NPQP Category 5

Manufacturing Process Development

NISSAN
MOTOR CORPORATION

5 - Manufacturing Process Development

Category Purpose:

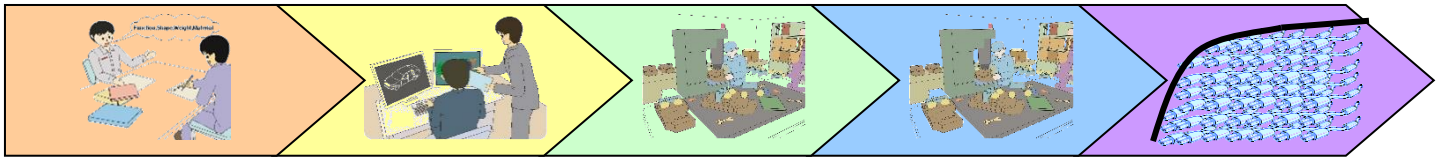
- **Design** a manufacturing process to meet Nissan's requirements for QCD:
  - Ensure that the manufacturing process will be capable of producing the required product **quality** level
  - Ensure that the manufacturing process will be capable of producing the required **quantity** of products

5 - Manufacturing Process Development

- 5.1 Process Failures Mode and Effect Analysis
- 5.2 Manufacturing Process Design
- 5.3 Tooling, Gauges & Facility Management
- 5.4 Process Capability Study and Improvement
- 5.5 Confirmation of Full Volume Conditions
- 5.6 Activities during Ramp-up
- 5.7 Identification and Traceability

5 - Manufacturing Process Development

Timing:



	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
5.1 Process Failure Mode & Effects Analysis					
5.2 Manufacturing Process Design					
5.3 Tooling, Gauges & Facility Management					
5.4 Process Capability Study and Improvement					
5.5 Confirmation of Full Volume Conditions					
5.6 Activities during Ramp-up					
5.7 Identification and Traceability					

5 - Manufacturing Process Development

5.1 Analysis of Process Potential Failures and Effects

5.2 Manufacturing Process Design

5.3 Tooling, Gauges and Facility Management

5.4 Process Capability Study and Improvement

5.5 Confirmation of Full Volume Conditions

5.6 Activities during Ramp-up

5.7 Identification and Traceability

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5 – Manufacturing Process Development
5.1 – Analysis of Process Potential Failures and Effects

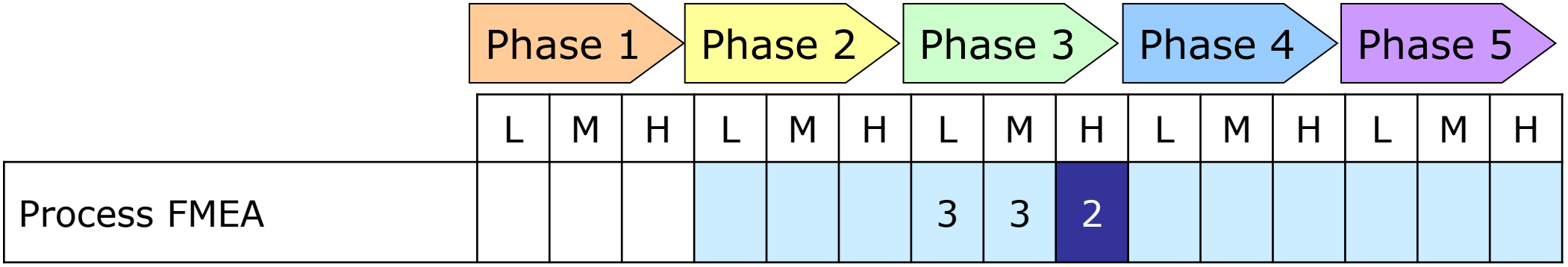
Activity Purpose:

- **Identify** potential process failure modes, their associated causes and their effects
- **Implement** effective countermeasures to minimize the probability of failure occurring

