect Prevention activities in manufacturing process	・Hard-operation elimination ・Past failure (Lessons Learned = Kakotora) check				○		
		-2 Control plan (QC process chart)	* Refer to above 3-1-2 Item -6.				○	○	
		-3 Inspection Standard	* Refer to above 3-1-2 Item -7.				○	○	
○		-4 Standard work instruction	・Using photographs and illustrations				○	○	
○		-5 Limit Samples	・Color, Finishing and so on.				○	○	
		-6 Preparation of standards and so on	・Inspection standard ・QC process chart ・Standard work instruction ・Limit sample etc. ・Consistency check in 3 standards ・Regular update ・Operation observation etc.				○	○	
	○	-7 Safety parts control	・Safety parts display ・Lot control ・Securement and maintenance of Process Capability by SPC sheet ・Rework parts: Rework & Records ・Operators qualification ・Record-keeping ・Self-audit				○	○	
	○	-8 Special process control	・Tightening ・Welding ・Surface treatment ・Riveting and so on.				○	○	
	○	-9 Education and training	・Preparing of Education & training tools ・Work skill ・Skill ability evaluation and optimize formation				○	○	
○		-10 Management of measuring equipment accuracy	・Record management and Calibration				○	○	
○		-11 Measurement System Analysis (MSA)	・Repeatability and Reproducibility of Gauge mesurment				○	○	
	○	-12 Lot control (Traceability control)	・First in first out according to production dates ・Easily identifiable defect area				○	○	
		-13 Inspection Jigs	* Refer to above 3-1-2 Item -11.				○	○	
		-14 Study process capability	・Safety characteristics ・Important function characteristics	・Process Capability Study Result Report			○	○	
		-15 Environment control in inspection area	* Refer to above 3-1-2 Item -12.				○	○	
○		-16 Validation production capability (Capacity)	* Refer to above 3-1-1 Item -12.				○		
○		-17 Ensure mass-production readiness	・Extract issues by approximately one-hour trial etc.				○		
		-18 Equipment condition control	* Refer to above 3-1-2 Item -10.				○	○	
○		-19 Confirmation for production preparations status including equipments (Contain Dies/molds, Jigs/tools)	* Refer to above 3-1-2 Item -9.			○	○		
		-20 Evaluation by tests	* Refer to above 3-1-1 Item -7.				○		
	○	-21 Equipment Control	・Equipment daily check sheet				○	○	
	○	-22 Processing non-conforming quality parts and reoccurrence prevention	・Causes & contermeasure for Occurrence, flow out ・Prevent non-conformance parts mix.	・Inspection Quick Notice and Correction Records ・Analyze Report (Countermeasure Report for Prevention of Reoccurrence, 8D report) ・Re-examination Proposal			○	○	
	○	-23 Unify management of issues & countermeasures in prototype	* Refer to above 3-1-2 Item -14.				○	○	
○		-24 Tier N management by supply chain chart	* Refer to above 3-1-1 Item -8.				○	○	
		-25 Substance of Concern (Specified substances)	* Refer to above 3-1-1 Item -10.				○	○	
	○	-26 Control of initial products	* Refer to above 3-1-1 Item -12.				○	○	
		3-2 Quality assurance for mass production phase							
		1) Ramp-Up control							
○		-1 Ramp-Up Activity plan	・Stabilization of Ramp-Up quality	・Ramp-Up Activity Plan				○	
	○	-2 Activity to achieve Key targets	・Special management system ・4M is running smoothly ・Training for additional operators ・Early sharing of quality problem information ・Surely implement of coplated parts inspection ・Causes analyez and improvement of defects at inspection					○	
		-3 Audit to close "Ramp-up Activity"						○	
	○	-4 Control of initial products	* Refer to above 3-1-1 Item -12.					○	

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Class ①	Class ②		Items	Main works	Relevant documents	P-Plan	DP-phase	PT-phase	MP-phase	Remarks
		3	2) Daily control							
○			-1 Quality target achievement management	・Warranty ・Delivery ・Process ・Receiving					○	
			-2 Processing of non-conforming quality parts and reoccurrence prevention	* Refer to above 3-1-3 Item -22.					○	
	○		-3 Safety parts control	* Refer to above 3-1-3 Item -7.					○	
	○		-4 Special process control	* Refer to above 3-1-3 Item -8.					○	
	○		-5 Study process control level	・Cpk control, Control chart etc.					○	
	○		-6 Change management	・Keeping Quality level ・Risk management	・Process Change Notice ・Process Change Deployment Plan ・Design Change Application ・Inspection Results Report, Others				○	
			-7 Preparation of standards and so on	* Refer to above 3-1-3 Item -6.					○	
	○		-8 Education and training	* Refer to above 3-1-3 Item -9.					○	
	○		-9 Lot control (Traceability control)	* Refer to above 3-1-3 Item -12.					○	
			-10 Equipment Control	* Refer to above 3-1-3 Item -21.					○	
○			-11 Management of measuring equipment accuracy	* Refer to above 3-1-3 Item -10.					○	
			-12 Periodic inspection and Testing	・Reliability datas (flame retardant properties) etc.					○	
	○		-13 Control of initial products	* Refer to above 3-1-1 Item -12					○	
○			-14 Kaizen activity on the work floor (Gemba)	・QRQC actiwty					○	
○			-15 Tier N management by supply chain chart	* Refer to above 3-1-1 Item -8.					○	
○			-16 Substance of Concern (Specified substances)	* Refer to above 3-1-1 Item -10.					○	
			-17 Quality record management	・Setup of record-keeping term					○	
			3) Supplier self-audit							
			-1 Selection of person responsible for the Audit						○	
	○		-2 Audit types	・Internal Quality Audit					○	
			-3 Audit management	・Top review					○	
			-4 Reporting to Tachi-S						○	
	○		4) Supplier management of Tier 2 and under Tier							
			-1 Definition of term	・Agreement related Quality ・Requipment details related Quality ・Audit and Coacting ・Tachi-S requested "use atandard of Tier 2 or under Tier 2 Suppliers"	・Use Notice of Tier 2 or under Tier 2 Suppliers					
			-2 Selection and agreement				○	○	○	
			-3 Quality assurance requirements				○	○	○	
			-4 Audit and coaching				○	○	○	
			-5 Safety parts application				○	○	○	
○			-6 Tier N management by supply chain chart				○	○	○	
		4	Audit by Tachi-S						○	
		5	List of submitted documents (Forms)		(29 forms)					
		6	List of Quality Assurance activities on each phases in Suppliers	(This lists)						

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Class ①	Class ②	Items	Main works	Relevant documents	P-Plan	DP-phase	PT-phase	MP-phase	Remarks
		7 Supplements 1) Guidance on Creating a QA Table 2) Guidance on Creating Control Plan 3) Guidance on Creating an Inspection Standard 4) Process Change Guidance 5) Engineering Change Guidance 6) Initial products control of Guidance 7) Guidance on Assigning a Lot Number							
		8 Attached forms (Forms and entry examples for submitted documents) ◇ Symbols : Notification ◇ 1) Notification of the Responsible Person for Quality ◇ 2) Notification of Person in Charge of Environment ◇ 3) Use Notice of Tier 2 or under Tier 2 Suppliers ◇ 4) Process Change Notice ◇ 5) Process Change Deployment Plan ◇ 6) Design Change Application ◇ 7) Re-examination Proposal 8) New Products Quality Assurance Action Plan 9) Supply Chain Chart 10) QA Table 11) QC Process Chart (Control plan) 12) Inspection Standards (A) - (D) 13) Delivery Packing Style Application 14) Inspection Results Report 15) Initial Product Delivery Notice 16) PPAP Correspondence Table 17) Production Preparation Progress Confirm Plan 18) Process Capability Study Result Report 19) Production Preparation Confirm Checksheet #1-#5 20) Ramp-Up Activity Plan 21) Quality Stabilization Control Chart 22) Substance of Concern Non-inclusion Analyze Result Report 23) Evidence Form 24) Actual State Sheet Indicating Non-inclusion in Delivered Parts 25) Inspection Quick Notice and Correction Records 26) Analyze Report (Countermeasure Report for Prevention of Reoccurrence, 8D report)							

10. Supplements

Supplement 1

1) Guidance for Creating a QA Table

1. Overview

For parts requested by Tachi-S, delivered key points on design quality are investigated and potential defect modes are extracted for each process to create a QA Table for easy understanding as a ledger to assure no defects are created or shipped. The quality assurance methods thus created are broken into the QC Process chart and standard work instructions to promote stabilization of the process quality at an early stage.

2. Creating a QA Table

(1) Form

The QA Table form is "C7-07-22 forms 6-1(for suppliers)".

Supplier's own form, if any, may be used.

(2) How to fill out the form

For how to fill out the QA Table form, see "About QA Table" (C7-07-22, Exhibit-1) and a filled-in example of attached form" C7-07-22, Form 6 (for suppliers)".

3. Submitting the QA Table

The original QA Table document shall be submitted to the applicable procurement department after the inspection standard is approved in the Production Trial phase. Note that when a completed item needs to be changed due to an engineering change, the form shall be also revised and submitted without delay.

4. Receiving the QA Table

An applicable quality control section shall receive the QA Table submitted above, affix a receipt stamp, make and keep a copy of the document and return the original to the supplier.

5. Keeping the QA Table

The QA Table shall be kept for 10 years after the start of mass production.

QA Table explanation

What is the QA Table? (Important assurance control items table)
A format that visualizes process assurance

Formerly,
A standard work instruction was created from the QC Process chart (Process Control Charts) and inspection standards to ensure that key points for quality assurance were managed. However, it was unknown whether all the items where quality must be assured by the process were covered or not. The shop floor formats were not always linked to ledgers used at the site in terms of quality performance, such as warranty claims, delivered defects and process defects.

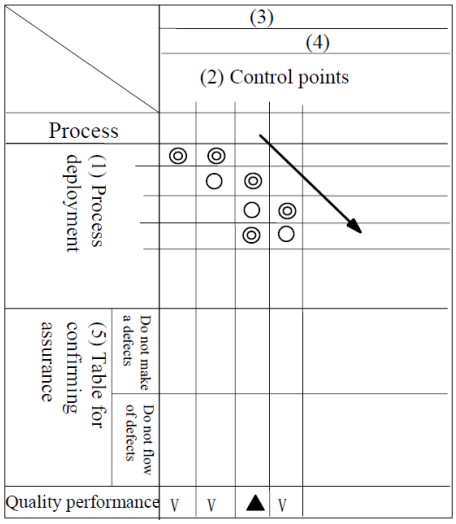
How to create the table:

(1) Process deployment
Break a process into work level.
(Refer to the Process and Manufacturing Method Plan.)

(2) Control points
- Items derived from important part characteristics.
- Controlled items for manufacturing quality
(Used in conjunction with Process FMEA)

(3) Degree of importance
- Derived from important part characteristics.

(4) Important control items
- Derived from important parts characteristics and process control characteristics.
* Make matrix with (1) and (2)
◎: Error proofing process
●: Processing process
◇: Inspection (Confirmation) process



(5) Table for confirming assurance
- Indicates what kind of controlled items each control point has for assurance.
Do not make defects: Assurance in terms of factors
Do not let defects escape: Assurance in terms of results
- Quality performance: Indicates performance, such as process defects.

Supplement 2

2) Guidance for Creating the Control plan

1. Overview

This guidance sets forth creation and submission of a Control plan containing the quality assurance methods performed by manufacturing, inspection and control departments in the order of manufacturing processes to allow the supplier to gain an understanding of assurance tasks in the entire process.

We changed to a Control plan from the traditional QC process chart for **ISO 9001/IATF 16949.**

2. Creating the Control plan

The guidance details for creating the Process flow chart and Control plan are described here. We handle these 2 documents as the Control Plan.

(1) Form

The process flow chart and control plan forms is attached 11.

For how to fill in the Process flow chart and Control plan, see next pages.

3. Submitting a Control plan

The original Control plan shall be submitted to an applicable procurement department after the inspection standard or QA Table is approved for safety parts, important parts and Tachi-S Quality Control Manager ordered parts.

Note that when a completed item needs to be changed due to an engineering or process change, the form shall be also revised and submitted without delay.

4. Receiving Control plan

An applicable quality control section shall receive the Control plan submitted above, affix a receipt stamp, make a copy and return the original to the supplier.

Exhibit-1

How to fill out the Control plan

< Process Flow Chart> Numbers like (1), (2) --- used same numbers for fill instruction of P50.

No.	Items	How to fill out
(1)	Model	Same as the drawing.
(2)	Part name	Same as the drawing.
(3)	Part number	Same as the drawing. Also list Customer part number, when submitting to the Customer.
(4)	Applicable grade	Fill in main grade.
(5)	Schematic illustration	Provide a schematic illustration or picture.
(6)	Mark display	Fill in Special Characteristic symbol.
(7)	Revision	Describe the contents of the design change, process change or others. When process chart contents change, cross off the old information, write the new information and add triangle mark. △
(8)	Process Flow	Make process chart using the below brevity codes for flow and input process sequence number. Brevity code: ▽Storage ○Processing ◇Check ○ Transportation Use the OEM's Safety characteristics symbols, where requested by the customer.
(9)	Registration No.	Input registration numbers for tracking.

< Control Plan > Numbers like (1), (2) --- used same numbers for fill instruction of P51.

No.	Items	How to fill out
(1)	Production trial phase display	Check Mass production trial phase or Mass production phase.
(2)	Control Plan No.	Fill in Control plan number for tracking.

(3)	Part No./Level of latest change	Fill in part number, system (unit) no. or sub system (sub-unit) no.
(4)	Part name/detail	Fill in name of product/process and detail.
(5)	Supplier/plant	Fill in supplier name and creating department name for Control plan.
(6)	Supplier code	Fill in Tachi-S provided supplier code.
(7)	Main contact/phone No.	Fill in window person name and phone number.
(8)	Core team	Fill in all member names of Control plan creating and phone numbers. List format is better.
(9)	Supplier/Plant approval/Approval date	Get plant in charge approval. (when required)
(10)	Date	Fill in original version creation date.
(11)	Date (revised version)	Fill in latest version date.
(12)	Customer engineering approval/Approval date	Get approval of Tachi-S engineering division (when necessary)
(13)	Customer quality approval / approval date	Get approval of Tachi-S Quality section in charge.
(14)	Other approval/approval date	Fill in approval date (when necessary)
(15)	Part/Process No.	Match numbers with the Process flow chart. Circle Special characteristics process numbers. And match Process FMEA and Standard work instructions.
(16)	Process name/Detail of operation	Fill in process/work name of process flow chart.
(17)	Production machine Device/Jigs Tools	Fill in identified machines, devices, jigs, tools and so on.
(18)	No.	Fill sequence numbers for each process numbers.
(19)	Product	Describe feature or part characteristics of parts and assembly parts. Fill in all Special characteristics.

(20)	Process	Describe process control characteristics to achieve part characteristics.
(21)	Special characteristics	Fill in Special characteristics mark of OEM and internal Special characteristics mark.
(22)	Spec. /tolerance of product/process	Describe specs / tolerance in drawing or material standard and so on and process control characteristics value.
(23)	Evaluation/measurement Technology	Describe Evaluation/measurement method like visual check, inspection method, check device/tool and so on.
(24)	Sample Size/Frequency	Fill in 100% or frequency and sample size when sampling.
(25)	Control method	Describe Standard work instruction, Checking device. Checklist, Record method and so on.
(26)	Handling method	Describe corrective action method when non-conformance part founding.
(27)	Process Change Report control No.	Fill in Process Change Report control Number. Blank when no change.
(28)	Clear updated points	Mark revision symbol for clearing rev. points on right margin.

TACHI-S México

TACHI-S México

Registration No.	Page
– –	

Distribution list	
Cont. No.	Distribute to
1	
2	
3	
4	
5	

6

Schematic illustration (fill in when necessary)

Applicable model code 4

5

Process Flow Chart

1

Model code

Name of item 2

Part No.

Approval	Review		Preparation
Plant manager	Quality control		

3

Revision			Approval	Review			Preparation
Symbol	Date	Revised matter	Plant manager	Quality control			
1	. .						
2	. .						
3	. .						
4	. .						
5	. .						
6	. .						
7	. .						
8	. .						
9	. .						
10	. .						

7

9

Symbol

- ▽ Storage
- ○ Processing
- ◇ Check
- ○ Transportation

8

TACHI-S México

TACHI-S México

Control Plan (CP)

Approval	Review		Prepared by
Plant General Manager	Quality Control		

☐ Prototype ☐ Mass production trial ☐ Mass production Control plan No. 2	Main contact/phone No. 7	Date (original) 10 / Date (revised version) 11	Latest Process Change 2 / Report control No.
Part No./Level of latest change 3	Core team 8	Customer engineering approval (only when necessary) 12	
Part name/detail 4	Supplier/Plant approval/Approval date (only when required) 9	Customer quality approval/approval date (only when necessary) 13	
Supplier/plant 5	Supplier code 6	Other approval (only when necessary) 14	Other approval/approval date (only when necessary) 14

Part/ Process No.	Process name/ Details of operation	Production machine Device/jigs Tools	Characteristics			Special characteristics	Method				Control method	Handling method
			No.	Product	Process		Spec./tolerance of product/process	Evaluation/measurement Technology	Sample Size	Sample Frequency		
15	16	17	1	19	20	21	22	23	24	24	25	26

Note: Indirect materials etc. used in the above process should not be mixed with any of the four substances of concern (SOCs)
Four substances＝(Cd: cadmium; Pd: lead; Hg: mercury; Cr6+: hexavalent chromium)

Supplement 3

3) Guidance for Creating an Inspection Standard

1. Overview

In accordance with Tachi-S requirement specifications, this guidance sets forth creation and submission of an inspection standard by suppliers. This inspection standard covers inspection performed in the manufacturing processes and is not limited to inspection in the final process.

2. Creating an inspection standard

(1) Form

The inspection standard form shall be any of attached forms. Select an appropriate form in accordance with the part type.

The supplier's own form, if any, may be used.

(2) How to fill out the form

For how to fill out the inspection standard, see next page.

Upon selecting inspection items and setting tolerances, quality characteristics, use the purposes of subsequent processes and take past quality problems into account.

3. Submitting an inspection standard

In principle the inspection standard shall be created in the prototyping phase and the original submitted to the applicable procurement department one month before delivery of the part.

Note that when a completed item needs to be changed due to an engineering or process change, the form shall be also revised and submitted without delay.

4. Receiving an inspection standard

The applicable quality control section shall receive the inspection standard submitted above, affix a receipt stamp, make a copy and return the original to the supplier.

5. Keeping an inspection standard

The inspection standard shall be kept as indicated in Table1.

6. Setting limit samples

If limit samples are created based on directions from the manager of an applicable Tachi-S quality control section, the necessary number of samples are created after adjusting with the quality control section, and subject to verification by the manager. One piece shall be kept by the supplier for use as a quality standard upon inspection.

Exhibit-1

How to fill in the Inspection Standard

C8-07-05 2007.11.09

Item	Description
Safety part mark	Indicate a safety part by using an applicable symbol outside the form in the upper left of the sheet. (The safety characteristics symbol designated in the drawing shall be marked.)
Receipt	Not used for products manufactured in-house. A receipt stamp is affixed if a supplier submits the inspection standard.
Model	
Part number	Shall be the same as the drawing.
Product name	
Type	Not necessary to fill in this item.
Class	For safety part, fill in "Safety", for important part, fill in "Important" and other parts, fill in "Others", respectively.
Materials	For a unit, fill in "Assy". For a single product, fill in a material name.
Plant	Fill in a manufacturing plant (business establishment). * If the manufacturing plant outsourced, fill in the suppler name.
Schematic illustration	Enter a schematic illustration illustrating a shape and construction. Clarify dimension lines and inspection items with arrows. If the schematic illustration contains safety characteristics, use an appropriate symbol. (CC SC)
Inspection number	Indicates the order of inspection items.
Inspection item	Fill in the characteristics and a task name to be inspected.
Degree of importance	Classify items into the following three levels in accordance with the degree of importance of quality characteristics: (1) CC : Items indicated as having safety characteristics in the drawing. (2) SC : Items that significantly affect functions, performance, durability and merchantability, as well as environmentally hazardous materials.

	(3) C: Items other than (1) and (2) * Use customer-designated Special Characteristic symbol when indicated
Sampling method	Fill in 100% or sampling inspection. For sampling inspection, clarify how many samples are taken out of how many lots or for how many hours.
Inspection method	Concretely describe specific inspection equipment or inspection conditions.
Decision criterion	Concretely describe specific criteria based upon which acceptance or rejection is determined.
Revision description	Fill in the "Symbol", "YYMMDD", and "Revision description" fields with a change number, a change date, and a revision description, respectively and affix approver's stamp. (If a supplier submits the inspection standard, the supplier shall fill in these fields.)

Note:1) The security characteristics symbols used in "Schematic illustration " and "Degree of importance" shall be those used in the drawing.
2) If a customer has some requests concerning the symbols used in "Degree of importance" (Safety parts, important function parts, and C), the request shall be taken precedence.

3) The frequency at which regular inspection data is submitted shall be entered in the "Remark" field.

TACHI-S México

Supplement 4

4) Initial Product Control Guidance

1. Overview

This guidance sets forth a procedure for suppliers to contact Tachi-S upon delivery of initial products.

2. Initial product delivery procedure

- For prototypes, please complete the “PPSA form” attached.
- For mass production delivery of initial products, submit actual products to the receiving section of a Tachi-S plant with the attached form “Initial mass product mark sample: “Hatsumono” and initial product inspection data attached.

3. How to fill in the Hatsumono form:

(1) “Code”: Require to Tachi-s SQA / SQC

(2) "Model,” "Part number" and "Product name"
Fill in the model, part number and product name of the initial products.

(3) "Reason for initial products"
Select a reason for initial products from those in the “Note” field and fill in the number.
For products subject to an engineering change, the fill in the “Engineering Change No.” field in the upper left of the sheet.

(4) "Delivery date"
Fill in the delivery date and quantity of initial products delivered.

(4) "Description of the change"
Simply describe the reasons for changes. Provide a schematic illustration as much as possible.

(5) Others
The “Judgment" and " Judgment comments” fields are filled in by Tachi-S.

4. Marking initial products

Initial products shall be indicated as such using the initial product tag (C8-05-01, Exhibit-1) designated by Tachi-S.

TACHI-S México

Prototype Part Shipping Authorization

Project :	**Tachi-s Important Part** ☐ SC ☐ CC	Document Reference No :
Supplier Name: _____	Supplier Code: _____	
Supplier Plant :	Supplier personnel responsible for the Activity :	
Part Name : _____	Control Plan Reference / Version : _____	
Part No & Issue level : _____	Control Plan Date : _____	
Design Note / DEVO : _____	Average Weight : _____	
	Tachi-s Plant :	

Mileston

☐ VC-Lot Trial ☐ PT Trial ☐ PT1 Trial
☐ PT2 Trial ☐ Pre - SOP ☐ Process Change
☐ Material Change ☐ Design Change ☐ Tooling Refurbishment
Details / Other : _____

Items attached to this Prototype Part Shipping Authorization :

- ☐ SMS
- ☐ Engineering Drawings
- ☐ Design Note
- ☐ Gauge Specification / Approval
- ☐ Inspection Report
- ☐ Key Feature Diagram
- ☐ Control Plan
- ☐ Process Flow Chart
- ☐ Logistics and Packaging Data Sheet
- ☐ Process Capability Study
- ☐ Appearance Approval Report (Tachi-s Only)
- ☐ Project Development Record
- ☐ Subsupplier Chain Sheet
- ☐ Supplier Test Report
- ☐ Details / Other : _____

For each supporting document, indicate the issue level and date on an attached list

SUPPLIER Signed Off :

Name _____ Position _____
Signature _____ Date _____

Tachi-s Shipping Authorization Judgement :

☐ **Authorized** ☐ **Rejected** ☐ **Conditional Approval**

SQA	**SQA Supervisor / Manager**
Name _____	Name _____
Position _____	Position _____
Signature _____	Signature _____
Date _____	Date _____

Note: Shipping Authorization Judgement by Tachi-s shall not relieve the supplier in any way from its responsibilities.

Tachi-s SQA COMMENT

Prototype product mark sample: PPSA

For each event programmed according with final customer requirements, is necessary to send PPSA format on color sheet according with next table.

PPSA Color Table

TACHI-S México	PPSA-COLOR TABLE			
NISSAN	VC-LOT	PT1	PT2	FVC

TACHI-S México	PPSA-COLOR TABLE		
AKI SEAT	TSB	TTO	PP

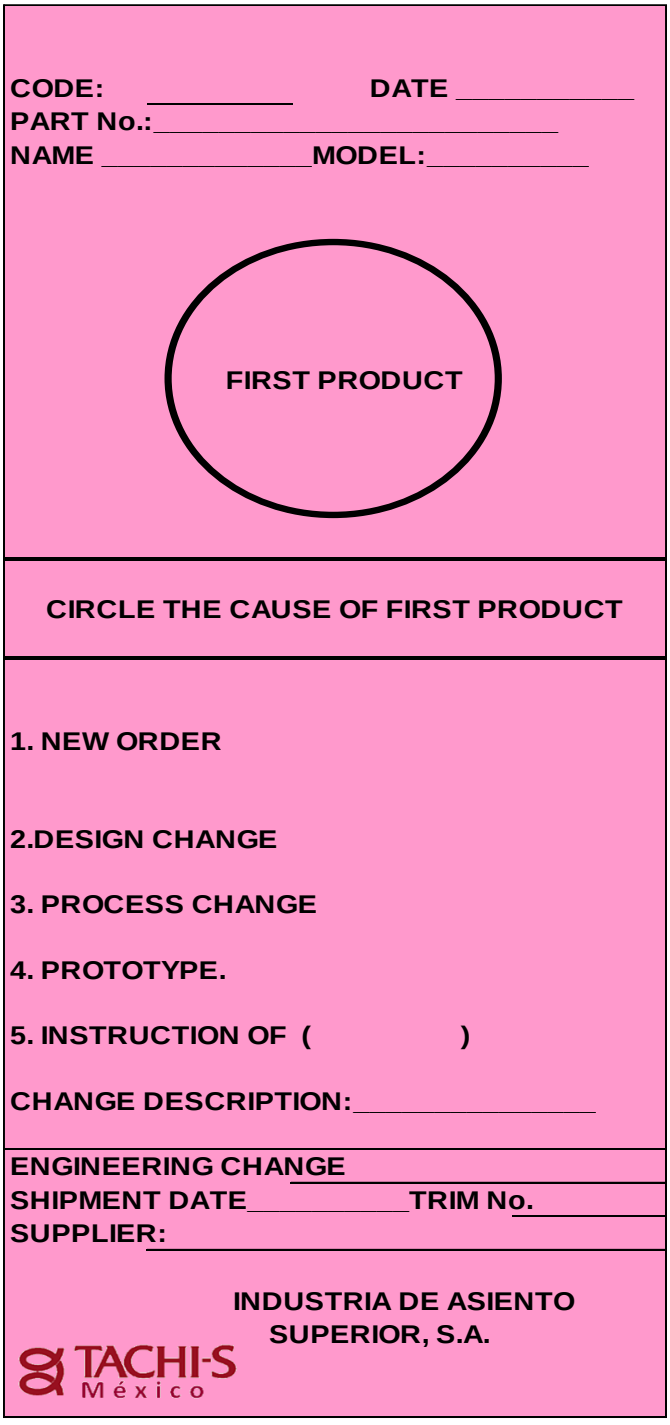
TACHI-S México	PPSA-COLOR TABLE					
TOYOTA	WRINKLE ZERO	TRAINING	PRE-LVPT	APPEREANCE REVIEW	LVPT	HPVT

TACHI-S México	PPSA-COLOR TABLE				
HONDA	DAN-0	PV TEST	DAN 1	QC	RC

TACHI-S México	PPSA-COLOR TABLE					
CAOEM	B1	B2	RC1	RC2	PILOT 1	PILOT 2

NOTE: For projects that were defined color previously to this Supplier Quality Manual review, take colors according with previous agreement.

Initial mass product mark sample: Hatsumono



5) Guidance for Lot Number Assignment

1. Overview

This guidance sets forth a method for assigning a lot number to Tachi-S designated safety and important parts.

2. How to display a lot number

[1] Lot controlled parts

(1) A sequence consisting of numbers and alphabets with no more than 7 digits

(2) Order of display

(i) Year: Use the last number of the year

(Ex) 1995 → 5

(ii) Month: 1-9, X, Y and Z are used to indicate months from January to December

(Ex) January → 1, November → Y

(iii) Day: 01 - 31 or 1 - 31 are used to indicate 1st to 31st days of a month.

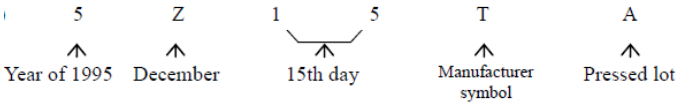
(Ex) 15th day → 15

(iv) Others: Can be used by part manufactures at their own discretion.

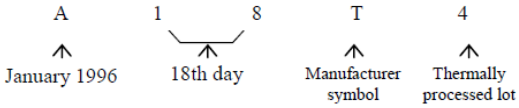
Note if indicating [1] and [2] is difficult, one letter indication of year and month is also acceptable.

(3) Display examples

(Example 1)



(Example 2)



[2] Individually controlled parts

(1) A 7-digit sequence consisting of numbers and alphabets

(2) Order of display

(i) Line number: 0-9 are used to express a manufacturing line number.

(Ex) Line 4 → 4

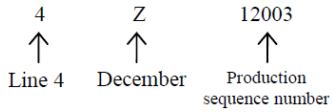
(ii) Month: 1-9, X, Y and Z are used to indicate months from January to December

(Ex) December → Z

(iii) Production sequence number:

A five-digit number is used. Returns to "00001" at the start of each month.

(3) Display examples



8. Attached forms (Forms and entry examples for submitted documents)

◊ Symbols: Notification

1) Supplier contact directory

Supplier Contact Directory

Supplier Name ______________ Part No. ______________ Important Part CC [ ] SC [ ]
Supplier Code ______________ Part Name ______________

Supplier Plant ______________ Drawing No. ______________
Report Number ______________ Design Note Number ______________

Managing Director		Desing Director		Information Systems Director	
Name:		Name:		Name:	
Telephone:		Telephone:		Telephone:	
Mobile:		Mobile:		Mobile:	
E-mail:		E-mail:		E-mail:	
Fax:		Fax:		Fax:	
Job Title:		Job Title:		Job Title:	
Proyect Leader		**Logistics Director**		**Commercial Director**	
Name:		Name:		Name:	
Telephone:		Telephone:		Telephone:	
Mobile:		Mobile:		Mobile:	
E-mail:		E-mail:		E-mail:	
Fax:		Fax:		Fax:	
Job Title:		Job Title:		Job Title:	
Quality Director		**Purchasing Director**		**Prodcution Control Director**	
Name:		Name:		Name:	
Telephone:		Telephone:		Telephone:	
Mobile:		Mobile:		Mobile:	
E-mail:		E-mail:		E-mail:	
Fax:		Fax:		Fax:	
Job Title:		Job Title:		Job Title:	
Name:		Name:		Name:	
Telephone:		Telephone:		Telephone:	
Mobile:		Mobile:		Mobile:	
E-mail:		E-mail:		E-mail:	
Fax:		Fax:		Fax:	
Job Title:		Job Title:		Job Title:	
Name:		Name:		Name:	
Telephone:		Telephone:		Telephone:	
Mobile:		Mobile:		Mobile:	
E-mail:		E-mail:		E-mail:	
Fax:		Fax:		Fax:	
Job Title:		Job Title:		Job Title:	

Provided by: ______________ Signature: ______________

Position: ______________ Date: ______________

2) Use Notice of Tier 2 or under Tier 2 Suppliers

TACHI-S México

Accepted by	
sect. in Procurement dept.	
SM	Person in charge

Application Form of Outsourcing to Sub Supplier

Supplier Name	Supplier Code	Issue date	Person Responsible for Quality assurance
			Seal

Sub-supplier	Company Name	Address:	Post code:	Tel:

Have ever produced similar parts?	Line trial schedule	First article inspection schedule	Expected delivery date of first article
Yes Parts name ( ) No	around dd/mmm/yyyy	dd/mmm/yyyy	dd/mmm/yyyy

No.	Model	Parts No.	Parts Name	Applicable process name	Reason to outsource	Remarks

To: _____

Receipt of Notice

* Comment	Date:		
	xxx Plant Quality Control sect.		
	Approved by	Checked by	Created by

Document route: Supplier → Procurement dept. in charge → Quality Control sect. in charge → Procurement dept. in charge → Supplier

3) Process Change Deployment Plan

Process Change Deployment Plan

Subject: _____

Spec: _____

Part No. _____

Schedule →

Received by:		plant	Applied by:		
Approved by	Checked by	Checked by	Responsible person	Person in charge	

Items	Month						
	Date (Week)						
1) Create mold/jig							
2) Verify quality of trial products (data)							
3) Verify feasibility of mass production							
4) Check operator's skill of new process							
5) Check process by applicant							
6) Revise relevant document (QC process chart, inspection standard, work instruction sheet)							
7) Replace parts							
8) Verify process by TACHI-S							
9) Switch products							

・No.1) to 7) shall be filled out by supplier or in-house applicant department.
・No. 8) and 9) shall be filled out by the department that received this form.

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4) Special acceptance request

FILL BY SUPPLIER

TACHI-S México

SPECIAL ACCEPTANCE REQUEST

Requested: Department , name **and signature**

Section 1 General information

CONTROL NUMBER		ISSUE DATE	
COMPANY NAME/ AREA		*AFFECTED LINE*	
PART NUMBER *(replacement)*		REQUESTED QUANTITY	
PART NAME		*REQUESTED DATE*	
MODEL			

Failure/*material* description and cause of request

Affected plants:
- ☐ *PIVA*
- ☐ *Zapata*
- ☐ *DSP*
- ☐ *Calvillo*
- ☐ *Ags Trim I*
- ☐ *Ags Trim II*
- ☐ *Zac. Trim*
- ☐ *Zac. PIP*
- ☐ *Guadalajara*
- ☐ *SAM*

Risk and control actions

Section 2 RHQ evaluation

***Comments and* decision quality assurance**	*Evaluated by*	Review by
	Name and signature	*Name and signature*

***Comments and* decision production control RHQ**	*Evaluated by*	Review by
	Name and signature	*Name and signature*

***Comments and* decision commercial**	*Evaluated by*	Review by
	Name and signature	*Name and signature*

Section 3 Approval

3.1 Commercial area Sr Manager	3.2 Production control Sr Manager	3.3 Quality assurance Sr Manager	*3.4 Sales Sr Manager*
Name and signature	*Name and signature*	*Name and signature*	*Name and signature*

Production control Sr Manager:	*Quality assurance Sr Manager:*
Customer notification *YES ___ NO___*	*Customer notification* *YES___ NO___*
Justification	*Justification*

3.5 Quality control Manager	*3.6 Production control (plant)*	*3.7 Responsible director*
	Integration date:	
Name and signature		*Name and signature*

Observations:

Note:
In case of being rejected during the process, it is delivered to quality assurance.
If you mark YES on customer notification, sales inform to customer

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5) Supplier Master Schedule

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Part Type ☐ Global Part ☐ RKD Part

TQMS SUPPLIER MASTER SCHEDULE (inc. Details)

Supplier Name _____ Part No. _____ Important Part SC ☐ CC ☐

Supplier Code _____ Part Name _____

Supplier Plant _____ Drawing No. _____

Report Number _____ Design Note Number _____

Vehicle Trial Production Requirements (Forcast information)	Trial	Delivery Date	Qty	Trial	Delivery Date	Qty	Trial	Delivery Date	Qty	Trial	Delivery Date	Qty	Trial	Delivery Date	Qty	SOP Date	Annuale Production Volume Max.

No	Project Items (Detail)	Responsible Person (Supplier)	Time Scale
1	Project Milestones		
2	Internal Project Review Meetings		
3	Detail Design/ Drawing Preparation		
4	Testing		
5	Analysis of Potential Failure and Effects		
6	Production Tooling		
7	Production Gauging		
8	Production Facilities (inc. Test) Installation		
9	Control Plans		
10	Floor Plan layout/ Process Flowchart		
11	Operation Sheets/ Work Instructions		
12	Operator Recruitment and Training		
13	Capability Study		
14	Packaging Development and Manufacture		
15	Logistics Systems Implementation		
16	Sub-supplier Management		
17	Appearance Approval		
18	Parts Manufacture and Submission		
19	Supplier Process Audit		
20	PSW Sign off		
21	Ramp-up Activities		

Coments:

Supplier Sign-off (Manager Level)

	Project Leader	Purch / Sales	Production Control	Quality Assurance	Engineering	Design	Production				
Name											
Signature											

6) Supply Chain Chart

TQMS COMPONENT SUPPLY CHAIN CHART (SCC)

Supplier Name _____ Part No. _____ Important Part SC ☐ CC ☐

Supplier Code _____ Part Name _____

Supplier Plant _____ Drawing No. _____

Report Number _____ Design Note Number _____

Product Structure					Supplier Feature					Manufacturing Feature		Product Feature	Development experience of the Tier N supplier (Where the supplier has development responsibility)
					Supplier Name	Manufacturing Plant			Business Experience	Plant/Process/Line	Method / technology		
						Plant Name	Location						
Tier 1	Tier 2	Tier 3	Tier 4	Tier 5... N			Country	State, City	New for the Tier N supplier	New for the supplier	New for the supplier	New commodity for Tier1	Development experience

7) QA Table

TACHI-S México

QA table

Supplier name:

Dept.	Approved by	Examined by	Prep.by

		Examined by	Verified by
Received by	plant QC sect.		

Symbol
◎ : Error proofing process
● : Processing process
◇: Inspection (confirmation) process

Rev.	Date	Revision	PIC	Examined by	Approved by	Received by
3						
2						
1						
0						

Product name:

1 ／

QA table-B
Relation to QA table-A
○ Important control items

Process	Work
	1
	2
	3
	4
	5
	6
	7
	8
	9
	10
	11
	12
	13
	14
	15
	16
	17
	18
	19
	20

Assurance Confirmation table

Defective Product Manufacturing Prevention (Cause)
- Error proofing
- Specific assurance description
- Measuring device/ methods
- Frequency

Defective Product Shipping Prevention (Result)
- Error proofing
- Specific assurance items
- Measuring device/ methods
- Frequency

Dist. Destination	
Total	

Assurance items		
Prevent Producing Defective	Error proofing in design	
	Mechanical assurance	
	Facility condition control	
	Control by operators	
Prevent Shipping Defective	Error proofing in design	
	Mechanical assurance	
	Facility condition control	
	Control by operators	
Past quality defects	Inhouse defects	
	RPPM	
	Warranty claims	

8) Control Plan

TACHI-S México

Control Plan (CP)

Approval	Review		Prepared by
Plant General Manager	Quality Control		

☐ Prototype ☐ Mass production trial ☐ Mass production Control plan No.	Main contact/phone No.	Date (original)	Date (revised version)	Latest Process Change Report control No.
Part No./Level of latest change	Core team	Customer engineering approval (only when necessary)		
Part name/detail	Supplier/Plant approval/Approval date (only when required)	Customer quality approval/approval date (only when necessary)		
Supplier/plant / Supplier code	Other approval (only when necessary)	Other approval/approval date (only when necessary)		

Part/ Process No.	Process name/ Details of operation	Production machine Device/jigs Tools	Characteristics No.	Characteristics Product	Characteristics Process	Special characteristics	Method Spec./tolerance of product/process	Method Evaluation/measurement Technology	Method Sample Size	Method Sample Frequency	Control method	Handling method

Note: Indirect materials etc. used in the above process should not be mixed with any of the four substances of concern (SOCs)
Four substances＝(Cd: cadmium; Pd: lead; Hg: mercury; Cr6+: hexavalent chromium)

Note: Indirect materials etc. used in the above process should not be mixed with any of the substances of concern (SOCs)

SOC substances＝ (Cd: cadmium; Pd: lead; Hg: mercury; Cr6+: hexavalent chromium, others)

9) Flow chart

TACHI-S México

Registration No.	Page
— —	

Distribution list		Schematic illustration (fill in when necessary)	Process Flow Chart				Revision			Approval	Review		Preparation	Symbol
Cont. No.	Distribute to	Applicable model code					Symbol	Date	Revised matter	Plant manager	Quality control			
1			Model code				1	. .						
2							2	. .						▽ Storage
3							3	. .						
4			Name of item				4	. .						○ Processing
5			Part No.				5	. .						
			Approval	Review		Preparation	6	. .						◇ Check
			Plant manager	Quality control			7	. .						
							8	. .						○ Transportation
							9	. .						
							10	. .						