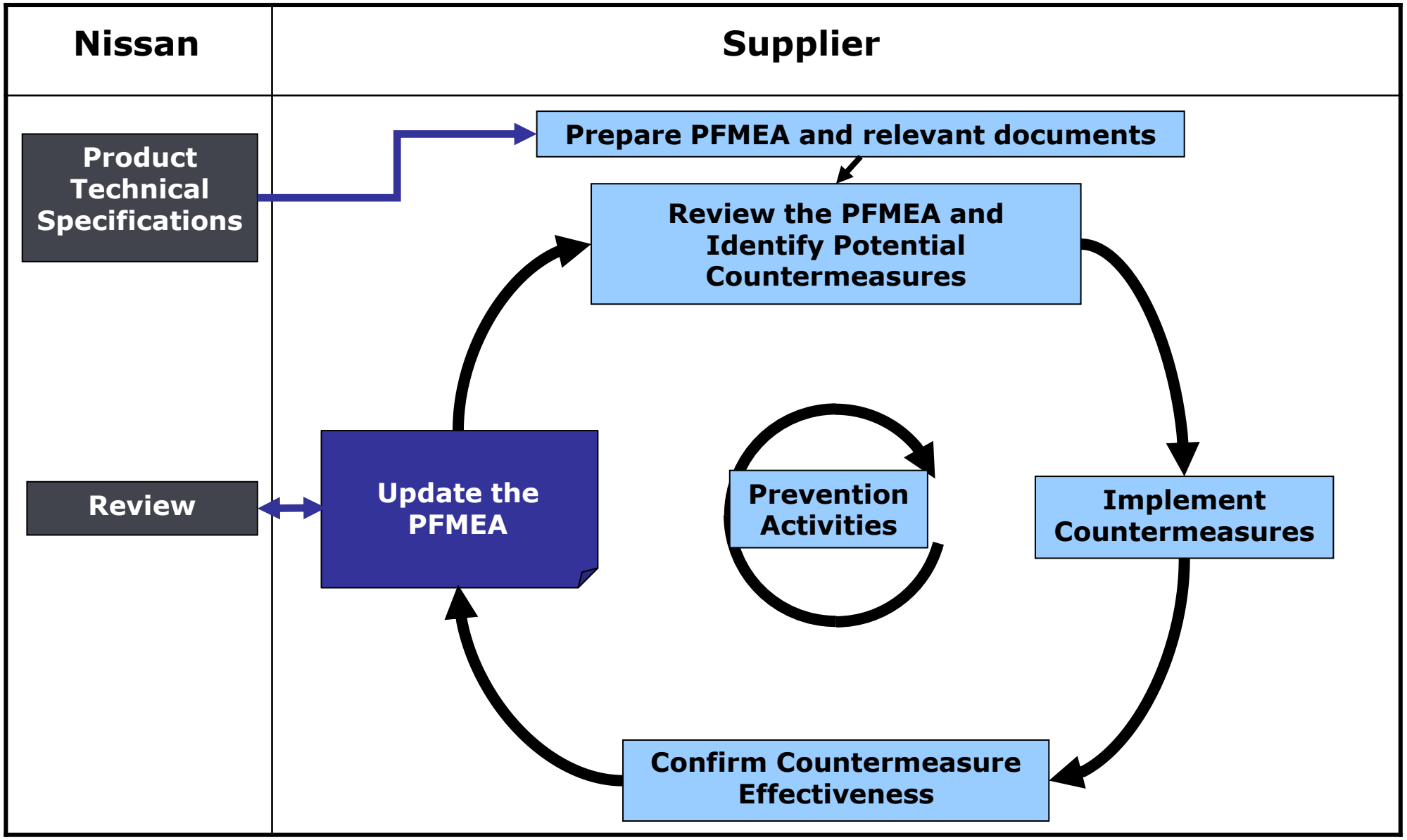
Notes:

The supplier must consider historical concerns, recurrence prevention, and customer satisfaction targets on assemblies and sub-assemblies / components when deciding the scope of the activity

Output Documents & Submission Timing



5 – Manufacturing Process Development
5.1 – Analysis of Process Potential Failures and Effects



What happens if the activity is not carried out correctly?

Failure to identify and action potential concerns at the correct timing leads to:

- **Increased potential** to manufacture and deliver **non-conforming product.**
- **Expensive** modification of tooling after completion.
- **Failure** to create a manufacturing process that is capable and stable
- **Disruption** of supply to customer

Failure to Achieve Customer Requirements

For details of how to correctly perform this activity, attend a specific training course on Potential Failure Modes and Effects Analysis.

5 - Manufacturing Process Development

5.1 Process Failure Mode and Effects Analysis

5.2 Manufacturing Process Design

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5 – Manufacturing Process Development
5.2 – Manufacturing Process Design

Activity Purpose:

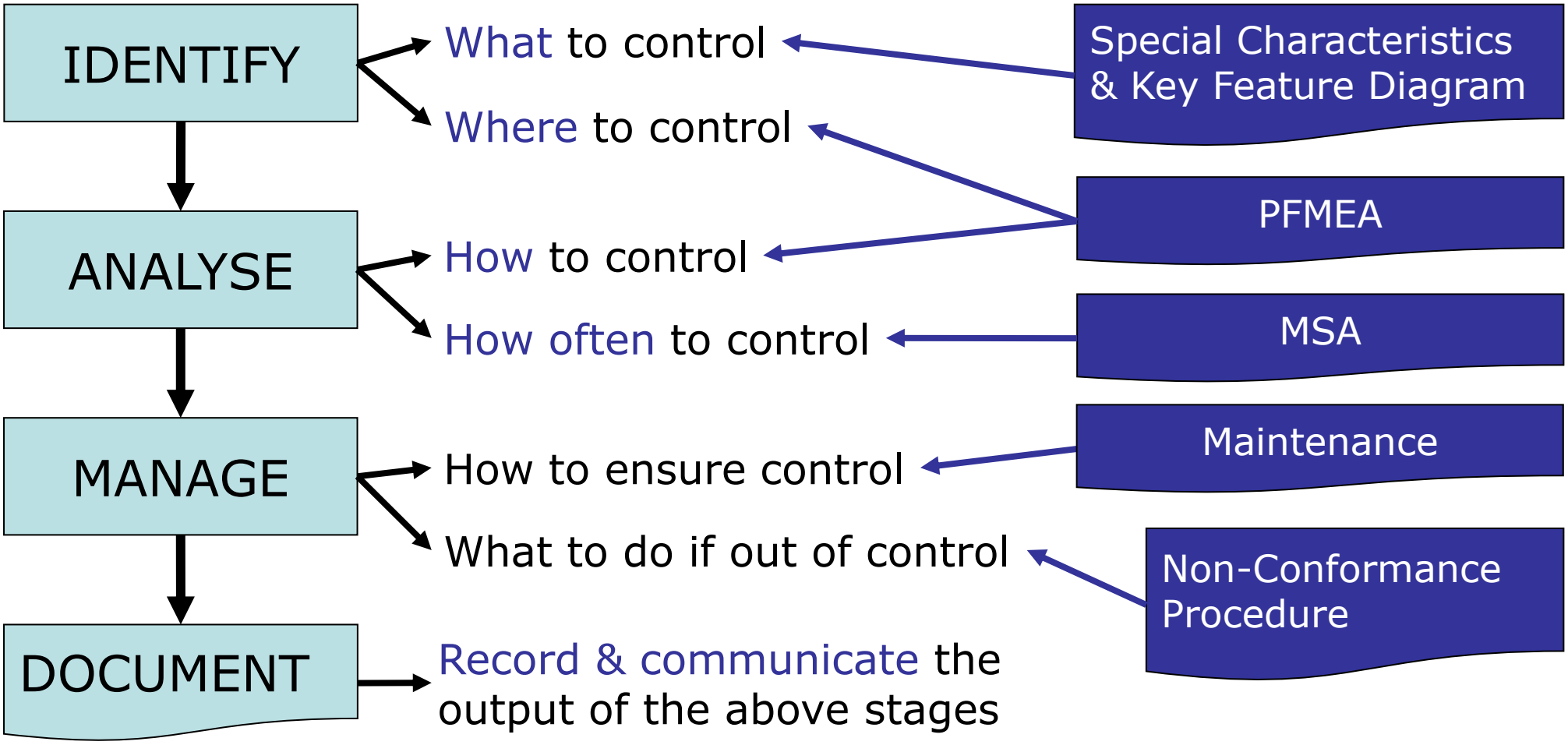
- **Design** a manufacturing process to **achieve** all Nissan Quality, Cost and Delivery targets.