10) Special characteristics and key features diagram

TACHI-S México

TQMS SPECIAL CHARACTERISTICS AND KEY FEATURES DIAGRAM

Supplier Name _____ Part No. _____ Important Part SC ☐ CC ☐

Supplier Code _____ Part Name _____

Supplier Plant _____ Drawing No. _____

Report Number _____ Design Note Number _____

Special Char. / Key Feature Ident'n	No.	Product Characteristic	Specification /Tolerance	Remark ( )

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Confirmar que el documento sea una revisión vigente.

TACHI-S México

11) Delivery Packing Style Application

TACHI-S México

INDUSTRIA DE ASIENTO SUPERIOR SA DE CV

PACKAGING DATA SPECIFICATION

Part number:
Part description:

Supplier name
Supplier code
Address:

Adpt. date

Purchasing Contact
Buyer:
Phone:
Fax:
e-mail:

Contact name:
Phone:
Fax:
e-mail:

Model code

Ecological index

Part specification

Lenght(mm)	Width(mm)	Height(mm)	Weight(kg)	Mass Production / Prototype

Hand held container (HHC) - only if apply

SNP / HHC	Lenght(mm)	Width(mm)	Height(mm)	Volume (m^3)
				0.000

Usage	RFQ	Part finished	Composition or nature	HHC / layer	Net wt.(kg)	Tare wt.(kg)	Gross wt.(kg)	
					0		0	FALSO

Dunnage / outer packaging and materials returnables and no returnables

Pkg. code				Q'ty / UL
Bulk 48x45-34		Base	0	0
Bulk 48x64-34		Lid	0	
Giagant Box		Carton		
PCH2415-5		Other		
PME2415-7				
PGR2415-11		Returnable		
Wire Bulk		Expend		

cell dividers
loose
tied
vacuum form
wrapped

Lenght(mm)	Width(mm)	Height(mm)	Weight(kg)	Return ratio
0	0	0	0	

Pallet or rack - max unit load (UL)

SNP / UL	Lenght(mm)	Width(mm)	Height(mm)	Volume (m^3)
0				0.000

Layers / UL	Net wt.(kg)	Tare wt.(kg)	Gross wt.(kg)	Volume (m3) / pcs.
	0	0	0	#¡DIV/0!

Order in lot size flexibility

Level	SNP / Pkg.	Customer plant 1	Adpt. date	Customer plant 2	Adpt. date
HHC	0	SM Zacatecas PI	01/05/2019	N/A	
Layer 1	0				
Layer 2	0				
Layer 3	0				
Layer 4	0				
Layer 5	0				
Layer 6	0				
Layer 7	0				
Layer 8	0				

Process	Packaging quantity				
	Pallet	Lid	Rack	Handheld ctnr	Fleet days
at supplier	###			#¡DIV/0!	
in transit	###			#¡DIV/0!	
at warehouse	###			#¡DIV/0!	
in return	###			#¡DIV/0!	
security stock	###			#¡DIV/0!	
Total	**##**	**####**	**0**	**#¡DIV/0!**	**0.0**

% UTILITAZION IN TRANSPORT

Transport Utilitation	Plastic Box	Bulk Container	Carton	
Trailer Box 53 ft				
Trailer Box 48 ft				
Torton				

Packaging style

- Plastic box on pallet
- Bulk container
- Vacuum form on pallet
- Special rack
- Carton
- Other

Module expected life

Storage and Shipping

Max q'ty of stacks:
For Return | at warehouse | in transport

Packing property of Tachi-s | or property of Supplier

Local customer packaging requirements

Packaging is a key element in Tachi-s' material logistics program. The parts order system will issue order quantities of the Relay linked by TIPS (Purchase Order Number) based on approved packaging multiples and approaching the production requirements. The objective is to adopt the appropriate packaging for each part in order to have the best cost practice in the supply chain, minimize the inventory in the plant and improve the field conditions while using ecological materials for packaging. The requirements are listed below to develop acceptable types of packaging. To obtain more address exceptions to the above requirements.

((1) Pieces packed in portable boxes / containers must not exceed 40 lbs.
(2) Portable boxes / containers must be in uniform layers. Mixed pallet loads will be released as necessary.
(3) All platforms must be stowed.
(4) All loads handled mechanically must have 4 road entries.
(5) All packaging, disposable / returnable, must be able to be stacked for transport and storage.
(6) The identification of the label must be in accordance with the standards of the shipping identification label / Tachi-s part number.
(7) All hazardous materials must be labeled and shipped in accordance with the regulations of the regional government, the sender is responsible for compliance (Include safety sheet in each of the transports that are used)
(8) The approval of Tachi-s of the packages sent does not exempt the supplier from the responsibility as sender for complying with the regulations of the supplier and providing adequate protection for the contents of the packaging.
(9) It is possible that a packing test in the direction of Tachi-s is required before the partial functional test (it must be released by quality receipt, manufacturing, engineering and production control)
(10) Any notification of packaging problem must be attended within the next 72 hours. and a final solution until 5 days after the notification must be informed to Tachi-s.
(11) If a change of packaging is proposed, a new "PACKAGING DATA SPECIFICATION" form must

Plant location

Manufacturing Plant:	0		
Address:	0		
	0		
Empty Packaging Return point:	0		
Customer Plants:	SM Zacatecas PI	N/A	N/A
Distance to custumer plt:			
Transit time:			

Transport Method: 53 ft | 48 ft | Torton | OTHER

Transport Cost / Part:
Transportation Details
Commercial Term:
Delivery Frequency:
Empty Return Freq:

Waste material weight(kg)	Paper	Cardboard	Plastic	Foam	Wood	Others
		0.100				

Supplier sign off (manager level)	Project leader	Purch./Sales	Logistics	Quality	Engineering	Design	Production
Name							
Signature							
Date							

Tachi-s(internal use only)

Production control	Name		Signature		Date
Quality	Name		Signature		Date
Engineering	Name		Signature		Date

TACHI-S México

12) Inspection Report

TACHI-S México

TQMS INSPECTION REPORT

Supplier Name _____ Part No. _____ Important Part SC ☐ CC ☐
Supplier Code _____ Part Name _____

Supplier Plant _____ Drawing No. _____ Control Plan Issue Level _____
Report Number _____ Design Note Number _____ Average Weight _____ kg
Milestone _____

☐ Dimensional ☐ Material ☐ Appearance ☐ Engineering Specification Testing ☐ Other _____

No.	Special Charac Symbol	Characteristic, Specification and Tolerance	Results					Conformance		Reports / Comments
			1	2	3	4	5	OK	NG	

Approval Signature Name Position Date:

Page of

13) Hatsumono

HATSUMONO

CODE: _____ DATE _____
PART No.:_____
NAME _____MODEL:_____

FIRST PRODUCT

CIRCLE THE CAUSE OF FIRST PRODUCT

1. NEW ORDER

2.DESIGN CHANGE

3. PROCESS CHANGE

4. PROTOTYPE.

5. INSTRUCTION OF ( )

CHANGE DESCRIPTION:_____

ENGINEERING CHANGE_____
SHIPMENT DATE_____TRIM No._____
SUPPLIER:_____

INDUSTRIA DE ASIENTO SUPERIOR, S.A.

LABEL COLOR: PINK

TACHI-S México

14) Prototype Part Shipping Authorization

TACHI-S México Prototype Part Shipping Authorization

Project :	**Tachi-s Important Part** ☐ **SC** ☐ **CC**	Document Reference No :
Supplier Name:	Supplier Code:	
Supplier Plant :	Supplier personnel responsible for the Activity :	

Part Name :	Control Plan Reference / Version :
Part No & Issue level :	Control Plan Date :
Design Note / DEVO :	Average Weight :
	Tachi-s Plant :

Mileston

☐ VC-Lot Trial ☐ PT Trial ☐ PT1 Trial
☐ PT2 Trial ☐ Pre - SOP ☐ Process Change
☐ Material Change ☐ Design Change ☐ Tooling Refurbishment
Details / Other : _____

Items attached to this Prototype Part Shipping Authorization :

- ☐ SMS
- ☐ Engineering Drawings
- ☐ Design Note
- ☐ Gauge Specification / Approval
- ☐ Inspection Report
- ☐ Key Feature Diagram
- ☐ Control Plan
- ☐ Process Flow Chart
- ☐ Logistics and Packaging Data Sheet
- ☐ Process Capability Study
- ☐ Appearance Approval Report (Tachi-s Only)
- ☐ Project Development Record
- ☐ Subsupplier Chain Sheet
- ☐ Supplier Test Report
- ☐ Details / Other : _____

For each supporting document, indicate the issue level and date on an attached list

SUPPLIER Signed Off :

Name _____ Position _____
Signature _____ Date _____

Tachi-s Shipping Authorization Judgement :

☐ **Authorized** ☐ **Rejected** ☐ **Conditional Approval**

SQA	**SQA Supervisor / Manager**
Name _____	Name _____
Position _____	Position _____
Signature _____	Signature _____
Date _____	Date _____

Note: Shipping Authorization Judgement by Tachi-s shall not relieve the supplier in any way from its responsibilities.

Tachi-s SQA COMMENT

15) PPAP Correspondence Table

No	Big 3 requirements			Our requirements to supplier			
	PPAP documents	PPAP requirements	Documents	Documents to be submitted	Engineering approval department		
					Outsource control (Purchased/processed products)		
					Category	Pre-launch ((Mass production)	Post-launch (Change)
1	Design documents —proprietary elements /details —other elements/details	Maintain all the documents related to product (Documents prepared by Design Engineering department to convey the necessary information for production; Drawings, specification tender, design notes, part list and CAD data)					
2	Engineering change documents	Maintain records which are not included in design notes although they are incorporated in products, parts and patterns.					
3	Customer engineering approval	Retain the applicable customer engineering approval in written form, in case it is specified in customer's engineering documents.		Tender drawing	S # *	DE	DE
4	Design FMEA	For the products/parts with design liability, Conduct analysis in line with and pursuant to the requirements of FMEA 3rd edition.		Design FMEA	# *	DE	DE
5	Process flow diagram	Maintain the process flow diagram indicating classification and sequences of production process that meets customer needs, requirements and desires (indicating material flow in process including repair and rework process)		QC process chart	R	Plant	Plant
6	Process FMEA	Conduct analysis in line with and pursuant to the requirements of FMEA 3rd edition.					
7	Control plan	Establish control plan and specify all the processes for process control and meet the requirements of TS16949		QC process chart	R	Plant	Plant

8	Measurement system analysis studies(MSA)	Analyze measurement system for all new or remodeled gauges, measurement equipment, and testing facility					
9	Dimensional results	Perform all dimensional inspection required by design sheet and control plan and record the results conforms to criteria.		Inspection report	S	Plant	Plant
10	Material/performance test results	Record the test results for the materials specified in design sheet or control plan and/or performance test results	(CFG-1004/5)	Test report	*	T	T
11	Initial process studies	Submit after ensuring the acceptance level of initial process capability or performance for all special characteristics specified by customer or the company.	(CFG-1003)	Check sheet for production preparation	*	Plant	Plant
12	Qualified laboratory documentation	Retain the document that proves the laboratory is pursuant to article 7.6.3.1 and/or 7.6.3.2 of TS16949, and retain the testing scope.					
13	Appearance approval report (AAR)	In case any appearance requirements are specified for color, pattern and grain in design documents, record necessary information in AAR.	CFG-1002	Master sample	S	DE	DE
				(Trim cover/Plastic)			
				Limit sample	R	Plant	Plant
14	Sample products	Submit in line with customer requirements or submission level.		Sample for changed products/parts	*	Plant	Plant
15	Master sample	Identify and store the product/part whose dimension was measured as a master sample		DUT after qualification inspection	*	Plant	Plant
16	Checking aids	Testing jigs (actual) used for testing/inspection					
		Exp. Mounting jig, mold and template					
17	Records of compliance with customer-specific requirements	Record the facts that all the customer specific requirements are satisfied.					
18	Part submission warrant	Prove that all the measurement results/test results conform to customer requirements.	CFG-1001	First Article Delivery Notification		Plant	Plant
	(PSW)			Inspection Results Sheet	S	Plant	Plant
				Process Change Form			Plant
	Bulk materials	Check list for bulk materials			S		

TACHI-S México

16) Production Preparation Monitoring Plan and Status Report

TACHI-S México

TQMS SUPPLIER PRODUCTION PREPARATION MONITORING PLAN AND STATUS REPORT

Supplier Name _____ Part No. _____ Important Part SC ☐ CC ☐

Supplier Code _____ Part Name _____

Supplier Plant _____ Drawing No. _____

Report Number _____ Design Note Number _____

Production Preparation Influencing Factors (All numbers below are cumulative numbers)					Project Milestones					Comments
KEY MEASURABLES	MAN	Manning Requirement	Number of Personnel	Planned Target						
				% of Personnel at Full Volume Condition						
				Achievement						
				% of Planned Target	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	
				% of Full Volume Condition						
		Skill Level	Number of Personnel Fully Trained	Planned Target						
				% of Personnel at Full Volume Condition						
				Achievement						
				% of Planned Target	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	
				% of Full Volume Condition						
	MATERIAL	Test Achievement	Number of Tests Passed	Planned Target						
				% of Supplier Test Plan						
				Achievement						
				% of Planned Target	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	
				% of SOP Target						
		Process Capability	Number of Features Capable	Planned Target						
				% of Process Capability Study Plan						
				Achievement						
				% of Planned Target	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	
				% of SOP Target						
		Straight Through Ratio	% of Product Straight Through	Planned Target						
				% of SOP Target						
				Achievement						
				% of Planned Target	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	
				% of SOP Target						
		OK Ratio	% of OK Product (Including Rework)	Planned Target						
				% of SOP Target						
				Achievement						
				% of Planned Target	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	
				% of SOP Target						
		Approval of Sub-components	Number of Sub-components fully approved	Planned Target						
				% of Components approved by SOP						
				Achievement						
				% of Planned Target	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	
				% of SOP Target						
		Part Graining	Number of Components with Graining Approval	Planned Target						
				% of SOP Target						
				Achievement						
				% of Planned Target	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	
				% of SOP Target						
		Part Marking for Mass Production	Number of Components with Mass Production Marking	Planned Target						
				% of SOP Target						
				Achievement						
				% of Planned Target	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	
				% of SOP Target						
	MACHINE	Production Tooling Completion	Number of Production Tools Complete	Planned Target						
				% Planned at Full Volume Condition						
				Achievement						
				% of Planned Target	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	
				% of Full Volume Condition						
		Production Gauging Completion	Number of Gauges Complete	Planned Target						
				% Planned at Full Volume Condition						
				Achievement						
				% of Planned Target	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	
				% of Full Volume Condition						
		Facilities Commissioned	Number of Facilities Commissioned in Final Location	Planned Target						
				% Planned at Full Volume Condition						
				Achievement						
				% of Planned Target	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	
				% of Full Volume Condition						
		Production Cycle Time Achievement	Cycle Time Achievement	Planned Target						
				% Planned at Full Volume Condition						
				Achievement						
				% of Planned Target	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	
				% of Full Volume Condition						
	METHOD	Packaging Availability	Quantity of Packaging Available	Planned Target						
				% Planned at Full Volume Condition						
				Achievement						
				% of Planned Target	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	
				% of SOP Target						
		Work Instructions	Number of Work Instructions Complete	Planned Target						
				% of SOP Target						
				Achievement						
				% of Planned Target	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!	
				% of Full Volume Condition						
				Average Score						

	Project Leader	Purch / Sales	Production Control	QA	Engineering	Design	Production
Name							
Signature							

17) Gauge specification and approval sheet

TQMS GAUGE SPECIFICATION AND APPROVAL SHEET

Supplier Name _____ Part No. _____ Important ! SC ☐ CC ☐
Supplier Code _____ Part Name _____

Supplier Plant _____ Drawing No. _____
Report Number _____ Design Note Number _____

Gauge Specifitacion Sheet

Interface Targets / Proximity Parts & Customer Agreed Check Points:	Specification Details and Appended Support Document References:
Measuring / Check Points for Part Gauge (Visual and Coordinate Detail):	
Calibration Frequency:	
Name: _____ Signature: _____ Date: _____	

Gauge Approval Sheet

Items		Specification Pedigree / Reference	Required (Yes / No)	Inspection / Buy off Report No./ Ref.	Approval (Yes / No)	Comments
Body / Mating Part Fix Area Identification (Body / Mating Part Recreation in X.Y.Z axis						
Key Gauge Tolerances Identification (Mating Part Surfaces, Location Surfaces)						
Details of Mating Part "Gap and Flush"						
Gauge Approval Activity and Reports	Gauge Materials Report					
	Gauge Inspection / Dimensional Report					
	Bias & Linearity Report					
	Fit & Function Report					
	Repeatability & Reproducibility Report					
Setting Masters Details and References						
Gauge Work Instructions Reference Details						

Coments:

Supplier Gauge Approval:	Tachi-s Acknowledgement:
Name: _____ Signature: _____ Date: _____	Name: _____ Signature: _____ Date: _____ Note: Acknowledgement by Tachi-s shall not relieve the supplier in any way from its responsibilities.

18) Process Capability Study Result Report

Process Capability Study Results Report	Part No.	Part Name	Measurement Date	App.	Exam	prep

			Tolerance		Evaluation Results							Measurement Results																													
№	Inepection Characteristics	Spec.	MAX	MIN	MAX	MIN	Ave.	Ramge	St.dev	Cp	Cpk	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
(1)					0.000	0.000	#¡DIV/0!	0.000	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!																														
(2)					0.000	0.000	#¡DIV/0!	0.000	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!																														
(3)					0.000	0.000	#¡DIV/0!	0.000	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!																														
(4)					0.000	0.000	#¡DIV/0!	0.000	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!																														
(5)					0.000	0.000	#¡DIV/0!	0.000	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!																														
(6)					0.000	0.000	#¡DIV/0!	0.000	#¡DIV/0!	#¡DIV/0!	#¡DIV/0!																														

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Confirmar que el documento sea una revisión vigente.

19) Production Preparation Confirm Checksheet #1-#5

TACHI-S México

(Model:) Production Preparation Check list #1

Supplier

Quality assurance responsible person	Person in charge

Purpose:
To check the sureness of the activity plan by the time of the SOP; to be linked with the Tachi-S event plan; to ensure care regarding the schedule for equipments, dies/molds and jigs/tools

Supplier name	
Objective parts	

Assessment : ◎ : Completed, ○ : On going plan, △: Delay to plan, × : Not yet start

Assessment regarding transferring to production preparation #1
Assessment regarding transferring to production preparation #1: OK / NO
(Day) (Month) (Year) 20

TACHI-S ( )

Approved by	Checked by

Progress status (entered by supplier)

Attend | Supplier | TACHI-S ( )

Description	Check contents	Requirement document (example)	Assessment judgment criteria	Self-evaluation	Evaluation by supplier	Evaluation	Actual condition	Cause	Measure	Responsible person	Completion date
1. Clarification of organization	1) Do you have a plan which can do progress management?	Production control plan, Production preparation management schedule	There are production readiness plan table combined with Tachi-s (to follow up on the plan and result, target, time of establishing tools and processes, time of CPK attainment, monitoring of progress status, and the responsible person for monitoring).	Plan : Have / Not have							
	2) Is the role allotment of production preparation clear?	System chart, Organization chart	An system chart that contains the names of the PJ responsible person and all of the persons in charge is prepared (links with Tachi-S contacts to be clear).	Organization chart : Have / Not have							
2. Information awareness	1) Are the latest change of design applied to the products, equipments and ~~concern~~ documents? (What No. are the latest design change notes/tempo Eng Change notes?)	Off tool of each parts progress control chart (In put Design change notes/tempo Eng Change notes number)	The last design change (design change notes/tempo Eng Change notes) number and contents are understood, and such are reflected in dies and jigs. (The last design change number is to be checked.)	Design change notes / tempo Eng Change notes number :							
3. Equipment, dies/molds and jigs/tools preparation	1) Are the production equipments progressed preparation as planned?(Production tool ratio, Jigs/Tools preparation ratio)	Off tool of each parts progress control chart (In put Design change notes/tempo Eng Change notes number), equipment maintenance plan	Production tools and jigs are planned to be prepared by the necessary date. (The start and completion of die production, testing, and product evaluation are to be entered in the plan, and the management of results and progress is to be enabled.)	Off tool ratio /							
	2) ~~is~~ Are the inspection equipments/inspection gauges progressed preparation as planned?	Inspection gauge plan, control book, and inspection report	A plan of inspection equipment and inspection jigs is prepared and a vision for inspection jigs is present (jig standards, inspection items, and inspection method for meeting the requirements shown in the drawings).	Gauge : /							
4. Standard documentations preparation	1)-Are the inspection standard/QC process charts(control plan) progressed preparation as planned? (include internal and suppliers)	Inspection standard, QC process chart	The department that makes them and the completion date in the plan are linked with events.	Scheduled date of submission : /							
	2)Are the required work standards (Standard work instruction and equipment and quality check sheet, etc.) number of each processes understood and progressed preparation as planned?	Standard work instruction, Check sheet	The department that makes them and the completion date in the plan are linked with events.	Scheduled date of complete : /							
	3) Are a necessary limit samples (standard samples) understood and is it progressed preparation as planned?	Limit sample plan, control book	The time for the plan of the necessary limit sample production is linked with events (PT, quality confirmation).	Scheduled date of complete : /							
	4) Has consistency in drawings, inspection standards, QC process charts, and standard work instructions been checked?	Consistency check plan and its result	The plan for the consistency check between those before plant production (on the desk) and those after the review of production (actual operation) is linked with events.	Consistency check Scheduled date of check: / Checked on: /							
5. Process preparation	1) Is the important process (Welding, Caulking, Tightening, Harness installation) specified (display to process and document)?	QC process chart and work key point, Standard Work instruction	The following is understood: The special safety symbol specified by Tachi-S is to be indicated in important processes and on important equipment on site, as well as in forms.	Indication on site: Have/Not have Forms (QC process chart, standard work instruction, work key point): Have/Not have							
	2) Is the quality guarantee of important process (Welding, Caulking, Tightening, Harness installation) ensured?	Maintenance process check sheet, QA matrix etc., Guarantee evaluate chart	Assessment so that quality guarantee is ensured is made by checking forms (before dies and jigs are made).	Scheduled date of complete: / Completed on: /							
	3) Are manufacturing conditions and equipment conditions decided at each process?	Condition chart, Daily check sheet	A plan in which preparation through the completion of the equipment condition chart and the items to be managed (daily check items) is prepared by being linked with events.	Target equipment: Have/Not have Scheduled date of complete: / Completed on: /							
	4) Are all measures incorporated about defect which occurred in the past?	Past trouble list and countermeasures content list	There is a list of past troubles in mass production and in prototype trials, and a plan in which countermeasures are to be reflected by the time of events is prepared.	Number of cases of past trouble check: Scheduled date of complete: / Completed on: /							
	5) POKAYOKE is fixed as planned, and was the check method of POKAYOKE also decided?	Process POKAYOKE map and POKAYOKE daily check sheet	A map that describes the locations and aims of POKAYOKE is prepared, and the introduction plan is prepared.	Scheduled date of submission: / Submitted on: /							
	6) Is there neither a frequent stop of equipment nor a neck process?	Equipment trial plan and trial result	The equipment trial and verification period are linked with events.	Scheduled date of submission: / Submitted on: /							
6. Work skill training	1) Is work skill training conducted as planned?	Work skill training plan, Competence evaluation chart	Methods of education and training are established, and who exactly is to be trained up to which level is planned (skill, target, status of progress for the target).	Work skill training completion %: % Scheduled date of complete: / Completed on: /							
	2) Have you the SOP head-count (HC) plan that planned by regular operator HC + back-up and has ensured HC?	Work skill training plan, Initial production plan / Operator plan	The necessary labor-hours have been predicted and figured out, and a plan for securing necessary staff is prepared.	Number of already secured persons/number of necessary persons: / Scheduled date of complete: / Completed on: /							
	3) Are the operators of important processes a assigned (certified) operators?	Education plan, Competence evaluation chart	A system for the recognition of qualifications is established, and a plan for assigning qualified persons who are educated and trained is prepared.	System of recognition of qualification: Have/Not have Scheduled date of assignment: / Assignment was completed on: /							
7. Production capacity / Control status	1) Is there production capacity enough?	MAX Production capacity chart	The MAX production capacity has been figured out. Measures to attain 150% of the defined regular production volume are prepared.	Plan of measures: Acceptable up to: %							
	2) Is the packaging standard set up not to spoil quality?	Packaging standard, Packaging application form	The packaging standard has been submitted and approved, and a plan to take measures against problems by simulating logistics and inventory with the designed packing style is prepared.	Scheduled date of submission: / Submitted on: /							
	3) Did important parts determine the lot identify, the position, the record method, etc.?	Lot control display detail, Lot display sample	For important parts, lot control is executed and a traceability system to search a target lot within two hours is established.	Scheduled date of submission: / Submitted on: /							
	4) The special inspection at the time of a standup, etc. have a plan of an initial management system. Is the standard of cancelation clear?	Initial management system structure, Stand up special inspection item, Standup inspection organization	The purpose, target value, and period of the initial management has been determined, and a system for the planning inspection of special management items exists or there is a plan to prepare it.	Scheduled date of submission: / Submitted on: /							
8. Products evaluate	1) A product is clear to specifications. Is it a satisfying quality level? Moreover, is required process capability ensured?	Inspection standard, Inspection report, Process capability report, Drawing	A system to prepare the inspection standard and inspection report based on requirements shown in drawings is prepared, and a plan to evaluate products is also prepared (the plan is to be linked with events).	Scheduled date of submission: / Submitted on: /							
	2) A component parts are clear to required item of drawing. Is it a satisfying quality level? Moreover, is required process capability ensured?	Inspection report, Process capability report, Drawing	A plan of tests to meet the requirements shown in drawings is prepared (the plan is to be linked with events).	Scheduled date of submission: / Submitted on: /							
9. Process change	1) Is there any process change and construction method change after a production trial phase?	Production plan, Process change request	Contents necessary for 4M management (change point control) and how to notice such are clear.	Plan of change: Have/Not have To be changed from: /							

Checksheet #2

(Model:) Production Preparation Check list #2

Purpose:
Check of whether there is no delay in the progress of the activity plan and whether the follow-up has surely been executed. (A check of delay in making dies is necessary.)

Quality assurance responsible person	Person in charge

Supplier name	
Objective parts	

Assessment regarding transferring to production preparation #2	TACHI-S ( )	
Assessment regarding transferring to production preparation #2: OK / NO	Approved by	Checked by
(Day) (Month) (Year) 20		

Assessment : ◎ : Completed, ○ : On going plan, △: Delay to plan, × : Not yet start

Progress status (entered by supplier)

Attend: Supplier / TACHI-S ( )

Description	Check contents	Requirement document (example)	Assessment judgment criteria	Self-evaluation	Evaluation by supplier	Evaluation	Actual condition	Cause	Measure	Responsible person	Completion date
1. Clarification of organization	1) Do you have a plan which can do progress management?	Production control plan, Production preparation management schedule	The follow-up of the progress of the production readiness plan table combined with Tachi-s is executed by the responsible person. Actions are taken for recovery from delay in the progress of plan.	Plan table: Have / Not have Scheduled date of submission : / Submitted on: /							
	2) Is the role allotment of production preparation clear?	System chart, Organization chart	Presence or absence of change is to be checked in the system chart, which contains the names of the PJ responsible person and all of the persons in charge. If present, measures are to be taken so as not to have any affect on the organization.	Organization chart: Have / Not have Scheduled date of preparation: /							
2. Information awareness	1) Are the latest change of design applied to the products, equipment and documents? (What No. are the latest design change notes/tempo Eng Change notes?)	Off tool of each parts progress control chart (In put Design change notes/tempo Eng Change notes number)	The history of the last design change (design change notes/tempo Eng Change notes) by Tachi-S is managed and its details are understood, and it is reflected in jigs and equipment (parts).	Design change notes / tempo Eng Change notes number :							
3. Equipment, dies/molds and jigs/tools preparation	1) Are the production equipments progressed preparation as planned?(Production tool ratio, Jigs/Tools preparation ratio)	Off tool of each parts progress control chart (In put Design change notes/tempo Eng Change notes number), equipment maintenance plan	Plans are prepared for each piece of equipment, and their execution has been started and is progressing without delay. If there is a delay in the progress of the plan, actions for recovery by the date of the completion of the plan are taken.	Off tool ratio: Scheduled date of complete: / Completed on: /							
	2) Are the inspection equipments/inspection gauges progressed preparation as planned?	Inspection gauge plan, control book, and inspection report	The arrangement of inspection equipment and inspection gauge has been started in accordance with the plan.	Gauge: Scheduled date of complete: / Completed on: /							
4. Standard documentations preparation	1) Are the inspection standard/QC process charts(control plan) progressed preparation as planned? (include internal and suppliers)	Inspection standard, QC process chart	Inspection standards and QC process charts for all parts are prepared as planned (number of completed ones/number of necessary ones).	Inspection standards, QC process charts Scheduled date of submission : / Submitted on: /							
	2) Are the required work standards (Standard work instruction and equipment and quality check sheet, etc.) number of each processes understood and progressed preparation as planned?	Standard work instruction, Check sheet	Lists of necessary standards are prepared, and the necessary standards are prepared as planned (number of completed forms/number of necessary forms).	Standard work instructions, check sheets Scheduled date of complete: / Completed on: /							
	3) Are a necessary limit samples (standard samples) understood and is it progressed preparation as planned?	Limit sample plan, control book	Lists of necessary limit samples are prepared, and the necessary limit samples are prepared as planned (number of completed ones/number of necessary ones).	Limit sample Scheduled date of complete: / Completed on: /							
	4) Has consistency in drawings, inspection standards, QC process charts, and standard work instructions been checked?	Consistency check plan and its result	Has been progressing as planned	Consistency check Scheduled date of check: / Checked on: /							
5. Process preparation	1) Is the important process (Welding, Caulking, Tightening, Harness installation) specified (display to process and document)?	QC process chart and work key point, Standard Work instruction	The special safety symbol specified by Tachi-S is prepared to be indicated in important processes and on important equipment on site. It is also indicated in forms.	Forms (QC process chart, standard work instruction, work key point): Have/Not have							
	2) Is the quality guarantee of important process (Welding, Caulking, Tightening, Harness installation) ensured?	Maintenance process check sheet, QA matrix etc., Guarantee evaluate chart	Assessment such that the quality guarantee is ensured can be made using forms (before dies and jigs are made). Measures against problems pointed out in the assessment are clear.	Scheduled date of complete: / Completed on: /							
	3) Are manufacturing conditions and equipment conditions decided at each process?	Condition chart, Daily check sheet	The equipment condition chart and the items to be managed are prepared in accordance with the plan of daily check items.	Target equipment: Present/Absent Scheduled date of complete: / Completed on: /							
	4) Are all measures incorporated about defect which occurred in the past?	Past trouble list and countermeasures content list	There is a list of past troubles in mass production and in prototype trials, and this is followed up on regarding whether measures for past problem-solving are reflected.	Number of cases of past trouble check: Scheduled date of complete: / Completed on: /							
	5) POKAYOKE is fixed as planned, and was the check method of POKAYOKE also decided?	Process POKAYOKE map and POKAYOKE daily check sheet	A map that describes the locations and aims of POKAYOKE is prepared, the check method is described in the check sheet, and the check has been executed as planned.	Scheduled date of submission : / Submitted on: /							
	6) Is there neither a frequent stop of equipment nor a neck process?	Equipment trial plan and trial result	Problems have been figured out through on-desk checking, and measures have been studied.	Scheduled date of submission : / Submitted on: /							
6. Work skill training	1) Is work skill training conducted as planned?	Work skill training plan, Competence evaluation chart	Methods for education and training are established, and who exactly is to be trained up to which level is planned. Skill and targets are clarified.	Work skill training completion %: % Scheduled date of complete: / Completed on: /							
	2) Have you the SOP head-count (HC) plan that planned by regular operator HC + back-up and has ensured HC?	Work skill training plan, Initial production plan / Operator plan	The necessary labor-hours have been predicted and figured out, and a plan for securing necessary staff is prepared.	Number of already secured persons/number of necessary persons: / Scheduled date of complete: /							
	3) Are the operators of important processes a assigned (certified) operators?	Education plan, Competence evaluation chart	A system for the recognition of qualifications is established, and a plan for assigning qualified persons who have been educated and trained is prepared.	System of recognition of qualification: Present/Absent Scheduled date of assignment: /							
7. Production capacity / Control status	1) Is there production capacity enough?	MAX Production capacity chart	The MAX production capacity has been figured out. Measures to attain 150% of the defined regular production volume are prepared.	Plan of measures: Acceptable up to: %							
	2) Is the packaging standard set up not to spoil quality?	Packaging standard, Packaging application form	Measures against problems have been studied by simulating logistics and inventory by the design of packing style and with designed packing style.	Scheduled date of submission : / Submitted on: /							
	3) Did important parts determine the lot identify, the position, the record method, etc.?	Lot control display detail, Lot display sample	For important parts, lot control is executed and a traceability system to search a target lot within two hours is established.	Scheduled date of submission : / Submitted on: /							
	4) The special inspection at the time of a standup, etc. have a plan of an initial management system. Is the standard of cancelation clear?	Initial management system structure, Stand up special inspection item, Standup inspection organization	The purpose, target value, and period of the initial management has been determined, and a system for planning the inspection of special management items is established or there is a plan to prepare it.	Scheduled date of submission : / Submitted on: /							
8. Products evaluate	1) A product is clear to specifications. Is it a satisfying quality level? Moreover, is required process capability ensured?	Inspection standard, Inspection report, Process capability report, Drawing	Inspection standard and inspection report based on the requirements shown in drawings are prepared, and criteria to evaluate (measure) products are prepared (measurement of delivered products).	Scheduled date of submission: / Submitted on: /							
	2) A component parts are clear to required item of drawing. Is it a satisfying quality level? Moreover, is required process capability ensured?	Inspection report, Process capability report, Drawing	A detailed schedule of tests to meet requirements shown in drawings is prepared (the completion date is to be linked with events).	Scheduled date of submission: / Submitted on: /							
9. Process change	1) Is there any process change and construction method change after a production trial phase?	Production plan, Process change request	Changes in dies, equipment, and jigs are understood (if there is no change, put ⊙).	Plan of change: Have/Not have To be changed from: /							

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Confirmar que el documento sea una revisión vigente.

Checksheet #3

(Model:) Production Preparation Check list #3

Supplier

Quality assurance responsible person	Person in charge

Purpose:
Check of the condition where equipments, dies/molds and jigs/tools have been prepared and whether no problems exist in any product evaluation, along with ensuring that the 4Ms have been prepared and production assuming mass production

Assessment regarding transferring to production preparation #3
Assessment regarding transferring to production preparation #3: OK / NO
(Day) (Month) (Year) 20

TACHI-S ( )	
Approved by	Checked by

Supplier name	
Objective parts	

Assessment : ◎ : Completed, ○ : On going plan, △: Delay to plan, × : Not yet start

				Progress status (entered by supplier)							
				Attend	Supplier		TACHI-S ( )				
Description	Check contents	Requirement document (example)	Assessment judgment criteria	Self-evaluation	Evaluation by supplier	Evaluation	Actual condition	Cause	Measure	Responsible person	Completion date
1. Clarification of organization	1) Do you have a plan which can do progress management?	Production control plan, Production preparation management schedule	A follow-up of the progress of the production readiness plan table combined with Tachi-s is executed by the responsible person. Actions are taken for recovery from any delay in the progress of the plan.	Plan table: Have / Not have Scheduled date of submission : / Submitted on: /							
	2) Is the role allotment of production preparation clear?	System chart, Organization chart	The presence or absence of change is to be checked in the system chart, which contains the names of the PJ responsible person and all of the persons in charge. If present, measures are to be taken so as not to have any affect on the organization.	Organization chart: Have / Not have Scheduled date of preparation: /							
2. Information awareness	1) Are the latest change of design applied to the products, equipment and documents? (What No. are the latest design change notes/tempo Eng Change notes?)	Off tool of each parts progress control chart (In put Design change notes/tempo Eng Change notes number)	The number and details of the last design change (design change notes/tempo Eng Change notes) by Tachi-S are understood, and these are reflected in products. * For design changes that have not yet been reflected, when they are to be reflected is to be clarified and the recovery plan is to be prepared.	Design change notes / tempo Eng Change notes number :							
3. Equipment, dies/molds and jigs/tools preparation	1) Are the production equipments progressed preparation as planned?(Production tool ratio, Jigs/Tools preparation ratio)	Off tool of each parts progress control chart (In put Design change notes/tempo Eng Change notes number), equipment maintenance	The preparation of mass production dies and jigs is complete. * Recovery from delay is to be completed during events.	Off tool ratio: Scheduled date of complete: / Completed on: /							
	2) Are the inspection equipments/inspection gauges progressed preparation as planned?	Inspection gauge plan, control book, and inspection report	An accuracy check is complete (checked using the inspection report). The required accuracy is realized.	Gauge: Scheduled date of complete: / Completed on: /							
4. Standard documentations preparation	1) Are the inspection standard/QC process charts(control plan) progressed preparation as planned? (include internal and suppliers)	Inspection standard, QC process chart	Inspection standards and QC process charts for all parts have been prepared, and they are ready to be submitted for each delivery (number of completed ones/number of necessary ones).	Inspection standards, QC process charts Scheduled date of submission : / Submitted on: /							
	2) Are the required work standards (Standard work instruction and equipment and quality check sheet, etc.) number of each processes understood and progressed preparation as planned?	Standard work instruction, Check sheet	A list of necessary standards is prepared, and the necessary standards are complete as planned (number of completed forms/number of necessary forms). * As to completeness, a level in which review and revision may be required is allowed, but it is necessary that problems are clarified or understood.	Standard work instructions, check sheets Scheduled date of complete: / Completed on: /							
	3) Are a necessary limit samples (standard samples) understood and is it progressed preparation as planned?	Limit sample plan, control book	A list of necessary limit samples is prepared and the preparation of such has been being progressed as planned (number of completed ones/number of necessary ones).	Limit sample Scheduled date of complete: / Completed on: /							
	4) Has consistency in drawings, inspection standards, QC process charts, and standard work instructions been checked?	Consistency check plan and its result	The check has been executed, and problems and tasks are clear, and a review and re-evaluation is planned.	Consistency check Scheduled date of check: / Checked on: /							
5. Process preparation	1) Is the important process (Welding, Caulking, Tightening, Harness installation) specified (display to process and document)?	QC process chart and work key point, Standard Work instruction	The special safety symbol specified by Tachi-S is indicated for important processes and on important equipment on site. It is also indicated in forms (processes related to CC/SC indications in drawings).	Indication on site: Have/Not have Forms (QC process chart, standard work instruction, work key point): Have/Not have							
	2) Is the quality guarantee of important process (Welding, Caulking, Tightening, Harness installation) ensured?	Maintenance process check sheet, QA matrix etc., Guarantee evaluate chart	Measures for the results of the audit of process and quality guarantee evaluation meeting the target values (described in the check sheet) necessary for mass production are determined.	Scheduled date of complete: / Completed on: /							
	3) Are manufacturing conditions and equipment conditions decided at each process?	Condition chart, Daily check sheet	An equipment condition chart is prepared, and the items to be managed are reflected in daily check items and are easily checked. Consistency with the QC process chart is kept.	Target equipment: Present/Absent Scheduled date of complete: / Completed on: /							
	4) Are all measures incorporated about defect which occurred in the past?	Past trouble list and countermeasures content list	There is a list of past troubles in mass production and in prototype trials, and the check of whether measures for past problem-solving are reflected is complete (number of extracted cases/number of reflected cases, 100% complete).	Number of cases of past trouble check: Scheduled date of complete: / Completed on: /							
	5) POKAYOKE is fixed as planned, and was the check method of POKAYOKE also decided?	Process POKAYOKE map and POKAYOKE daily check sheet	A map that describes the locations and aims of POKAYOKE is prepared, and the check method is described in the check sheet.	Scheduled date of submission : / Submitted on: /							
	6) Is there neither a frequent stop of equipment nor a neck process?	Equipment trial plan and trial result	Equipment has been operated, and problems have been clarified and measures have been taken.	Scheduled date of submission : / Submitted on: /							
6. Work skill training	1) Is work skill training conducted as planned?	Work skill training plan, Competence evaluation chart	Methods of education and training are established, and the skill evaluation result meets the current skill target. Education in handling products is complete.	Work skill training completion %: % Scheduled date of complete: / Completed on: /							
	2) Have you the SOP head-count (HC) plan that planned by regular operator HC + back-up and has ensured HC?	Work skill training plan, Initial production plan / Operator plan	Necessary processes are figured out, and necessary staff is secured. Two or more operators per a process are targeted.	Number of already secured persons/number of necessary persons: / Scheduled date of complete: /							
	3) Are the operators of important processes a assigned (certified) operators?	Education plan, Competence evaluation chart	A system for the recognition of qualifications is established, and qualified persons who have been educated and trained are assigned.	System of recognition of qualification: Present/Absent Scheduled date of assignment: /							
7. Production capacity/Control status	1) Is there production capacity enough?	MAX Production capacity chart	The MAX production capacity has been figured out. Measures to attain 150% of the defined regular production volume are prepared.	Plan of measures: Acceptable up to: %							
	2) Is the packaging standard set up not to spoil quality?	Packaging standard, Packaging application form	Measures can be taken against problems in the simulation with the designed packing style, and the packing standard can be submitted.	Scheduled date of submission : / Submitted on: /							
	3) Did important parts determine the lot identify, the position, the record method, etc.?	Lot control display detail, Lot display sample	For important parts, lot control is executed and a target can be searched (traced) within two hours.	Scheduled date of submission : / Submitted on: /							
	4) The special inspection at the time of a standup, etc. have a plan of an initial management system. Is the standard of cancelation clear?	Initial management system structure, Stand up special inspection item, Standup inspection organization	The purpose, target value, and period of the initial management has been determined, and there is a plan for the inspection of special management items.	Scheduled date of submission : / Submitted on: /							
8. Product evaluate	1) A product is clear to specifications. Is it a satisfying quality level? Moreover, is required process capability ensured?	Inspection standard, Inspection report, Process capability report, Drawing	Measurement based on the inspection standard has been completed, and the results meet the standard. Process capability to accommodate an increased level of n of required quality characteristics is secured.	Scheduled date of submission: / Submitted on: /							
	2) A component parts are clear to required item of drawing. Is it a satisfying quality level? Moreover, is required process capability ensured?	Inspection report, Process capability report, Drawing	Measurement based on the inspection standard has been completed, and the results meet the standard. Process capability to accommodate an increased level of n of required quality characteristics is secured.	Scheduled date of submission: / Submitted on: /							
9. Process change	1) Is there any process change and construction method change after a production trial phase?	Production plan, Process change request	Off-tool dies and jigs are used, and mass production operators are assigned (if there is no change, put). * Prior notice is given and formal procedure is taken for any change. Influence on product quality is verified.	Plan of change: Have/Not have To be changed from: /							
10 Process check	1) Are the quality characteristics in the QC process charts and inspection standards consistent with the conditions/management items for equipment and jigs?	On-site check: QC process chart, inspection standards	There is no problem in consistency. (For off process, the plan is to be checked.)								
	2) Are the quality characteristics described in the standard work instructions and others, and is the check by actual operations executed?	Operation check: Standard work instructions	A check of actual operations is executed, and problems and tasks are clear.								