Key Points of Activity:

- For manufacturing process design to be effective, a **thorough understanding of the main stages of the activity is necessary**.

5 – Manufacturing Process Development
5.2 – Manufacturing Process Design

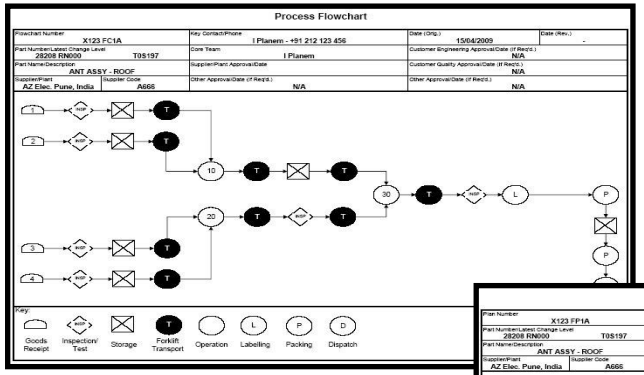
Main Stages of Manufacturing Process Design:



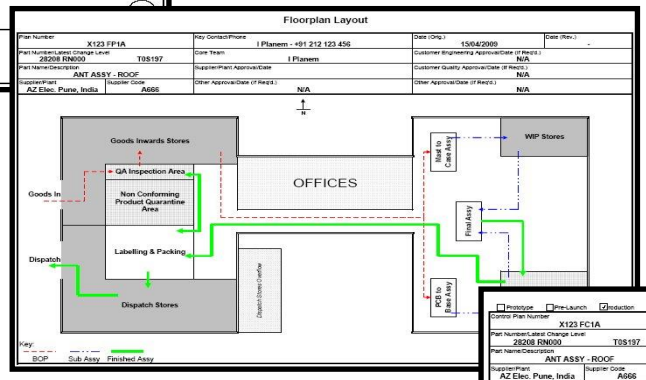
Output Documents & Submission Timing

	Phase 1			Phase 2			Phase 3			Phase 4			Phase 5		
	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Control Plan (CP)				4	4	4	3	3	2	1	1	1			
Process Flow Chart (PFC)				4	4	4	3	3	3	2	2	2			
Floor Plan Layout (FPL)				3	3	3	3	3	3						
Work Instructions (WI)										3	3	3			

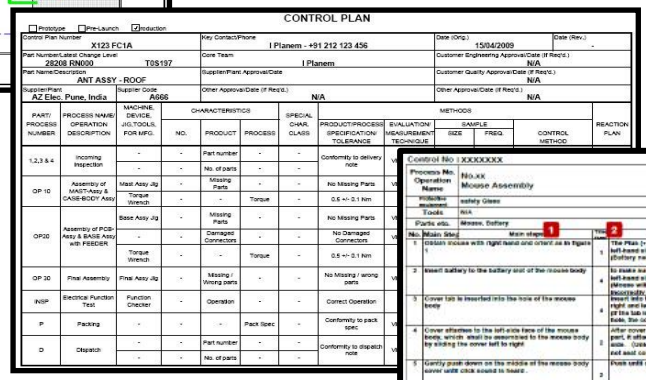
5 – Manufacturing Process Development
5.2 – Manufacturing Process Design