TACHI-S México

Checksheet #4

TACHI-S México **(Model:) Production Preparation Check list #4**

Purpose:
For product evaluation after the completion of equipments, dies/molds and jigs/toolsand with the method for mass production being complete (CPK: 100%), and for when the workmanship evaluation of quality is complete and when the preparation for 4M management is also complete; along with when unsolved problems are clear and when the schedule for their solution before

Supplier	Quality assurance responsible person	Person in charge

Supplier name	
Objective parts	

Assessment : ◎ : Completed, ○ : On going plan, △: Delay in plan, × : Not yet start

Assessment regarding transferring to production preparation #4
Assessment regarding transferring to production preparation #4: OK / NO
(Day) (Month) (Year) 20

TACHI-S

Approved by | Checked by

Progress status (entered by supplier)

Attend | Supplier | TACHI-S ( )

Description	Check contents	Requirement document (example)	Assessment judgment criteria	Self-evaluation	Evaluation by supplier	Evaluation	Actual condition	Cause	Measure	Responsible person	Completion date
1. Clarification of organization	1) Do you have a plan which can do progress management?	Production control plan, Production preparation management schedule	The follow-up of the progress of the production readiness plan table is executed by the responsible person. There is no delay at this point.	Plan table: Have / Not have Scheduled date of submission : / Submitted on: /							
	2) Is the role allotment of production preparation clear?	System chart, Organization chart	The presence or absence of change is to be checked in the system chart, which contains the names of the PJ responsible person and all of the persons in charge. If present, measures are to be taken so as not to cause any affect on the organization.	Organization chart: Have / Not have Scheduled date of preparation: /							
2. Information awareness	1) Are the latest change of design applied to the products, equipment and documents? (What No. are the latest design change notes/tempo Eng Change notes?)	OH tool of each parts progress control chart (In put Design change notes/tempo Eng Change notes number)	The number and details of the last design change (design change notes/tempo Eng Change notes) by Tachi-S are understood and are reflected in the products.	Design change notes / tempo Eng Change notes number :							
3. Equipment, dies/molds and jigs/tools preparation	1) Are the production equipments progressed preparation as planned?(Production tool ratio, Jigs/Tools preparation ratio)	OH tool of each parts progress control chart (In put Design change notes/tempo Eng Change notes number)	The progress is complete as planned. * Recovery from delay is complete during events.	OH tool ratio: Scheduled date of complete: / Completed on: /							
	2) Are the inspection equipments/inspection gauges progressed preparation as planned?	Inspection gauge plan, control book, and inspection report	The preparation of inspection items and methods for inspection gauge have been completed, and operators understand them. * To be checked on site	Gauge: Scheduled date of complete: / Completed on: /							
4. Standard documentations preparation	1) Are the inspection standard/IQC process charts(control plan) progressed preparation as planned? (include internal and suppliers)	Inspection standard, QC process chart	Inspection standards and QC process charts have been prepared for each part and are submitted for each delivery, and the receiving side has admitted them(number of those completed/number of those necessary).	Inspection standards, QC process charts Scheduled date of submission : / Submitted on: /							
	2) Are the required work standards (Standard work instruction and equipment and quality check sheet, etc.) number of each processes understood and progressed preparation as planned?	Standard work instruction, Check sheet	Lists of necessary standards have been prepared, and the necessary standards are complete as planned (number of completed forms/number of necessary forms).	Standard work instructions, check sheets Scheduled date of complete: / Completed on: /							
	3) Are a necessary limit samples (standard samples) understood and is it progressed preparation as planned?	Limit sample plan, control book	Lists of necessary limit samples have been prepared, and the necessary limit samples are complete as planned (number of completed ones/number of necessary ones).	Limit sample Scheduled date of complete: / Completed on: /							
	4) Has consistency in drawings, inspection standards, QC process charts, and standard work instructions been checked?	Consistency check plan and its result	A check has been executed, and the items revised for consistency are reflected in the forms.	Consistency check Scheduled date of check: / Checked on: /							
5. Process preparation	1) Is the important process (Welding, Caulking, Tightening, Harness installation) specified (display to process and document)?	QC process chart and work key point, Standard Work instruction	A special safety symbol is indicated for important processes and on important equipment. Such is also indicated in forms (CC/SC indication in drawings).	Forms (QC process chart, standard work instruction, work key point): Have/Not have							
	2) Is the quality guarantee of important process (Welding, Caulking, Tightening, Harness installation) ensured?	Maintenance process check sheet, QA matrix etc., Guarantee evaluate chart	The results of the audit of process and the quality guarantee evaluation meet the target values (described in the check sheet) necessary for mass production.	Scheduled date of complete: / Completed on: /							
	3) Are manufacturing conditions and equipment conditions decided at each process?	Condition chart, Daily check sheet	An equipment condition chart is prepared, and the items to be managed are reflected in daily check items and can be easily checked.	Target equipment: Present/Absent Scheduled date of complete: / Completed on: /							
	4) Are all measures incorporated about defect which occurred in the past?	Past trouble list and countermeasures content list	There is a list of past troubles in mass production and in prototype trial events, the measures are reflected to parts and processes, and the evaluation is complete.	Number of cases of past trouble check: Scheduled date of complete: / Completed on: /							
	5) POKAYOKE is fixed as planned, and was the check method of POKAYOKE also decided?	Process POKAYOKE map and POKAYOKE daily check sheet	A map which shows the locations of POKAYOKE with its aims is prepared, the check method is described in the check sheet, and any abnormality and how to handle such is clear.	Scheduled date of submission : / Submitted on: /							
	6) Is there neither a frequent stop of equipment nor a neck process?	Equipment trial plan and trial result	Equipment has been operated within the mass-production tact time 1, problems are clear, and measures have been taken.	Scheduled date of submission : / Submitted on: /							
6. Work skill training	1) Is work skill training conducted as planned?	Work skill training plan, Competence evaluation chart	Methods of education and training are established, who is to be trained up to which level is planned, and the skill level has reached the target.	Work skill training completion %: % Scheduled date of complete: / Completed on: /							
	2) Have you the SOP head-count (HC) plan that planned by regular operator HC + back-up and has ensured HC?	Work skill training plan, Initial production plan / Operator plan	Necessary processes are figured out, and necessary staff is secured.	Number of primary persons /number of necessary persons:							
	3) Are the operators of important processes a assigned (certified) operators?	Education plan, Competence evaluation chart	A system of recognition for qualifications is established, and qualified persons who have been educated and trained are assigned.	System of designation of qualification: Present/Absent Scheduled date of assignment: /							
7. Production capacity / Control status	1) Is there production capacity enough?	MAX Production capacity chart	The MAX production capacity has been figured out. Measures to attain 150% of the defined regular production volume are prepared.	Plan of measures: Acceptable up to: %							
	2) Is the packaging standard set up not to spoil quality?	Packaging standard, Packaging application form	The packaging standard has been submitted and approved, and measures against problems of long-term storage with the designed packing style are successfully taken.	Scheduled date of submission : / Submitted on: /							
	3) Did important parts determine the lot identify, the position, the record method, etc.?	Lot control display detail, Lot display sample	For important parts, lot control is executed and a target can be searched (traced) within two hours.	Scheduled date of submission : / Submitted on: /							
	4) The special inspection at the time of a standup, etc. have a plan of an initial management system. Is the standard of cancelation clear?	Initial management system structure, Stand up special inspection item, Standup inspection organization	The purpose, target value, and period of the initial management have been determined, and there is a plan for the inspection of special management items.	Scheduled date of submission : / Submitted on: /							
8. Products evaluate	1) A product is clear to specifications. Is it a satisfying quality level? Moreover, is required process capability ensured?	Inspection standard, Inspection report, Process capability report, Drawing	Measurement based on the inspection standard has been completed, and the results meet the standard. The required quality characteristics of process capability meet the target value.	Scheduled date of submission: / Submitted on: /							
	2) A component parts are clear to required item of drawing. Is it a satisfying quality level? Moreover, is required process capability ensured?	Inspection report, Process capability report, Drawing		Scheduled date of submission: / Submitted on: /							
9 Ensuring of mass-productiveness	1) Is the mass-productiveness (productivity, quality) verified in the mass production tact time?	Mass-productiveness check results	Production is possible within the targeted mass-production tact time. The product meets the standard.	Scheduled date of verification: / Verified on: /							
			If the above-mentioned productivity and quality cannot be attained, bottlenecked operation processes and problems are extracted and measures against them are assumed.	Scheduled date of verification: / Verified on: /							
10 Process change	1) Is there any process change and construction method change after a production trial phase?	Production plan, Process change request	Mass production dies, equipment, and jigs are used, and mass production operators are assigned (if there is no change, put).	Plan of change: Have/Not have To be changed from /							
11 Process check	1) Are the quality characteristics in the QC process charts and inspection standards consistent with the conditions/management items for equipment and jigs?	On-site check QC process charts, inspection standards	There is no problem in consistency. (The process flow is to be checked by using the QC process charts.)								
	2) Are the quality characteristics described in the standard work instructions and others, and is the check by actual operations executed?	Operation check: Standard work instructions	A check by actual operation is executed. The points of the standard work instructions are to be checked.								

Checksheet #5

(Model:) Production Preparation Check list #5

Supplier name	
Objective parts	

Supplier

Quality assurance responsible person	Person in charge

Purpose:
To keep the direct running rate and the workmanship of the product within the normal mass production tact time; to smoothly conduct production

Assessment of production preparation #5
Assessment of the completion of production preparation #5: OK / No
(Day) (Month) (Year) 20

TACHI-S ( )
Approved by | Checked by

Progress status (entered by supplier)
Attend

Supplier | TACHI-S ( )

Assessment : ◎ : Completed, ○ : On going plan, △: Delay to plan, × : Not yet start

Description	Check contents	Requirement document (example)	Assessment judgment criteria	Self-evaluation	Evaluation by supplier	Evaluation	Actual condition	Cause	Measure	Responsible person	Completion date
1. Clarification of organization	1) Do you have a plan which can do progress management?	Production control plan, Production preparation management schedule	Activities other than the ramp-up activity have been completed. (Plans have been closed).	Plan table: Have / Not have Scheduled date of submission : / Submitted on: /							
	2) Is the role allotment of production preparation clear?	Sy stem chart, Organization chart	The presence or absence of change is to be checked in the system chart, which contains the names of the PJ responsible person and all of the persons in charge. If present, measures are to be taken so as not to cause any effect on the organization.	Organization chart: Have / Not have Scheduled date of preparation: /							
2. Information awareness	1) Are the latest change of design applied to the products, equipment and documents? (What No. are the latest design change notes/tempo Eng Change notes?)	Off tool of each parts progress control chart (In put Design change notes/tempo Eng Change notes number)	There is no untreated design change left remaining. All design changes have been reflected in products and processes, and their evaluation has also been completed.	Design change notes / tempo Eng Change notes number :							
3. Equipment, dies/molds and jigs/tools preparation	1) Are the production equipments progressed preparation as planned?(Production tool ratio, Jigs/Tools preparation ratio)	Off tool of each parts progress control chart (In put Design change notes/tempo Eng Change notes	All permanent setups have been completed. The equipment maintenance plan is complete.	Off tool ratio: Scheduled date of complete: / Completed on: /							
	2) Are the inspection equipments/Inspection gauges progressed preparation as planned?	Inspection gauge plan, control book, and inspection report	The preparation of inspection items and the method for inspection gauge have been completed, and operators understand them. Management is executed by using the jig control book.	Gauge: Scheduled date of complete: / Completed on: /							
4. Standard documentations preparation	1) Are the inspection standard/QC process charts(control plan) progressed preparation as planned? (include internal and suppliers)	Inspection standard, QC process chart	Inspection standards and QC process charts have been prepared for each part and submitted for each delivery, and the receiving side has admitted them. Such activities are complete for outside companies.	Inspection standards, QC process charts Scheduled date of submission : / Submitted on: /							
	2) Are the required work standards (Standard work instruction and equipment and quality check sheet, etc.) number of each processes understood and progressed preparation as planned?	Standard work instruction, Check sheet	All necessary standards are complete.	Standard work instructions, check sheets Scheduled date of complete: / Completed on: /							
	3) Are a necessary limit samples (standard samples) understood and is it progressed preparation as planned?	Limit sample plan, control book	Lists of necessary limit samples have been prepared, and the necessary limit samples are complete. The expiration date is also indicated.	Limit sample Scheduled date of complete: / Completed on: /							
	4) Has consistency in drawings, inspection standards, QC process charts, and standard work instructions been checked?	Consistency check plan and its result	A check has been executed, and consistency is kept.	Consistency check Scheduled date of check: / Checked on: /							
5. Process preparation	1) Is the important process (Welding, Caulking, Tightening, Harness installation) specified (display to process and document)?	QC process chart and work key point, Standard Work instruction	A special safety symbol is indicated for important processes and on important equipment on site. Such is also indicated in forms.	Document to use: Have/Not have Forms (QC process chart, standard work instruction, work key point): Have/Not							
	2) Is the quality guarantee of important process (Welding, Caulking, Tightening, Harness installation) ensured?	Maintenance process check sheet, QA matrix etc., Guarantee evaluate chart	The results of the audit of process and the quality guarantee evaluation meet the target values (described in the check sheet) necessary for mass production.	Scheduled date of complete: / Completed on: /							
	3) Are manufacturing conditions and equipment conditions decided at each process?	Condition chart, Daily check sheet	The equipment condition chart is prepared, and the items to be managed are reflected in daily check items and can be easily checked.	Target equipment: Present/Absent Scheduled date of complete: / Completed on: /							
	4) Are all measures incorporated about defect which occurred in the past?	Past trouble list and countermeasures content list	There is a list of past troubles in mass production and in prototype trial events, and the measures have been reflected.	Number of cases of past trouble check: Scheduled date of complete: / Completed on: /							
	5) POKAYOKE is fixed as planned, and was the check method of POKAYOKE also decided?	Process POKAYOKE map and POKAYOKE daily check sheet	A map that shows the locations of POKAYOKE with its aims is prepared, the check method is described in the check sheet, and the method for handling abnormality is well understood.	Scheduled date of submission : / Submitted on: /							
	6) Is there neither a frequent stop of equipment nor a neck process?	Equipment trial plan and trial result	Equipment has been operated within the mass production tact time, and problems involving bottlenecked processes have been solved.	Scheduled date of submission : / Submitted on: /							
6. Work skill training	1) Is work skill training conducted as planned?	Work skill training plan, Competence evaluation chart	Education and proficiency are complete, and the target of tact time has been attained.	Work skill training completion %: % Scheduled date of complete: / Completed on: /							
	2) Have you the SOP head-count (HC) plan that planned by regular operator HC + back-up and has ensured HC?	Work skill training plan, Initial production plan / Operator plan	Necessary processes are figured out, and necessary staff is secured.	Number of ordinary vacation persons /number of necessary persons: / Scheduled date of complete: /							
	3) Are the operators of important processes a assigned (certified) operators?	Education plan, Competence evaluation chart	A system of recognition for qualifications is established, and qualified persons who have been educated and trained are assigned. The management of operator change is enabled.	System of recognition of qualification: Present/Absent Scheduled date of assignment: / Assignment was completed on: /							
7. Production capacity / Control status	1) Is there production capacity enough?	MAX Production capacity chart	The MAX production capacity has been figured out. Measures to attain 150% of the defined regular production volume are prepared.	Plan of measures: Acceptable up to: %							
	2) Is the packaging standard set up not to spoil quality?	Packaging standard, Packaging application form	The packaging standard has been submitted and approved, and measures against problems of conveyance/transportation are successfully taken.	Scheduled date of submission : / Submitted on: /							
	3) Did important parts determine the lot identify, the position, the record method, etc.?	Lot control display detail, Lot display sample	For important parts, lot control is executed and a target can be searched (traced) within two hours.	Scheduled date of submission : / Submitted on: /							
	4) The special inspection at the time of a standup, etc. have a plan of an initial management system. Is the standard of cancelation clear?	Initial management system structure, Stand up special inspection item, Standup inspection organization	The purpose, target value, and period of the initial management have been determined, and there is a plan for the inspection of special management items.	Scheduled date of submission : / Submitted on: /							
8. Products evaluate	1) A product is clear to specifications. Is it a satisfying quality level? Moreover, is required process capability ensured?	Inspection standard, Inspection report, Process capability report, Drawing	Measurement based on the inspection standard has been completed, and the results meet the standard. The required quality characteristics of process capability meet the target value. The frequency of completion inspection and sampling inspection is determined, and the assessment criteria are accurately notified to inspectors. (There is indication for the assessment criteria.)	Scheduled date of submission: / Submitted on: /							
	2) A component parts are clear to required item of drawing. Is it a satisfying quality level? Moreover, is required process capability ensured?	Inspection report, Process capability report, Drawing		Scheduled date of submission: / Submitted on: /							
9 Ensuring of mass-productiveness	1) Is the mass-productiveness (productivity, quality) verified in the mass production tact time?	Mass-productiveness check results	Production is possible within the targeted mass production tact time. The product meets the standard.	Scheduled date of verification: / Verified on: /							
			Measures against bottlenecked operation processes and problems have been taken.	Scheduled date of verification: / Verified on: /							
10 Process change	1) Is there any process change and construction method change after a production trial phase?	Production plan, Process change request	Mass production dies, equipment, and jigs are used, and mass production operators are assigned. (if there is no change, put ▿)	Plan of change: Have/Not have To be changed from: /							
11 Process check	1) Are the quality characteristics in the QC process charts and inspection standards consistent with the conditions/management items for equipment and jigs, and with the work site?	On-site check: QC process charts, inspection standards	There is no problem in consistency. (The production condition is to be checked by process and by using the QC process charts.)								
	2) Are the quality characteristics described in the standard work instructions and others, and is the check by actual operations executed?	Operation check: Standard work instructions	A check by actual operation is executed. (The points of the standard work instructions and actual operations are to be checked.)								