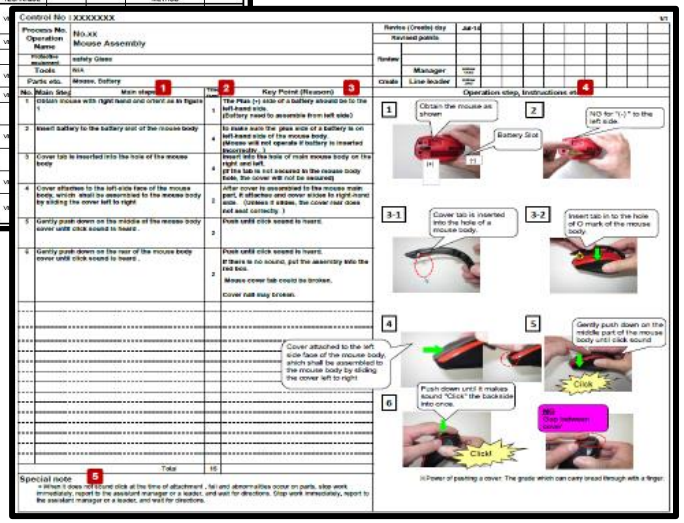
Process Flowchart – A schematic layout of the complete process



Floorplan Layout – Document to show the facilities installation and product flow



Control Plan – description of all product and process control operations implemented in the production process

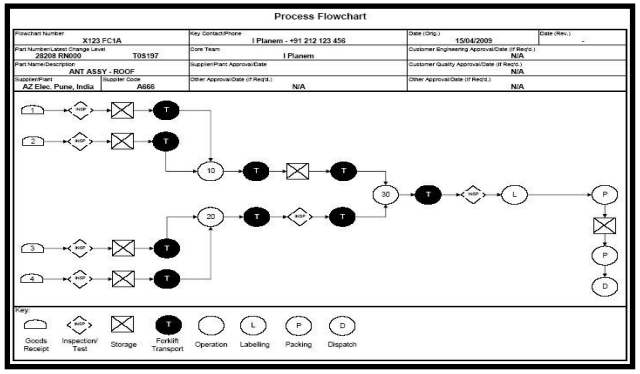


Work Instructions – defines the actions required to carry out an operation

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5 – Manufacturing Process Development
5.2 – Manufacturing Process Design

Process Flowchart

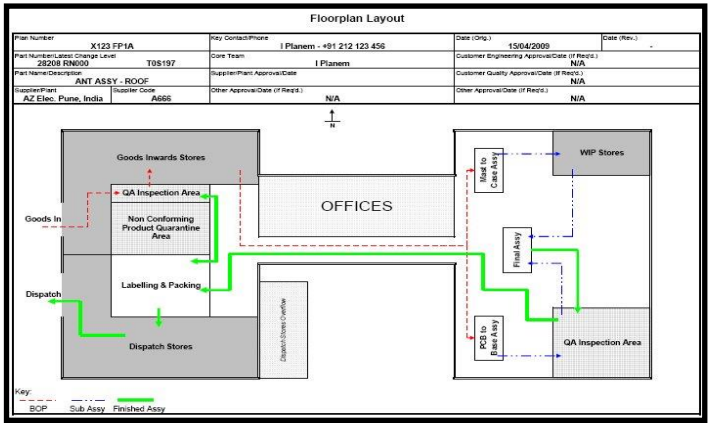


- Does the flowchart **illustrate the entire process** from receiving through shipping, **including outside processes and services**?
- Is the flowchart **consistent** with the product and process checks in the **control plan**?
- Does the flowchart describe **how the product will move** i.e. roller conveyor, slide containers, etc?
- Have provisions been made to **identify and inspect reworked product** before being used?

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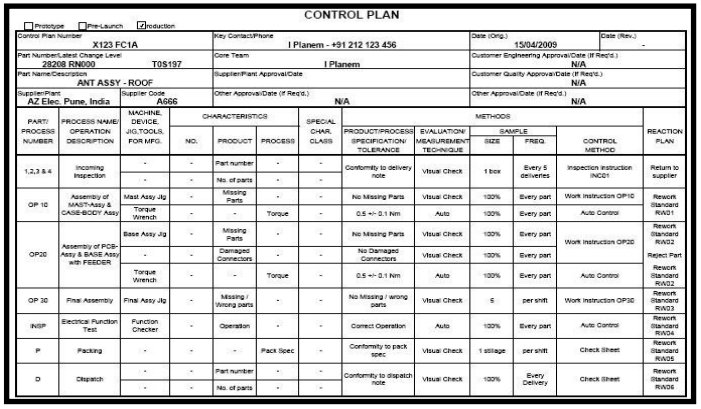
5 – Manufacturing Process Development
5.2 – Manufacturing Process Design

Floor Plan Layout



- Does the floor plan **identify all required process and inspection points?**
- Have **clearly marked areas for all material, tools and equipment** at each operation been considered?
- Has **sufficient space** been allocated for all **equipment and personnel?**
- Are **inspection points** located to prevent **shipment of nonconforming products?**

Control Plan



CONTROL PLAN

☐ Prototype ☐ Pre-Launch ☑ roduction

Control Plan Number: X123 FC1A				Key Contact/Phone: I Planem - +91 212 123 456					Date (Orig.): 15/04/2009				Date (Rev.): -			
Part Number/Latest Change Level: 28208 RN000 T0S197				Core Team: I Planem					Customer Engineering Approval/Date (If Req'd.): N/A							
Part Name/Description: ANT ASSY - ROOF				Supplier/Plant Approval/Date					Customer Quality Approval/Date (If Req'd.): N/A							
Supplier/Plant: AZ Elec. Pune, India				Supplier Code: A666				Other Approval/Date (If Req'd.): N/A					Other Approval/Date (If Req'd.): N/A			
PART/ PROCESS NUMBER	PROCESS NAME/ OPERATION DESCRIPTION	MACHINE, DEVICE, JIG,TOOLS, FOR MFG.	CHARACTERISTICS NO.	CHARACTERISTICS PRODUCT	CHARACTERISTICS PROCESS	SPECIAL CHAR. CLASS	METHODS PRODUCT/PROCESS SPECIFICATION TOLERANCE	METHODS EVALUATION/ MEASUREMENT TECHNIQUE	METHODS SAMPLE SIZE	METHODS SAMPLE FREQ.	METHODS CONTROL METHOD	REACTION PLAN
1,2,3 & 4	Incoming Inspection	-	-	Part number	-	-	Conformity to delivery note	Visual Check	1 box	Every 5 deliveries	Inspection instruction INC01	Return to supplier
		-	-	No. of parts	-	-						
OP 10	Assembly of MAST-Assy & CASE-BODY Assy	Mast Assy Jig	-	Missing Parts	-	-	No Missing Parts	Visual Check	100%	Every part	Work instruction OP10	Rework Standard RW01
		Torque Wrench	-	-	Torque	-	0.5 +/- 0.1 Nm	Auto	100%	Every part	Auto Control	
OP20	Assembly of PCB-Assy & BASE Assy with FEEDER	Base Assy Jig	-	Missing Parts	-	-	No Missing Parts	Visual Check	100%	Every part	Work instruction OP20	Rework Standard RW02
		-	-	Damaged Connectors	-	-	No Damaged Connectors	Visual Check	100%	Every part		Reject Part
		Torque Wrench	-	-	Torque	-	0.5 +/- 0.1 Nm	Auto	100%	Every part	Auto Control	Rework Standard RW02
OP 30	Final Assembly	Final Assy Jig	-	Missing / Wrong parts	-	-	No Missing / wrong parts	Visual Check	5	per shift	Work instruction OP30	Rework Standard RW03
INSP	Electrical Function Test	Function Checker	-	Operation	-	-	Correct Operation	Auto	100%	Every part	Auto Control	Rework Standard RW04
P	Packing	-	-	-	Pack Spec	-	Conformity to pack spec	Visual Check	1 sillage	per shift	Check Sheet	Rework Standard RW05
D	Dispatch	-	-	Part number	-	-	Conformity to dispatch note	Visual Check	100%	Every Delivery	Check Sheet	Rework Standard RW06
		-	-	No. of parts	-	-						

- Have all the **controls identified in the PFMEA** been included in the control plan?
- Are all **Special Characteristics and Key Features** included in the control plan?
- Does the control plan include **all processes from receiving through to shipping, including packaging?**
- Are **material specifications** requiring inspection identified?
- Are **engineering performance testing** requirements identified?

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5.2 – Manufacturing Process Design
-Key Points for Creating a Control Plan-

Key Points for Creation:

- The Control plan is the description of all Product and Process control operations implemented in the production process. It is a living document and **shall reflect the manufacturing process and control systems at all times**.
- In accordance with IATF 16949, there are 3 stages of control plan used during the NPQP phases:
  1) The Prototype Control Plan: A Prototype Control Plan is a description of the dimensional measurements material and performance tests that will occur during manufacture of the prototype part.
  2) The Pre-Launch Control plan: A Pre-Launch Control Plan is a description of the product/ process controls, dimensional measurements, material and performance tests that occur after prototype and before full production.
  3) The Production Control plan: Production Control Plan is a description of the product/ process controls, dimensional measurements, material and performance tests that occur during mass production.

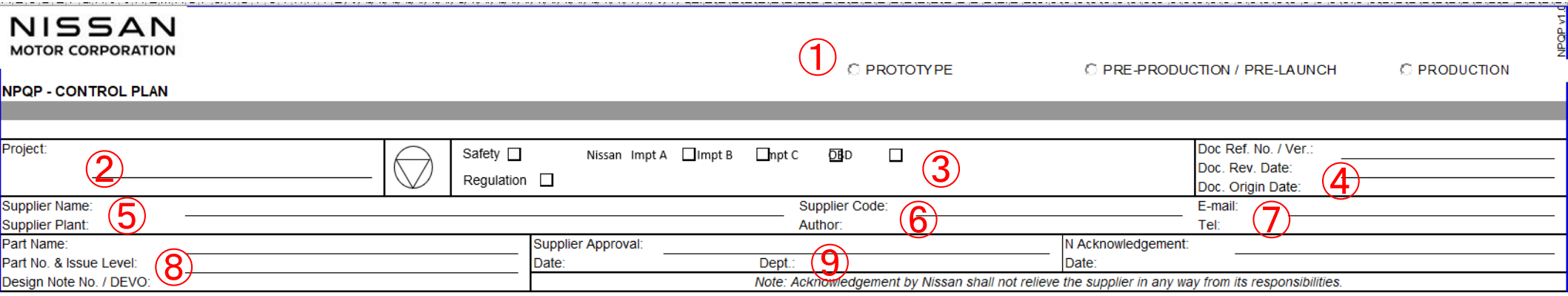
5.2 – Manufacturing Process Design
-Key Points for Creating a Control Plan-

Minimum Content Requirement:

The Control plan shall include:

- Identification of all Special Characteristics and Key Features, with suitable control methods and appropriate check frequency.
- Identification of process characteristics. Note: In some processes one process characteristic may affect several product characteristics
- Identification of all other features to be checked according to contracted requirements.
- The production and process control operations mentioned in the Process flow chart
- The calibration/ maintenance of all control means and the check of the error proofing (poka-yoke) devices
- Details of reaction plans
- Special Characteristics and Key Features Diagram shall accompany the Control Plan.