20)Ramp up

dd/mmm/yyyy
Supplier name

Approve	Check	Author

Model : Ramp -up Activity Plan

NO	Item	Contents
1	Parts name & number	Parts name : Parts number :
2	Manufacture Plant	
3	Target value	
4	Structure for Ramp-up actitvity	
5	Feedback Meetings	
6	Ramp-up term & Exit criteria	
7	Action Items	
8	Shipping Control	

Revided History

NO	dd/mmm/yyyy	Contents	Approved	Author
N		New		
1				
2				
3				

21) Project Development Record

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TQMS PROJECT DEVELOPMENT RECORD

Supplier Name _____ Part No. _____ Important Part SC ☐ CC ☐
Supplier Code _____ Part Name _____

Supplier Plant _____ Drawing No. _____
Report Number _____ Design Note Number _____

No.	Detail						
Report No.		Root cause					
		Countermeasure					
			Design Note: Date: Judgement:	Design Note: Date: Judgement:	Design Note: Date: Judgement:	Design Note: Date: Judgement:	Design Note: Date: Judgement:
	Raised by:						
	Date: Build:	Confirmation					
Report No.		Root cause					
		Countermeasure					
			Design Note: Date: Judgement:	Design Note: Date: Judgement:	Design Note: Date: Judgement:	Design Note: Date: Judgement:	Design Note: Date: Judgement:
	Raised by:						
	Date: Build:	Confirmation					

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22) Substance of Concern Non-inclusion Analyze Result Report

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Delivered Parts SOC Non-Inclusion Statement Sheet

Model:< >

Plant:	Section:		Supplier:		
Approved by	Examined by	Received by	Approved by	Examined by	Author:

	Part No.	Part Name	Category	Supplier	New/Current	Statement that component parts do not include SOC
Component (per set for delivery)						

23) Evidence Form

SOC Analysis Report

Supplier:		
Dept.:		
Approved by	Examined by	Created by

Model:

Part/Material No:

Part/Material Name:

SOC	Analysis value (Note1)	Analysis Method	Minimum value of quantitative analysis method	Intentionally or Unintentionally (Reason	Attached data
Pb				Intentionally Unintentionally ( )	
Hg				Intentionally Unintentionally ( )	
Cd				Intentionally Unintentionally ( )	
Cr (hexavalent)				Intentionally Unintentionally ( )	
Asbestos				Intentionally Unintentionally ( )	
PBDE				Intentionally Unintentionally ( )	
PBB				Intentionally Unintentionally ( )	

Note 1: Includes the qualitative analysis results by X-ray fluorescence spectrometer.

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24) Actual State Sheet Indicating Non-inclusion in Delivered Parts

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DELIVERED PARTS SOC NON INCLUSION STATEMENT SHEET

MODEL: _____

PLANT:	SECTION:		SUPPLIER:		
APPROVED BY	EXAMITED BY	RECEIVED BY	APPROVED BY	EXAMITED BY	RECEIVED BY

	PART NO.	PART NAME	CATEGORY	SUPPLIER	NEW/CURRENT	STATEMENT THAT COMPONENT PARTS DO NOT INCLUDE SOC				
COMPONENT /PER SET FOR DELIVERY)										

Este documento es propiedad de Tachi-s México, no puede ser dado a terceras partes de lo contrario carecerá de validez.
Confirmar que el documento sea una revisión vigente.

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25) Inspection Quick Notice and Correction Records

TACHI-S México

To

Issue date: dd/mmm/yyyy
Issued by dept.
Issued by

Inspection Quick Notice and Corrective Action Record

Control No

Approved by	Checked by	Author

(1) Occurance date: dd/mmm/y | **(2) Place occurred:** Receiving:( ) Process ( ) Customer (Delivered)

(3) Model: | Part name:

(4) Handling No(Customer): | Part No: | **(5) Reply Deadline**: dd/mmm/yyyy

Advance Report

(6) Issue

Description:
Founding Condition:
No.of defects: pieces /lot (Total no: pieces)
Temporary handling:
Handling Result:
Failure history: - First time - Reoccurrence - Chronic
Inventory : TACHI-S: No rework/Rework/Sort and Replace/Replace LOT
Supplier: Sorting/Rework/Scrap
- For next shipment - For next production
Sorting result: - In-house( ) - Supplier( ) - Customer ( )
Investigate area: 4M Change points, C/M of from past issue, Data, Applicable LOT
Notification of initial product Required/Not required

Figure/Picture

(7) Failure rank *Enter a circle in applicable field by the responsible division/For changes or revision, ● shall be entered.

		1	Internal	Dectectable				
		2		Undetectable				
		3	Customer	Detectable				
		4		Undetectable				
Can Identify	Can't Identify	Location of failure / Identify quantity / Process / Failure			5	3	1	
					Safety related process	Important process	General process	
1	3	Safety related failure			8			
		Function related failure			6			
		Labeling failure (caution label)			3			
		Others (Appearance/Missing/Wrong part/Scratch/Noise)			1			

Result

< Score/Failure rank

Total score	Rank
19 – 20	1
15 – 18	2
11 – 14	3
4 – 10	4

< Result >

	Score
In-house	
	Rank

Customer: Use Customer Standard
Internal: Standard(B, C)

Importance level	
Customer	**Internal**

(8) Cause/Measures (Circle applicable items): Required report (Analysis report/Why-Why Analysis Report)

* Why made? (Cause of issue)
* Why shipped? (Cause of outflow)
* Does countermeasure stop reoccurrence? (Countermeasure for occurrence)
* Does countermeasure prevent shipping defect parts? (Outflow measure)

(9) Occurrence Causes (Circle applicable items)

Standard operation/Change point control management/Abnormal handling/Daily control/Process design/Specification Issue

(10) Handling (Circle applicable) | Result

(11) Initial review

- Evaluation result of measures and standardization: Pass/Fail
< If "Required" is selected for ⑩, the result shall be judged, as well. Follow up is allowed for the second evaluation.>
- Reason for the result of judgment is as follows;

Approved by	Checked by	Checked by

Deadline for response (2nd): dd/mm/yyyy

- D-FMEA(Required/Not) Implementation Period; — Pass/Fail
- P-FMEA(Required/Not) Implementation Period; — Pass/Fail
- Revision of inspection standard(Required/Not) Implementation Period; — Pass/Fail
- QC process chart revision(Required/Not) Implementation Period; — Pass/Fail
- Revision of standard work instruction (Required/Not) Implementation Period; — Pass/Fail
- Evaluation of Quality Assuarance level (Required/Not) Implementation Period; — Pass/Fail

2nd review

- Evaluation result of measures and standardization: Pass/Fail
- Reason for the result of judgment is as follows;

Approved by	Checked by	Checked by

Deadline for response : dd/mm/yyyy

(12) Horizontal Deployment (Adopt at other plants, suppliers)

Yes/No	Description

(13) Apply to register in quality know-how

Yes/No	Description

(14) Result

< Required to submit to QA sect >
1.Failures raised at shipped destination(c
2. Failures in rank A/B

Sect.in QA Dept

Approved by	Checked by	Author

Corrective Action Records

Distributing destination	Inspection Report	Corrective Action
Exec officer of QA		
Exec officer of plant		
QA GM		
Other related		
Copy		
Total	0	0

Note 1: Return the original document to the issued division after filling out.
Note 2: For warranty claims, Inspection Quick Notice on Warranty Claim(C8-04-03 Form－1) shall be issued.

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26) Analyze Report (Countermeasure Report for Prevention of Reoccurrence, 8D report -)

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TQMS 8D CONCERN & COUNTERMEASURE REPORT SUMMARY

Supplier Name		Part No.		Important Part SC ☐ CC ☐
Supplier Code		Part Name		
Supplier Plant		Drawing No.		
Report Number		Design Note Number		

1. Concern Details

Description (include photograph or sketch):

Report No.			
Rank			
Incident Date & time			
Model			
Quantity Affected			
Affected Lot No´s.			
Recurrence	Y		N

2. Similar Part Consideration

Can the concern appear on the parts?

Consider:	YES	NO	Comment / Result
- Other models			
- Generic Parts			
- Other Colours			
- Opposite Hand			
- Front / Rear			
- Oher (please state):			

3. Initial Analysis

Where should the non-conforming parts have been detected?	YES	NO	Reason fon non-detection
- During process / Manufacture?			
- After manufacture (e.g. Final inspection)			
- Prior to dispatch			
- Oher (please state):			

4. Temporary Countermeasures - Immediate Action

What actions have been taken to prevent the delivery of reject parts to Renault / Nissan Plants?

Consider:	Actions Taken	Qty. OK	Qty. NG	% Effective
- Work in progress				
- Stores stock				
- Warehouse stock				
- Service parts				

Temporary Countermeasure Detail:

Delivery Date for 1st OK parts after temporary countermeasure	
Delivery Reference for 1st OK parts after temporary countermeasure	
How are OK parts identified?	

5. Fynal Analysis

WHY Analysis to identify root cause ***Consider: Man, Material, Machine, Method, Who, Where When Why, How, Process settings, Rework, Maintenance etc. Attach extra detail sheets where necessary**

1	Why was the non conformity made?					2	Why was the non conformity not detected?		
Why?		Why?		Why?		Why?		Why?	
Why?		Why?		Why?		Why?		Why?	
Why?		Why?		Why?		Why?		Why?	
Why?		Why?		Why?		Why?		Why?	
Why?		Why?		Why?		Why?		Why?	

Root Cause:

	Responsability		Responsability		Responsability		Responsability		Responsability
	Department		Department		Department		Department		Department

6. Permanent Countermeasures

What actions have been taken to prevent the manufacture of reject parts in the future? ***Consider: Error proofing, Testing, Process Control etc.**

Actions	Responsability	Department	Timing

7. Countermeasure Confirmation

Have the countermeasures implemented been confirmed as effective?

Countermeasure Action	Confirmation method

8. Follow-up Actions (Lessons Learned / Recurrence Prevention Activities)

Review the following documentation and update as a result of this concern. ***Please attach relevant data, e.g. Dimensional Report, Capability study, Attribute data, Fault tree analysis etc.**

Consider:	Updated? (Y/N)	Details	Responsability	Department	Timing
- DFMEA					
- Drawing / CAD data					
- Design / Development / QA Standards					
- Special Characteristics & Key Features Diagram					
- PFMEA					
- Process Flow Chart					
- Control Plan / Chart					
- In house Work / Inspection Instructions					
- Gauges / MSA					
- Sub-supplier Follow-up					

Have the countermeasures taken been horizontally deployed to similar parts, processes and other plants?

Countermeasure Action	Deployment? (Y/N)	Details

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27) Audit format (Complete file in annexes)

Quality Assurance Audit Sheet

Important item: section of points (2 points or less--5, 0 point---10)

Evaluation Level		5 Point	4 Point	3 Point	2 Point	0 Point
Criteria	General items	An activity is implemented more than the system.	It is completely implemented.	The management of past performance is partially insufficient.	Understanding of rules and the management of past performance are partially unclear.	There are no system and records of past performance
	Important items	An activity is implemented more than the system.	It is completely implemented.	Management is partially insufficient. Also even, it is a honest mistake	The management of past performance is partially insufficient.	Understanding of rules and the management of past performance are partially unclear.

Evaluation	Rank A	Rank B	Rank C	Rank D
Evaluation Point	100～80	79～60	59～40	39～
Qualification	All important items more than 4 points	All important items more than 3 points	No qualification	

	Evaluation Item		Content of Audit	Important item	Content of Confirmation	Documents	Audit style: Plant (Process)	Audit style: Supplier (System)	Audit style: Supplier (Process)	Result	Full marks	Evaluation Point	Total Point	Allocation of points	Score	Demerit points	Colsweb chart Point
1	Top management	1)Company overview	① Please tell me your major product(s) and processes as well as suppliers.		・Confirm a Company overview & Plant overview ・Confirm a process & main products.	・Company overview ・Supplier list ・Quality analysis documents of the previous year		o									
		2)Quality history	① Please tell me the quality results of the previous year and up to as of today. ・Warranty claim occurrence rate (total occurrence) ・Delivery defect rate. (total occurrence)		・Confirm management index, targets and results on quality. (Confirm major issues on market, shipping and process also) ・The variance analysis between target and result has been conducted and an improvement activity has been promoted.	・Quality analysis documents of the previous year ・Analysis documents by event when a new model is launched		o									
2	Quality policy and quality assurance system	1)Quality assurance system	① ・Please tell me the status of obtaining a certificate on quality from a public institution. ・Please show me an implementation program of internal quality audit and its results.	●	・Confirm a copy of certificate that was obtained from a public institution (QS, ISO, TS, IATF etc.) ・If there is no certificate, check if there is a plan to be audited by a public institution. (If the audit will be held within 1 year, check a plan document) ・Confirm an implementation standard of an internal quality audit (frequency, timing) ・Are there any instructions about the deadline of correcting issues?	・Copy of certificate ・Commendation documents on quality ・Audit plan ・Internal audit implementation standard ・Internal audit implementation report		o			5		0.0	0	0.0	0	#¡DIV/0!
		2)Quality targets	① Please tell me your quality targets. Also, please tell me the achievement rate against your concrete quality targets for the past three years.		・Confirm a quality policy and quality targets ・Confirm a standard and a method of setting targets(customer's requirements, midterm plan) ・Confirm a measure, a target value and an activity plan to achieve the policy and targets. (Are they set up by department or section? In terms of processes and receiving, are they set up by they type of work?) ・Are customer's requirements reflected on an internal audit? ・Are there a process audit plan and the result of the audit implemented by the plant's top management?	・Quality policy ・Quality target setting standard ・Activity plan by department and/or section		o			5					0	#¡DIV/0!
		3)Quality assurance system and structure	① Please tell me your organization system to promote the operation of quality assurance and the division of roles (people in charge, related departments, etc.)		・Confirm a quality assurance system chart and a quality manual to check the flow from development to the maintenance of mass production ・Confirm the responsibility of quality-related departments and a division of roles chart. ・Quality meeting	・Quality assurance system chart ・Quality manual ・List of division of roles in the quality-related departments		o			5					0	
3	Analysis of quality defects in current products	1)Target management	① Please tell me your (annual) activity to achieve targets against warranty claims, delivery defects and internal defects as well as its progress management method.		・Check an activity plan to achieve quality targets for this year and the progress status. ・Confirm if the quality result is analyzed and issues are clearly identified. Also confirm if there is an action plan for those issues. ・If it is a new model, confirm if defects are analyzed by event and countermeasures for those defects are incorporated into the next event.	・Quality target achievement activity plan and the progress of this year ・Improvement plan of major defect(s) ・Analysis data by event when a new model is launched ・*Actions when the plan is not being fulfilled.*		o			5					0	
		2)Information analysis	① Please tell me how to obtain and analyze information on warranty claims.	●	・Confirm how to obtain warranty claim information and the steps to analyze the information (information analysis flow) ・Confirm analysis documents on phenomenon, characteristics, etc. of defects of major warranty claims. ・Confirm what kind of actions are taken using the warranty claim analysis data.	・Information analysis process flow ・Monthly analysis data on market claims ・Action standard		o			5					0	
		3)Root-cause analysis	① Please tell me what you do to do root-cause analysis on warranty claims, delivery defects and internal defects.	●	・Confirm the steps to process, investigate and analyze a defect. ・Confirm examples of steps to analyze individual major defects (market, delivery, internal) ・Confirm an analysis report based on the steps.	・Quality defect handling steps ・Analysis procedure for each defect (2 or 3 examples)		o			5		0.0	0	0.0	0	#¡DIV/0!
		4)Prevention of recurrence	① Please tell me your system to prevent the recurrence of a defect and how you standardize technical issues, know-hows, examples, etc. based on the result of analysis on actual defective parts.	●	・Check the system to prevent the recurrence of major defects. (Registering for lessons learnt and quality know-how) ・Check the system to give feedback to new product development. (check a lesson learnt list) ・Confirm the lesson learnt list ・How is the information sharing system (horizontal collaboration)	・Defect countermeasure operation flow ・Defect countermeasure management sheet ・Defect countermeasure control list ・Lessons learnt list		o			5					0	
		5)Progress management of individual defect	① Please tell me how you manage the progress in comments and investigation requests on a defect received from your customer.		・Confirm the progress using a defect control list. ・Do you confirm the effect of measures contents ?	・Defect countermeasure control list		o			5					0	
4	Setting a quality target for the new product	1)Setting a quality target	① Please tell me how you set up a quality target for the new product. (warranty claim occurrence rate, delivery defect rate, etc.)		・Confirm a method to set up a quality target for the new product ・Confirm quality target values of the new product (market, delivery process, receiving) ・Confirm an activity plan to achieve a target. ・*Confirm if you have the manufacturing capacity of the product.* ・*Show me the delivery performance program.*	・Target setting standard ・Quality target of the new product ・Achievement activity plan ・*Delivery performance program.*		o			5		0.0	0	0.0	0	#¡DIV/0!
5	Quality assurance in the product design stage	1)Milestone management	① Please tell me how you manage the progress, etc. (completion of development, making a mold, judgment of proceeding to the mass production, etc.) in each milestone according to the development master schedule.		・Confirm a development master schedule (including the progress) ・Confirm a method to check milestones according to the master schedule ・Confirm meeting minutes on the implementation of milestone management	・Development master schedule (including the progress)		o			5					0	
		2)DR(Design Review)	① Please tell me your system of Design Review (selection standard of judgment items, judgment method, judgment system, progress management) and its implementation status.	●	・Confirm the system of DR (selection standard, judgment method, judgment system, progress management, etc.) ・Confirm a method to reflect past failure example on DR, FMEA, etc.	・DDR selection standard (new check sheet) ・DR report ・Lessons learnt check list		o			5					0	
		3)D-FMEA	① Please tell me the status of implementing a preventive analysis method. (D-FMEA, FTA, etc.)	●	・Confirm the record of implementing D-FMEA (necessary countermeasures) ・Confirm the examples that countermeasures were reflected ・Confirm the record of implementing FTA (theme, content)	・D-FMEA implementation record ・Reflection record ・Record of implementing FTA		o			5		0.0	0	0.0	0	#¡DIV/0!
		4)Design change (development stage)	① Please tell me the steps when there is a design change in the development stage. (business operation flow, management standard, etc.)		・Confirm the implementation of design change in the development stage. (processing flow chart) ・Confirm the implementation of design change after the project is transferred to a plant. (processing flow chart) ・Confirm the status of design change management (management book)	・Design change business operation standard ・Design change business operation flow ・Design change management book		o			5					0	
6	Quality assurance in the process design stage	1) DR	① Please tell me the system of Design Review (selection standard of judgment items, judgment method, judgment system and progress management) and its implementation status.		・Confirm the system of DR (selection standard, judgment method, judgment system, progress management, etc.) ・Confirm a method to reflect past failure examples on DR, FMEA, etc. (verification of lessons learnt list) Confirm process management using QA-8	・DR selection standard ・DR report ・Lessons learnt check list ・Process control instructions from QA-8		o			5					0	
		2)P-FMEA	① Please tell me about the implementation of P-FMEA.	●	・Confirm the system and standards of a method to implement and score P-FMEA *of process.* ・Confirm the record of implementing P-FMEA *of process.* ・Confirm examples that countermeasures for the result of implementing P-FMEA *of process* are reflected on equipment or processes.	・P-FMEA implementation procedure ・Record of implementing P-FMEA. ・Examples that countermeasures were reflected on equipment or processes		o			5		0.0	0	0.0	0	#¡DIV/0!
		3)Control Plan	① Please tell me how to create a Control Plan.	●	・Confirm how to create a Control Plan. (What is the standard? How much information is filled out ? Can you see the control of all processes?) ・Confirm the creation date and which department approved the Control Plan. ・*Confirm if there are special characteristics that must be controlled.* ・Confirm how the maintenance of the latest version. ・Are there any symbols of special characteristics missing? ・The importance of the control item is decided and the control method is decided according to importance.	・Control Plan creation standard ・Control Plan ・Drawings ・QA matrix ・*Special controlled features*		o			5					0	
7	Quality assurance in the production preparation stage	1)Quality assurance in the production preparation stage	① Please tell me about a milestone meeting and control items in the production preparation stage.		・Confirm a milestone meeting and control items in the production preparation stage. ・Confirm meeting minutes of a milestone meeting. (Are issues raised and are countermeasures for those issues taken?) ・What has been done to make sure that there is no item missed by milestone?	・Milestone meeting implementation standard. ・Milestone meeting minutes. (preparation stage)		o			5					0	
			② Please tell me about control items to achieve quality goals during the launch (process capability, product evaluation, etc.) and the achievement timing.		・Confirm a quality evaluation item list and progress status. (process capability item, product evaluation item) ・Confirm a Control Plan and a inspection specification document to make sure that all quality evaluation items are included without missing any information.	・Control Plan and appendix ・Inspection plan ・Quality record		o			5					0	
			③ ・Please tell me how to check equipment. ・Please tell me how to create equipment check sheet.		・Confirm the equipment check and a calibration method such as the replacement of tools, etc. ・Confirm a equipment check list and a check plan. ・Check calibration data.	・Equipment check standard. ・Check equipment list ・Check plan. ・Check history and record of equipment.		o			5		0.0	0	0.0	0	#¡DIV/0!
			④ Please tell me how to educate operators for the launch and how you evaluate training.		・Confirm documents to educate operators. (including education on a new product or manufacturing method) ・Confirm an educational program for a launch. (content of education and training) ・Confirm the record of evaluating the result of education and training (ILU).	・Educational manuals. ・Educational programs. ・Training plan by process and record of evaluation on the level of skills.		o			5					0	
			⑤ Please tell me how to create Standard Work Instruction (SWI), Key Point of Operation and inspection documents.		・Confirm a standard of creating SWI and Key Point of Operation (timing, point to specify, maintenance management). ・Confirm the planned number of pages and the actual number of pages. ・Confirm a control list(is it up to date?).	・SWI creation standard. ・SWI ・Creation plan list.		o			5					0	
8	*Ramp-Up Activity*	*1) Ramp-Up Activity*	① Please tell me about an *Ramp-Up* activity plan and the content of the activity.		・Confirm the purpose, period and target value of the *Ramp-Up activity.* ・Confirm the special management and an inspection plan. ・Confirm the exit criteria. ・What kind of special audit system is established?	・*Ramp-Up activity* standard. ・*Ramp-Up activity* plan. ・Exit record.		o			5		0.0	0	0.0	0	#¡DIV/0!
9	Quality assurance in the mass-production stage	1)Change control	① Please tell me about the steps (operation flow, control standard, etc.) when there is a process change.	●	・Confirm the system of process change (customer and internal). ・Confirm a processing flow chart. ・Confirm a change control list. ・What is the result of checking initial products? ・Is process change application done securely to customer?	・Process change management standard ・Business operation flow chart ・Control list and initial product check data ・*Design change requests*	o	o	o		5		0.0	0	0.0	0	#¡DIV/0!
			② Please tell me about the steps (operation flow, control standard, etc.) when there is a design change.	●	・Confirm the system of design change. ・Confirm a processing flow chart. ・Confirm a change control book ・What is the result of checking initial products? ・Is design change application done securely to customer?	・Design change management standard ・Business operation flow chart ・Control list and initial product check data	o	o	o		5					0	