5.2 – Manufacturing Process Design
-Key Points for Creating a Control Plan-



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NPQP v1.0

① ○ PROTOTYPE ○ PRE-PRODUCTION / PRE-LAUNCH ○ PRODUCTION

NPQP - CONTROL PLAN

Project: ②	Safety ☐ Nissan Impt A ☐ Impt B ☐ Impt C ☐ DfD ☐ ③ Regulation ☐	Doc Ref. No. / Ver.: Doc. Rev. Date: Doc. Origin Date: ④
Supplier Name: ⑤ Supplier Plant:	Supplier Code: ⑥ Author:	E-mail: ⑦ Tel:
Part Name: Part No. & Issue Level: ⑧ Design Note No. / DEVO:	Supplier Approval: Date: Dept.: ⑨	N Acknowledgement: Date:

Note: Acknowledgement by Nissan shall not relieve the supplier in any way from its responsibilities.

Suppliers may use their own unique forms for the Control Plan. When using the recommended NPQP form, be sure to fill in the following

①PROTOTYPE/PRE-PRODUCTION/PRODUCTION
②Project
③Special Characteristics
④Document Ref. No./Ver. / Document revision Date / Document Origin Date
⑤Supplier Name / Supplier Plant
⑥Supplier Code / Author
⑦E-mail address / tell of Author
⑧Part Name / Part No. / Design Note No
⑨Supplier Approval / Date

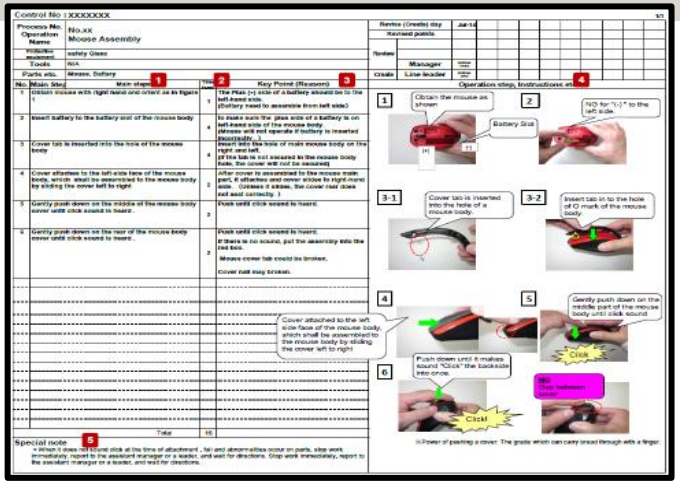
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5.2 – Manufacturing Process Design
-Key Points for Creating a Control Plan-

Process		Machine, Device, Jig, Tools for Mfg.	Characteristics			Spec.Char./ Key Feature Ident'n	Specification / Tolerance	Methods				Maintenance	Poka Yoke	Reaction Plan
No.	Description		No.	Product	Process			Evaluation / Measurement Technique	Sample		Control Method			
									Size	Freq'cy				
①	②	③		④	⑤	⑥	⑦	⑧	⑨		⑩	⑪	⑫	⑬

①Enter the numbers indicated in the Process Flow Chart.
②Enter the Process name indicated in the Process Flow Chart.
③Enter the Machine, Device, Jig, Tools used in ② process.
④Enter the characteristics of the parts or components.
⑤Enter the parameters that affect the product characteristics.
⑥Enter the symbols for special characteristics and key feature
⑦Enter the drawings, specifications, and assembly requirements.
⑧Enter the measuring instruments used to verify specifications and tolerances.
⑨Enter the size the frequency of sample.
⑩Enter the control method for measurement results.
⑪Enter the maintenance activities that will be conducted regularly.
⑫Enter the poka-yoke incorporated into the process.
⑬Enter the reaction plan for the process abnormalities or product nonconformities.

Work Instructions



- Have **all main steps** required to complete the operation been included?
- Have all **key points/care points** and the **reasons** for them been included?
- Do the work instructions include **inspection requirements, inspection criteria and reaction instructions**?
- Are all **Special Characteristics and Key Features** identified in the work instructions?
- Are **photographs/sketches** used to support operation descriptions?

Key points on documentation:

- If the Manufacturing Process Design activity is done correctly, the **output documents should link together to form a coherent set**.
- The **links to other activities** such as Identification of Special Characteristics and Key Features on Analysis of Process Potential Failure Modes and Effects etc. **should be evident** from the documentation
- All submitted documents need to **satisfy** the **minimum content requirements** as specified in each of the **DCI's.**

5 - Manufacturing Process Development

5.1 Process Failure Mode and Effects Analysis

5.2 Manufacturing Process Design

5.3 Tooling, Gauges and Facility Management

5.4 Process Capability Study and Improvement

5.5 Confirmation of Full Volume Conditions

5.6 Activities during Ramp-up

5.7 Identification and Traceability

5 – Manufacturing Process Development
5.3 – Tooling, Gauges and Facility Management

Activity Purpose:

- The supplier must **manage all necessary equipment** to ensure that Nissan requirements are achieved and maintained.

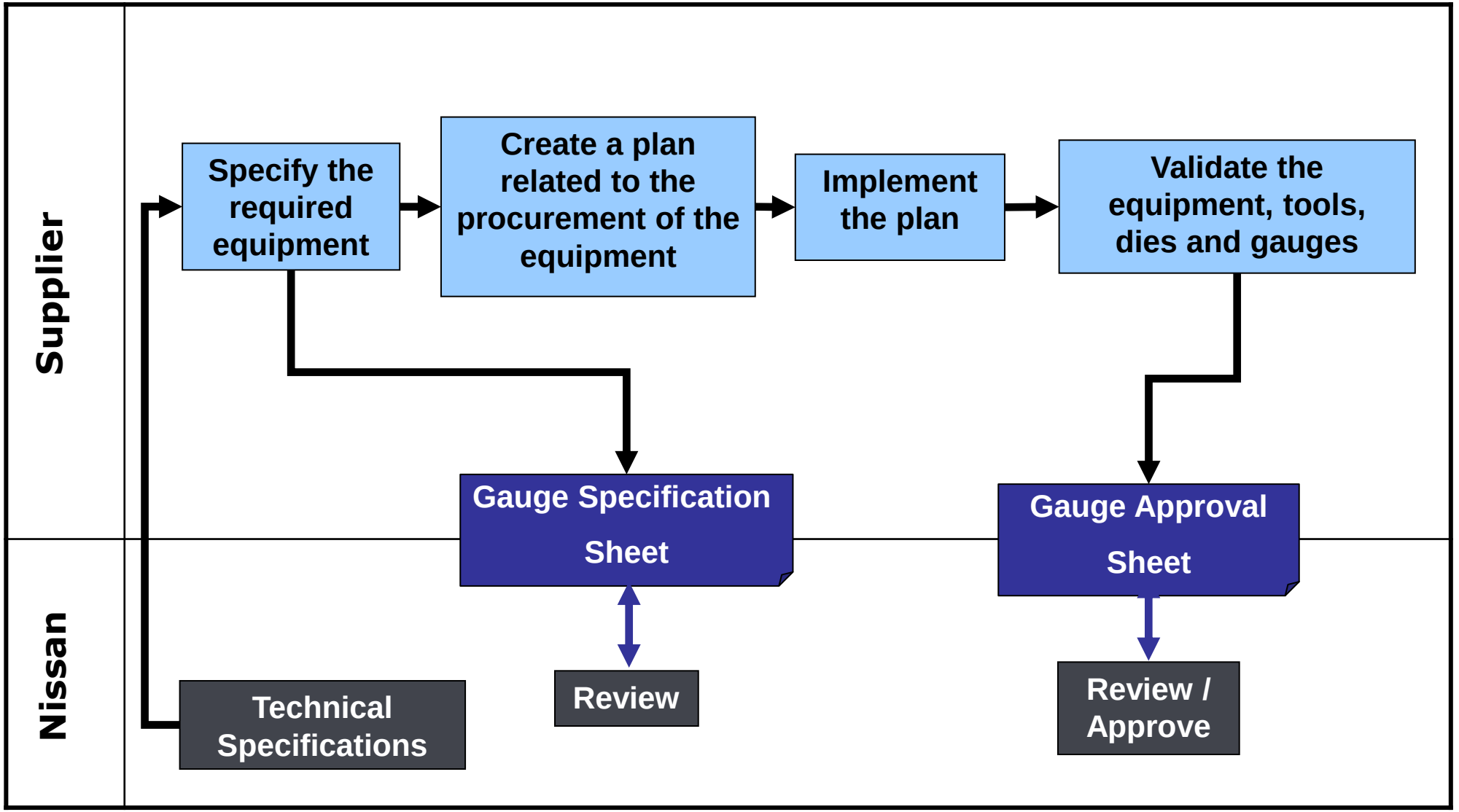
Key Points of Activity:

- The supplier must ensure that **all equipment is capable, reliable and in a stable condition during use.**
  - Equipment includes, but is not limited to, machinery, tools, gauges, inspection and test equipment.

Output Documents & Submission Timing

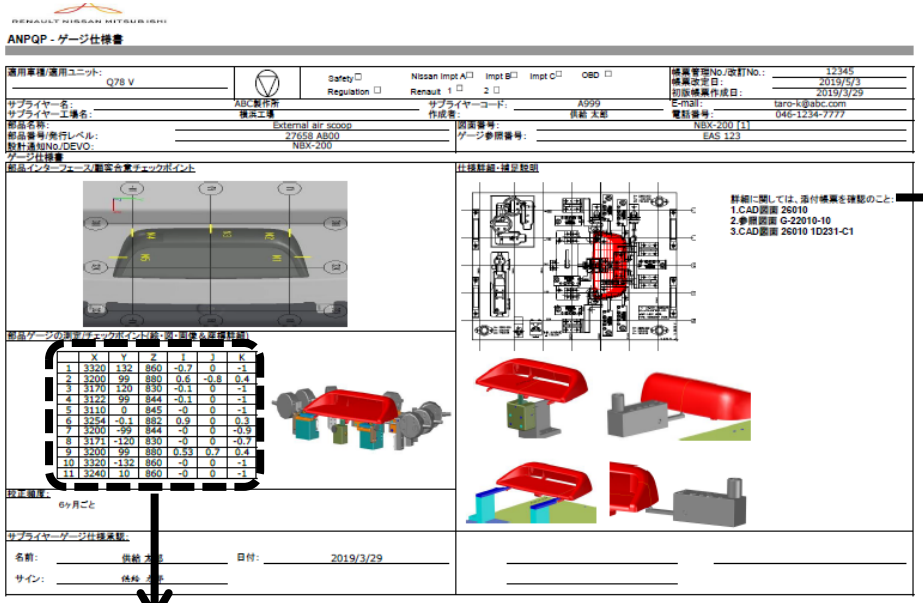
	Phase 1			Phase 2			Phase 3			Phase 4			Phase 5		
	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Gauge Specification Sheet (GSS)				4	4	4									
Gauge Approval Sheet (GAS)							(1)	(1)	(1)						