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10	Supplier management	1)Supplier management	① Please tell me how you select and manage suppliers.		• Confirm how to select and manage suppliers. • Confirm the quality result of suppliers. • Confirm the supply chain by model. • *Confirm if there is an evaluation of the supplier's quality management system.* • Is the monthly quality result announced in public? • What is the quality target?	• Supplier selection and management standard • Quality result data • Supplier chain by model • *Supplier audit program.*	0	0	0		5					0	
			② Please tell me about the audit and an coaching plan for your suppliers.		• Confirm an audit and coaching plan for suppliers. • Confirm the record of implementing audit. • Confirm the preparation of new launch model and quality agreement. • How is the follow up on the audit result? • What is the standard of selecting a supplier to audit?	• Audit and coaching plan • Record of implementing audit • Record of confirming the preparation of launch (preparation, agreement, initial product) • Preliminary inspection report, documents on countermeasures that were taken to prevent the recurrence of issues.	0	0	0		5		0.0	0	0.0	0	#¡DIV/0!
			③ Please tell me your system to receive the change information from your supplier.	●	• Confirm the presence a guide book on change system for suppliers. • Confirm a change handling flow chart. • Confirm a change management book. • How is the maintenance of quality agreement associated with change?	• Work guide book • Change handling flow chart • Change control list • Initial product check data	0	0	0		5					0	
11	Maintenance and management of processes	1)Receiving materials	① Do you discuss and decide what kind of packaging will be used to protect the quality with your supplier?		• Confirm a packaging setting document with suppliers. • If a steel pipe and steel plate are purchased, are specifications and Mill Sheet obtained?	• Packaging setting standard • Packaging setting document • Specification agreement document • Mill Sheet=material certificate to specify the result of material analysis for seat parts	0	0	0		5					0	
			② Do you inspect check items in the receiving process based on the Control Plan? Also, do you keep the record of the result of the inspection?		• Confirm the content of receiving inspection in the Control Plan. • Confirm the record of inspection based on the check items of the receiving inspection. • Is the result of receiving inspection managed using a receiving inspection list?	• Control Plan • Receiving inspection record • Receiving list	0	0	0		5					0	
			③ If nonconformity (including questionable parts) is found after the inspection is done, do you give feedback to your supplier?		• Are nonconformity products indicated as nonconformity and separated and stored in a designated area? • *A record of each of the failures presented by the suppliers is kept.* • Confirm a method to give feedback to a supplier.	• NG (nonconformity product) ticket/label. • *Fault log.* • Defect notice • Nonconformity product handling standard (flow)	0	0	0		5					0	
			④ Is the storage place for materials decided and are materials managed to protect the quality?		• Are materials that are judged as OK to be used managed and stored in a designated area? • Is the prevention of getting rain, dust, rust and deformation considered when storing materials? (Storing materials directly on the ground is not allowed.) • Display the height limit and appropriate weight of stock (MAX and MIN). • Is storage area of similar part strictly separated to prevent part from mixing?	• Parts management standard	0	0	0		5					0	
			⑤ Is FIFO observed?		• Confirm what has been done to do FIFO well (identify IN-OUT, shelf, roller, etc.). • Is there SWI (or a flow chart) from receiving materials to feeding to the line? • Is there a record of operation observation to check that FIFO is observed?	• SWI (flow chart) • Operation observation record	0	0	0		5					0	
		2)Start of shift check standard	① Do you have a check sheet based on the check standard (steps)?	●	• The check method is clear and there is a standard. Also, there is a record of the check based on a check sheet. • You can fill out how an abnormal condition was handled in a check sheet. Handling an abnormal condition is well done. • Can check be done easily (within 5 minutes)? • What is the number of pages of a check sheet? • Have a manager and a supervisor tried doing the check?	• Equipment check standard • Check sheet	0	0	0		5		0.0	0	0.0	0	#¡DIV/0!
			② Are there signatures from a person who checked and a manager on a check sheet after the check is completed?	●	• Inspection records are confirmed without missing any information and the judgment of an action that was made by a boss on handling an abnormal condition is specified on a check sheet.	• Check sheet	0	0	0		5					0	
		3)Management of equipment parameters	① Is the management of equipment parameters implemented based on a parameter list?	●	• Confirm a equipment parameters list (is the OK range of parameters clarified?) • A parameters list is stored next to an operator. • Parameters are checked before the start of shift and there is a record. • Specify the OK range of parameters. • Are the meters easy to see?	• Equipment parameters chart • Record of checking a parameters chart	0	0	0		5					0	
		4)SWI (Standard Work Instruction)	① Are key points specified on SWI to assure the quality?		• SWIs are created by process (conditions of a good product, good condition of a product, how to check, assumed defect). • Periodically check SWIs to keep them updated. • Have 3 documents been checked periodically to make sure they are consistent?	• SWI • SWI control list	0	0	0		5					0	
			② Are operators doing their jobs by following the steps, which are specified on SWI?		• Operators are doing their jobs based on SWI (steps, quality check, tact time, etc.) • A manager/supervisor is doing operation observation (check operator's work) periodically.	• SWI • Operation observation record	0	0	0		5					0	
		5)Management using a SPC sheet	① In regard to quality characteristics, is there a system to check the process capability and do daily quality management using a SPC sheet?		• A process capability is checked and daily quality management is done using a X-R control chart. • Also, operators understand how to use and read a X-R control chart (Check the education record).	• X-R control chart • How to read a X-R control chart • Education record	0	0	0		5					0	
		6)Process assurance level	① Is there a system to evaluate the level of assurance of processes?		• There is a plan for process assurance evaluation and it is implemented. • Are Corrective actions planed and followed up ?	• Process assurance level standard • Process assurance level matrix chart • Assurance level improvement plan and its result	0	0	0		4					0	
12	Education	1)Education for operators	① In your operator education and training standards (procedures), are items such as jobs based on the SWI, handling a nonconformity products, handling a measuring instrument, items that are strictly needed to be observed in the Control Plan, education records, handling an abnormal condition, laws and regulations) documented and implemented?	●	• There are educational documents for operators. • Education and training are implemented according to the plan, operators' skills are understood and there are records of the education and training. • There is a standard that an operator will be evaluated about his/her skills before he/she officially does a job on line. • The quality of products is confirmed when a new operator or an employee who temporarily supports production works on line. • Re-education is given when an operator who did not work for a while comes back to work again. And a record of the re-education is kept.	• Educational documents on a new product and a new method • General educational documents • Education and training plan and skill evaluation record • Education record	0	0	0		5		0.0	0	0.0	0	#¡DIV/0!
			② *Is there a system where it is defined that the operation required online is only performed by a certified operator?*	●	• Is there a system to certify operators for welding and tightening bolts/screws? • Confirm education, training, education, approval, management of a list, periodical evaluation, etc • Do you certify employees who inspect finished goods and quality inspectors in the Quality Department?	• Certification standard • Educational documents and education record • Certification list • Proof data on certification	0	0	0		5					0	
13	Inspection	1)Inspection of WIP (Work in Process) and finished goods	① Is the inspection implemented based on the Control Plan and recorded?	●	• *The items of the daily and periodic inspections are clarified in the control plan?* • There is an annual inspection plan and has it been implemented as it is specified? • There are inspection specifications and the first product and periodic inspection is implemented.	• Control Plan • Annual inspection plan • Inspection specification • Inspection record	0	0	0		5					0	
			② Are numerical values, limit sample, etc which are used as judgment criteria easy to see and is the storage condition appropriate?	●	• Is the judgment standard for limit samples or standard samples easy to understand (weld length, etc.). • Also, the expiration date is displayed and the most recent version is maintained. • Are the judgment criteria for welding and tightening bolts/screws easy to understand for operators?	• Limit samples and standard samples • Control list • Judgment criteria for welding and tightening bolts/screws	0	0	0		4					0	
			③ Is there a system to keep a record of data on an initial product (Hatsumono) before the shift starts and during the preparation time? Preparation time = to change a plate from RH to LH vice versa on equipment)	●	• Has checking of Hatsumono (initial products) been decided and implemented before the start of shift and during the preparation time? • There are records of Hatsumono (initial products)	• Rule of checking Hatsumono (initial products). • Record of Hatsumono.	0	0	0		5		0.0	0	0.0	0	#¡DIV/0!
			④ Do you have inspection standards for testing instruments (equipment) and the record of inspection?	●	• There is a start of shift check sheet for testing equipment and it is implemented. • If there are poka-yoke devices, checking items are decided and checked. • There are rules to handle abnormal conditions on equipment and quality and the record of actions that had been taken is kept.	• Start of shift check sheet • Poka-yoke check procedure • Rules of handling an abnormal condition of equipment and quality • *Actions for abnormal conditions.*	0	0	0		5					0	
			⑤ Is an inspection area appropriate environment to judge (lighting, noise, space, etc.)?	●	• There is a standard for illumination intensity, noise, etc. in the processes and inspection room and the standard is meeting the requirements.	• Illumination intensity and noise standard • Measurement data	0	0	0		5					0	
14	Shipping	1)Management of the shipping process	① Is the proof that inspection is completed and it is OK to ship clearly specified on products which are stored or will be shipped in the shipping process?		• There are rules on temporary storage and shipping inspection specified in the shipping inspection procedure. • Rules to handle nonconformity products are also decided.	• Shipping inspection procedure • Shipping inspection record • Rules of handling nonconformity products	0	0	0		4					0	
			② Is the shipping packaging (including temporary authorized packaging) verified and standardized to make sure that it won't hurt the quality?		• The shipping packaging is set up based on the approval from your customer. • The deformation of the decided packaging is checked to see how hours it will take to recover to a normal condition. • The prevention of packaging deformation due to the long-term storage is considered and implemented.	• Packaging certification • Recovery data • Countermeasures for long-term storage	0	0	0		4		0.0	0	0.0	0	#¡DIV/0!
			③ Does the layout allow you to do FIFO?		• FIFO can be managed because of the layout. • Also there are other ideas to do FIFO (IN-OUT, First-out Kanban, identification-red, yellow, blue)	• Layout chart or storage location chart • FIFO rules	0	0	0		5					0	

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15	Storage status of a warehouse	1)Storage (warehouse, WIP stock)	① Is the storage place decided and observed? (warehouse, WIP stock)		・Are materials stored in an indicated area? ・The stacking height and weight are considered. ・The prevention of quality deterioration (due to rain, rust, contamination, dust, scratch) is also considered. ・Do you have procedure for long term storage part at the time of use ?	*Layout or storage distribution.	o	o	o		5					0	
			② Does the layout allow you to do FIFO?		・FIFO can be managed because of the layout. ・Also there are other ideas to do FIFO (IN-OUT, Fin&out Kanban, identification-red, yellow, blue).	・Layout chart or storage location chart ・FIFO rules	o	o	o		5					0	
			③ Is there a system to protect WIP parts from damage and is the system implemented?		・The condemination of WIP parts (electrostatic of plastic parts, rust of plates) is prevented. ・The deformation of transported products during the transportation, scratch due to touching other parts, etc. are also prevented.	・Rules	o	o	o		5		0.0	0	0.0	0	#¡DIV/0!
			④ Is there a system to protect parts from galting mixed into different parts? Are there any possibilities of parts mixing ?		・The situation that parts get mixed into different parts is prevented. (storing similar parts in different locations, how to distinguish similar parts, etc.)	・Rules	o	o	o		5					0	
16	Maintenance and management of processes	1)Inspection and calibration	① Is the periodic check and calibration of equipment implemented based on standards according to the plan?		・Confirm the equipment check and calibration standards ・Expiration labels have been put on equipment ・Maintenance of a equipment check list. ・Is equipment check sheet created ?	・Equipment check standard ・Equipment check list ・Annual plan and its result	o	o	o		5					0	
			② Is the check and replacement of fixtures. tools and cutting tools of equipment implemented based on standards (procedures) and its record kept?		・There is a procedure of check and replacement of fixtures and tools, etc. And it has been implemented and there is a record of the check and replacement. ・There is a system that quality will be recorded when something is replaced. ・Electro rode, contact tip, Punch etc. ・Control method of spare part.	・Check record of fixtures and tools ・Record of checking Hatsumono (initial products) ・Instruct the timing of replacement using a daily check sheet	o	o	o		5					0	
			③ Is the periodic calibration of gauges and measuring instruments implemented according to the plan?		・An annual plan is made based on the check standard of measuring instruments and it has been implemented according to the plan. ・The expiration date is displayed on measuring instruments that require calibration. ・The check history and check records are maintained on each gauge and measuring instrument. ・To confirm measurement equipment or gauge in production area.	・List of gauges and measuring instruments ・Annual check plan and its implementation ・Check history and record by each gauge and measuring instrument.	o	o	o		5					0	
			④ Do you have a set of 3 calibration records for measuring instruments (measuring equipment, standard instruments)?		・There is a set of 3 calibration records (traceability chart, calibration certificate and inspection result) for newly purchased/updated measuring instruments. ・Standard instruments have been maintained. ・The judgment criteria of each measuring instrument is clarified. ・If calibration result would be NG, How do you validate products which were measured by NG equipment ? ・Does third party have official certification for calibration ?	・3 set of calibration records ・Judgment criteria of instruments	o	o	o		5					0	
			⑤ Is there a system to certify an employee to do calibration by providing education, etc.?		・An employee who does calibration is certified. ・An employee who is certified is recorded in a control list and the periodic evaluation is also conducted.	・Certification standard ・Control list of certified people		o	o		5					0	
			⑥ Are measuring devices that are used daily checked to assure the quality and is the record kept?		・There is a daily check standard. And the check is implemented based on the standard and a record is kept.	・Start of shift check record	o	o	o		5					0	
		2)Changing point control 4M's Control (Change Management)	Is there a system to manage and visualize the change of process elements? ①		・Manage 4M's (Change Management)change control politics of Tiem N. ・The modifications and changes of work site own is confirm everyday. ・The modifications and changes of this day is recorded in the control change board. ・The information of modification is sent at corresponding department. ・The evidence of confirmation/validation of change is determine by responsible department. ・Is carried out the product validation. ・The product validation is carried by the QC area. ・Is recorded the modifications and changes confirmation result, in case of it is NG is necessary take on actions according non conformity product control. ・The result of the confirmation of the modifications and changes is inform to person in a superior range or to related department. ・When there is defects caused per modifications and changes, it can found? ・The control recorded is stored in a department when is can found modifications and changes. The content of daily 4M (Change Management) changing points can be seen in the process. ・A initial product (Hatsumono) is confirmed and evaluated for the change. ・A record is kept.	・4M's (Change Management) Audit to Tier N. ・Meeting of starter where is notify the changes planned and unplanned. ・Confirm the record of planned changes and unplanned, in changes control board. ・Inform the 4M's (Change Management) changes, is sent at related department and is have signs of validation. ・4M's record , to confirm the reception and validation of the information by the involucrated area. ・Exist evidence of that is carried out the change validation of change according with a standard. ・The product quality is evaluated in each change. ・Is validated the characteristic that is affected according with each change. ・Is recorded judgement OK/NG, and is recreedt the actions in case of it is NG. ・Is informed to person in a the most greatest range according with the nature of each change. ・Exist traceability of material according with each change, and is does contation activities and also as the product confirmation before shipping. ・To planned and unplanned changes, the recordad is stored and is can trace in a time not more at 2 hours.	o	o	o		5		0.0	0	0.0	0	#¡DIV/0!
17	Process assurance	1) 5S	① Is there evaluation standard for 5S and is it implemented?		・There is an evaluation standard for 5S and a manager periodically evaluates it based on the standard. ・There are signs at dangerous areas and there is a plan for improvements ・Is operator's wear and attitude toward to work evaluated ?	・5S evaluation standard ・Evaluation record	o	o	o		5					0	
			② Is it supposed to clean inside and outside of your process every day?		・There is a 5S procedure and it is implemented. The frequency of implementing 5S is decided in your daily life and cleaning is implemented. ・There are no dropped products (parts) on the floor.	・5S implementation area	o	o	o		5					0	
			③ Are measuring instruments, fixtures and tools that are used in the process stored and managed to protect the accuracy?		・The storage place and containers for measuring instruments, fixtures and tools that are used in the process are decided. ・Also, in terms of the storage condition, There is no need to worry about dropping, dust, etc.		o	o	o		5		0.0	0	0.0	0	#¡DIV/0!
		2)Maintenance and management of processes (assurance level for contamination, etc.)	① How are WIP parts managed?		・There is a way to prevent WIP parts from getting mixed into other parts and there is also a way to prevent WIP parts from slipping a process (Rseki Kanban= a tag to identify WIP parts) ・Also, there is a way to prevent and manage contamination, etc. using a protection cover (grease container lid). ・The completed condition of 1 cycle job is confirmed before taking a break.	・Rseki Kanban=a tag to identify WIP parts	o	o	o		5					0	
			② Is there dust, trash or metallic powder, etc. on the production line that will have an impact on products?		・Handling contamination in the work areas such as welding spatter, dirty fixture, dust are decided using a check list or a check sheet and it is implemented daily. ・There are no products (parts) that are dropped in the process. ・Cleanness of conveyor, part container ?	・Check sheet	o	o	o		5					0	
18	Management of a nonconformity product	1)Management standard of a nonconformity product	① Do you have a system that a nonconformity product will be handled based on the management standard of nonconformity products?	●	・There is a management standard of nonconformity products and it is implemented based on the standard. (Education is provided to operators and they know how to handle nonconformity products.)	・Judgment criteria of nonconformity products ・Flowchart of handling nonconformity products	o	o	o		5					0	
		2)Handling and usage of a nonconformity product	① Has a way of handling a nonconformity product been standardized so that it will be managed by part or by the defect level?	●	・The definition of replacement parts, scrap parts, etc. is decided and it is decided that nonconformity products will be handled depending on the level of defect. (It is also OK that a group leader makes a judgment) ・There are records of handling major defects.	・Defect handling record ・Non-compliant Product and Scrap Material handling flowchart.	o	o	o		4					0	
			② Have repair procedures been located easy access to the person who repairs in the work area so that he/she can do his/her job by checking the procedures? Also are repair procedures explained easily for people who repair?	●	・Repair procedures explain that a root-cause can be identified by FTA, etc. and repair can be done for the root-cause. ・Also, they are located and managed in the work area so that they can be utilized immediately.	・Repair procedures ・Steps to analyze major defects	o	o	o		5					0	
			③ Is there a system to assure the quality of products that are fixed or repaired?	●	・Products that are fixed or repaired will go back to the regular process again and be judged in the finished goods inspection process. Also, they will be checked using a check fixture that is used in the regular process. ・The content of re-inspection is specified in repair procedures and re-inspection is done using the steps specified in the procedures.	・Repair handling flow ・Repair procedures ・Specifications and torque values of tightening bots ・Repair records	o	o	o		5		0.0	0	0.0	0	#¡DIV/0!
			④ Is the storage place for tools decided and observed?	●	・Tools that are necessary for Rework table are decided and there is a sign for those tools. (A person who is responsible for managing those tools is decided) ・All necessary tools are prepared to be used.	・Tool list/by line or shot	o	o	o		5					0	
		3)Prevention of a nonconformity product getting mixed into good products	① How is the prevention of nonconformity products from getting mixed into good products standardized?	●	・Nonconformity products are immediately put in a nonconformity product box so that they will be separated and won't be used. ・There is a system that the quantity of nonconformity products is managed and the traceability is secured ・There are rules that nonconformity products are identified with labels, etc ・Handling nonconformity products are implemented by the end of shift.	・Records of handling nonconformity products	o	o	o		5					0	
19	Handling an abnormal condition	1)Handling an abnormal condition	① Has an abnormal condition of a product been defined and has an action been taken when you find an abnormal condition? Also do you keep the record when there is an abnormal condition?	●	・The definition of an abnormal condition of products (parts that are questionable if it's OK or nonconformity) is decided, handling an abnormal condition is standardized and implemented.	・Definition of an abnormal condition and handling flow ・Record of abnormal conditions	o	o	o		5					0	
			② Has handling a product that was a dropped been decided and managed?	●	・An internal defect and a part that was dropped on the ground are immediately picked up and handled as scrap, etc.	・Non-compliant Product and Scrap Material handling flowchart.	o	o	o		5					0	
			③ When you have been doing to assure the quality of products when an internal abnormal condition is found?	●	・When an abnormal condition is found, immediately check products immediately for traceability, verify that products are meeting the required quality characteristics and keep the record. Identification of products ・There is a standard to report to the customer immediately if an abnormal condition is found and the applicable range cannot be identified.	・Special Acceptance Request.	o	o	o		4		0.0	0	0.0	0	#¡DIV/0!
			④ Do you stop the production line when there is an abnormal condition? Do you have rules to re-start the line?	●	・A manager/supervisor re-starts the line after an abnormal condition is fixed. ・A normal condition is decided.	・Re-start rules	o	o	o		5					0	
20	Special characteristics	1)Special characteristics	① Are special characteristics symbols that are required to use by the customer specified and identified on the Control Plan, SWI, documents, etc based on what is specified on a drawing or the sentences that the Design Dept. wrote down and instructed without missing anything?	●	・Special characteristics symbols that are required to use by the customer are specified and identified on the Control Plan, SWI, documents, etc based on what is specified on a drawing or the sentences that the Design Dept. wrote down and instructed without missing anything?	・Control Plan ・SWI ・Documents	o	o	o		5					0	
			② Is Poka Yoke applied for process which has special characteristics ? Is special characteristic monitored it's variance and state of stability by statistic method such as Xbar R control chart ?	●	・There is a special characteristics assurance standard and the assurance level is decided and managed based on the evaluation. (destructive testing, double check) ・Special characteristics are managed in the way that you can immediately see that process capability is Cpk≧1.33. ・If a variation is assumed to occur, a management standard is decided in advance and the quality is assured by inspecting all products, etc. ・Is Poka Yoke applied for process which has special characteristics ?	・Torque control for tightening bolts ・Destructive check, Chisel check →destroy or deform the welded area using a chisel to check the welding condition ・Height and diameter of rivets	o	o	o		5					0	
			③ The reaction according to importance of problem is decided and correctional record is kept appropriately.	●	・There is a standard when a noncontormity product of special characteristics is found and operators understand it. ・There is a system to keep a record when nonconformity of special characteristics is found and the system is implemented. ・Do you have procedure which describes how to identify NG part? ・Is reaction record of problem kept appropriately ?	・Record of the occurrence of defects	o	o	o		5					0	
			④ Are all required documents on parts that need to be managed for special characteristics stored?	●	・Documents on items that are required by the customer and records that you can trace back and prove the quality are managed. ・The storage period is specified in a standard document to store for a length of time that is required by the customer and it is implemented. ・Are all required document and/or record relative to part which has special characteristic keeping correctly ?	・Weld-related documents (parameters list, SWI, PM record, quality check record, record of operators, etc.) ・Documents on tightening bolts/screws (SWI, PM record, X-R control chart, record of operators, etc.)	o	o	o		5		0.0	0	0.0	0	#¡DIV/0!
			⑤ Can special characteristics parts were repaired be distinguished by looking at a product? Also do you keep the record of the repair?	●	・Special characteristics parts that were repaired are identified as repaired parts, a record is kept on the area of repair and there is a record on lot. ・There is a system to keep a record when nonconformity of special characteristics is found all the time and the system is implemented. ・Is reworked part identified by marking and is reaction record keeping correctly ?	・Repair record ・Repair mark instructions	o	o	o		5					0	
			⑥ Is the way that the production number is displayed satisfying the requirement of displaying special characteristics parts?	●	・Things that are specified in a drawing, etc. are clear and easy to read. Also, they are evaluated and recorded. ・Is production lot number for tracibility clearly indicated on part which has special characteristics ?	・Date instructions ・Date label management chart	o	o	o		4					0	
			⑦ Do you provide training for operators who will do a job related to special characteristics, certify those operators and keep the record of training?	●	・There is an educational history and a certifying system. The renewal education is periodically implemented and a record is kept (once a year) ・Does operator have fully received the training to special characteristic and is training record kept ? ・Does only designated operator engage in process which has special characteristic ?	・Education manual, training standard ・Certification system ・Registration book ・Education record	o	o	o		5					0	
21	Traceability	1)Traceability	① Do you have procedure to describe relative to production lot control ? (Lot number, lot size, record method, search method, etc)		・Procedure describes what to do clearly and management based on a standard is carried out.	・Lot control procedure	o	o	o		5					0	
			② Are lot number, model number, date of production, inspection and shipping and quantity recorded?		・They have been managed based on the lot management.	・Production record by shop ・Shipping record ・Control list of receiving and usage of important parts	o	o	o		4		0.0	0	0.0	0	#¡DIV/0!
			③ Is search time to decide certain period when defect part build less than 2 hours or within given period by supplier.		・It is meeting the requirement of special characteristics.	・List of receiving and usage of important parts	o	o	o		5					0	
22	Continuous improvement	1)Improvement activity on the floor	① What kind of daily improvement activity have you been doing to improve quality?	●	・There is a meeting system (QRQC, morning meeting, etc.) that is implemented daily. Not only related departments but also other departments cross-functionally implement an activity Effective improvements are made daily and targets are achieved.	・QRQC record ・Examples of quality improvements	o	o	o		5					0	
			② Have a root-causes of abnormal conditions been analyzed and fixed?	●	・Defect and abnormal conditions decreased and a target is achieved.	・Monthly quality result	o	o	o		5					0	
		2) Target achievement activity for internal defects	① What have you been doing to reduce internal defects?	●	・Countermeasures are taken to fix internal defects using hardware (design change, poka-yoke, etc.) and an activity to prevent the recurrence is implemented.	・Annual activity plan ・Monthly quality result ・Examples of countermeasures ・Quality meeting minutes	o	o	o		5		0.0	0	0.0	0	#¡DIV/0!
			② Do you analyze internal nonconformity products by following a procedure?	●	・A procedure states that a nonconformity product is investigated to identify and get rid of a root-cause before repairing.	・Analysis procedure for major defects ・Analysis examples	o	o	o		5					0	
23	Consideration to safety		① Is personal protective equipment decided by work area and it implemented?		・Operators wear necessary personal protective equipment.	・Dress code standard by work area	o	o	o		5					0	
			② Do you have an environmental standard for work areas and break rooms? Also, it is confirmed?		・There is a standard and it is observed.		o	o	o		5		0.0	0	0.0	0	#¡DIV/0!
24	Control of SOC (SOC:Substance s of concern)	1)Clarification of the supply chain of your company's product	① All purchased parts, materials and subsidiary materials (hereinafter referred to as purchased parts) are distinguished and identified and can be managed individually. (Purchased products that are shipped to your customer as finished goods are applicable.)		・There is a list of purchased products. ・All purchased parts have product number and can be managed individually.	・List of purchased products		o			8					0	
		2)Clarification of requirements for tier 2 suppliers	① You company clearly instructs suppliers (Tier 2) to specify that SOC is not contained on a drawing,		・Handling SOV is included in a supplier basic contract. ・Your company instructs suppliers (Tier2) to specify that SOC is not contained on a drawing.	・The basic trade contract ・Instructions to the drawing		o			8					0	
		3)Thorough management of materials purchased from suppliers (Tier 2)	① A proof that SOC is not contained is obtained from Tier 2 suppliers for all purchased parts, materials and subsidiary materials.		・A written declaration that SOC is not contained is obtained as a whole company. ・A proof that SOC is not contained is obtained by part and by material (including subsidiary material).	・SOC free declaration ・Material component analysis table		o			8		0.0	0	0.0	0	#¡DIV/0!
		4)Proof that SOC is not contained in materials shipped to the customer (Tachi-S)	① The SOC management is included in inspection specification documents that are submitted to Tachi-S.		・SOC is included in inspection specification documents.	・Inspection specification		o			8					0	
						・Total items	68	97	69						0	######	0
															RANK	A	

28) No conforming part flow – Credit note summary

CREDIT NOTE

FOLIO:

SUPPLIER NAME:

REASON:

REV:

SUPPLIER CODE:

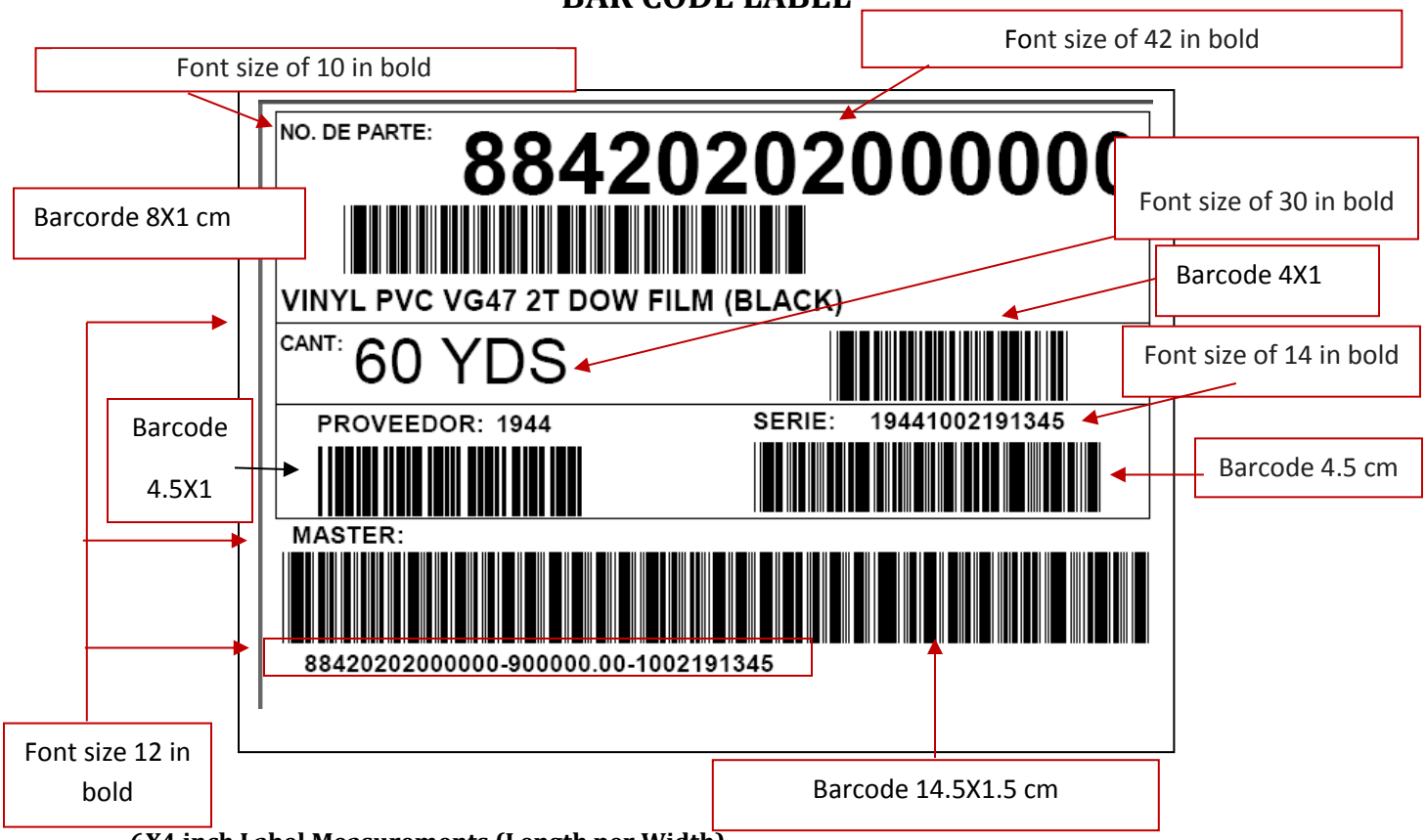
DATE:

ITEM	DATE	QTY	UNIT	REFERENCE	PART DESCRIPTION	PRICE		FINAL PRICE
						MATERIAL COST	FREIGHT PRICE	
					OTHER COST			
					ADMINISTRATIVE CHARGE			

SUB-TOTAL	$0.00
TAX	
TOTAL (USD)	$0.00

29) Bar code label

BAR CODE LABEL



6X4 inch Label Measurements (Length per Width)
Note: Font = Arial

Data of the master code, separated by dashes

88420202000000-900000.00-1002191345

Serie.

The series that is part of the master code will not contain the supplier code, only the date and the consecutive one. (10 DIGITS)

Part Number of Tachi-S of 14 dígits

Quantity with a maximum length of 9 characters, including point and 2 decimals (applies decimals only if the party handles fractions otherwise it is just the amount
i.e.: 900000)

The label series must have the following nomenclature without spaces (14 DIGITS)

19441002191345

Supplier code 4 dígits

date:
yymmdd

Consecutive number 4 digits

TACHI-S México

30) Request for authorization for membership or supplier modification

TACHI-S México

REQUEST FOR AUTHORIZATION FOR MEMBERSHIP OR SUPPLIER MODIFICATION

A) TO BE COMPLETED BY PURCHASING CORPORATIVE / MRO PLANT

SUPPLIER CODE:		APPLICATION DATE:	

DEPARTMENT REQUESTING IT:		REASON (ADDITION / MODIFICATION):	
COMMODITY (In case of massive):		STATUS (ACTIVE / INACTIVE):	
PLANT CODE (In case of MRO):		PRODUCT / SERVICE *PROVIDED:*	

B) TO BE CLOMPLETED BY SUPPLIER

COMMERCIAL NAME:					
OFFICIAL NAME:		TAX ID AND SWIFT CODE:			
ADDRESS:					
CITY:		COUNTRY:		ZIP CODE:	

	NAME	POSITION	PHONE NUMBER	E-MAIL
COMERCIAL CONTACT / PROYECTS:				
LOGISTIC CONTACT (In case of massive):				
ACCOUNTANT CONTACT (In case of massive):				
QUALITY CONTACT (In case of massive):				
ENGINEERING CONTACT (In case of massive):				

BANK:		TRANSFER CODE:	
ACCOUNT NUMBER:		INTERNATIONAL / NATIONAL (EXT/NAL)	
ACCOUNT REFERENCE:		COUNTRY OF ORIGIN USA/MEX/JPN/CAN/EUR/BRA	

COMMERCIAL AND BANK REFERENCES

COMPANY	CONTACT	PHONE NUMBER	EMAIL

A) TO BE COMPLETED BY PURCHASING CORPORATIVE / MRO PLANT

TYPE OF SUPPLIER **A)** Materials **B)** Freight		INCOTERM:	
PAYMENT CONDITION **A)** 15, **B)** 30, **C)** 45, **D)** 60 **Z)** Inmediately		PAYMENT CURRENCY **A)** MXN **B)** yenes **C)** dólares **D)** euros *E) real*	

EVALUATION QCDF (In case of Massive)

COMMERCIAL DEPARTMENT ASSESSMENT		PRODUCTION CONTROL ASSESSMENT	
QUALITY DEPARTMENT ASSESSMENT		FINANCIAL ASSESSMENT	
FINAL RESULT QCDF:			

DOCUMENTOS ANEXOS CHECK LIST

TAX ID:		FINANCIAL STATES (AUDITED CERTIFICATES)	
W9:		COMPANY PROFILE	
IDENTIFICATION OF THE LEGAL REPRESENTATIVE		HOME VISIT (In case of Massive):	
PROOF OF CURRENT DOMICILIUM (3 MONTHS TO DATE)		CERTIFICATE ISO / IATF VIGENTE (IF APPLICABLE)	

APPLICANT	
NAME	
SIGNATURE	
DATE	

CORPORATE PURCHASE AUTHORIZATION	
NAME	
SIGNATURE	
DATE	

DOCUMENTS SHOULD BE SUBMITTED AS FOLLOWS:
****Each document is sent with the name of the document, example COPY OF THE IFE OF THE LEGAL REPRESENTATIVE***
****Documents must be readable.***
****Documents must be recent 3 months to date.***
****The application of Alta must be duly signed.***

TACHI-S México

31) Request for Quotation

TACHI-S México

RFQ NUMBER		ISSUED DATE		REVISION	
SUPPLIER NAME		ISSUED BY			
SUPPLIER CODE		SUBMITED TO			
PROGRAM		SOP			
DUE DATE TO REPLY					

ITEM	PART NUMBER	DESCRIPTION	USAGE	VOLUMEN	PROJECT LIFE	D-NOTE	REMARKS	TARGET PRICE (If it apply)	MASS PRODUCTION PRICE (USD X PZ)	SAMPLES PRICE (USD X PZ)	LEAD TIME	MOQ (PZ)	ORIGIN	DELIVERY POINT	INCOTERM	PAYMENT TERMS

NOTE 1: SUPPLIER MUST COMPLETE EVERY SECTION MARKED IN RED.

NOTE 2: QUOTES MUST BE SUBMITED IN THE Tachi-s México's QUOTE AND COST STRUCTURE FORMAT FOR EACH PART NUMBER.

NOTE 3: Tachi-s México WILL SEND CORRESPONDENT TACHI-S NUMBERS.

NOTE 4: USAGE CAN VARY, DATA GIVEN IS AN ESTIMATE, NOT A STANDARD NUMBER.

NOTE 5: CONSIDER ANNUAL VOLUME MAY CHANGE AT +/- 20%.

ALL QUOTES MUST INCLUDE THE INFORMATION INDICATED BELOW:

o	PART COST BREAK DOWN	o	TOOLING QUOTED LIFESPAN
o	CAPACITY AND PLANT ADAPTATIONS	o	GENERAL DEVELOPMENT PLAN
o	TOOLING COST BREAK DOWN (If necessary)	o	QUALITY, DESIGN OR ENGINEERING STANDARDS AND / OR RESTRAINTS

REMARKS:
- Parts quoted must meet all quality standards normally or specifically defined for this component (s).
- Packaging must be included and clearly showed on the break down format.
- Additional information such as plant location and distance to Tachi-s México's manufacturing plant must be attached to the quote.
- Consider Freigth EXW

- IF YOU HAVE ANY QUESTION PLEASE ASK Tachi-s México PURCHASING AGENT
- THIS DOCUMENT DOES NOT MEAN A COMPROMISE FROM ANY OF THE MEMBERS OF Tachi-s México OF ANY KIND.
- By accepting to analyze the information submited along with this document and further information and data submited by Tachi-s México, the company receiving this RFQ also accepts the confidentiality agreement attached.

PURCHASE AGENT

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Tachi-s México

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