5 – Manufacturing Process Development
5.3 – Tooling, Gauges and Facility Management



5.3 – Tooling, Gauges and Facility Management
Gauge Specification Sheet/Gauge Approval Sheet

Gauge Specification Sheet



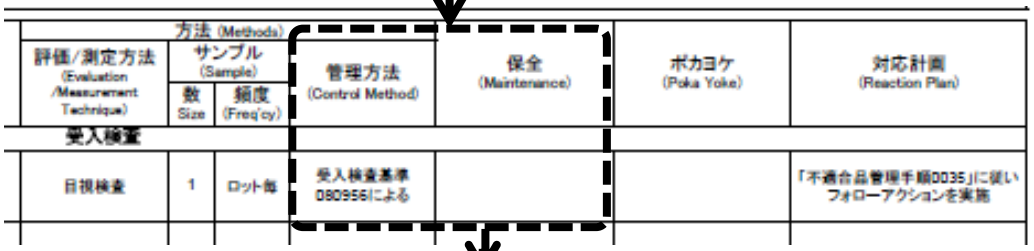
ANPQP - ゲージ仕様書

	X	Y	Z	I	J	K
1	3320	132	860	-0.7	0	-1
2	3200	99	880	0.6	-0.8	0.4
3	3170	120	830	-0.1	0	-1
4	3122	99	844	-0.1	0	-1
5	3110	0	845	-0	0	-1
6	3254	-0.1	882	0.9	0	0.3
7	3200	-99	844	-0	0	-0.9
8	3171	-120	830	-0	0	-0.7
9	3200	99	880	0.53	0.7	0.4
10	3320	-132	860	-0	0	-1
11	3240	10	860	-0	0	-1

① **Coordinates should be entered according to the values shown in the drawing.**

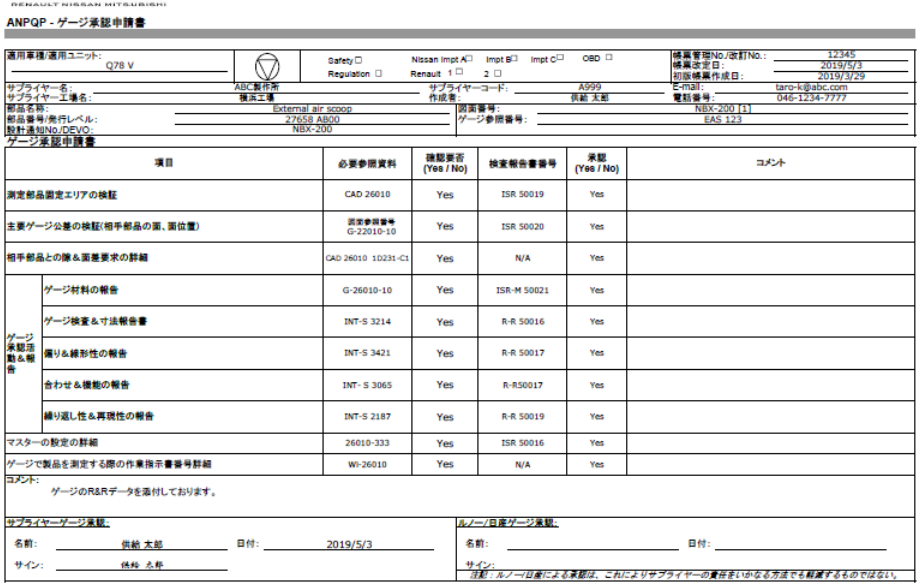
② Control Plan

Please fill in the gauge number, Control Method (maintenance), and frequency.



評価/測定方法 (Evaluation /Measurement Technique)	方法 (Methods) サンプル (Sample) 数 Size	頻度 (Freq'cy)	管理方法 (Control Method)	保全 (Maintenance)	ポカヨケ (Poka Yoke)	対応計画 (Reaction Plan)
受入検査						
目視検査	1	ロット毎	受入検査基準 080956による			「不適合品管理手順0035」に従いフォローアクションを実施

Gauge Approval Sheet



ANPQP - ゲージ承認申請書

項目		必要参照資料	確認要否 (Yes / No)	検査報告書番号	承認 (Yes / No)	コメント
測定部品固定エリアの検証		CAD 26010	Yes	ISR 50019	Yes	
主要ゲージ公差の検証(相手部品の面、面位置)		図面参照番号 G-22010-10	Yes	ISR 50020	Yes	
相手部品との隙＆面差要求の詳細		CAD 26010 1D231-C1	Yes	N/A	Yes	
ゲージ承認活動＆報告	ゲージ材料の報告	G-26010-10	Yes	ISR-M 50021	Yes	
	ゲージ検査＆寸法報告書	INT-S 3214	Yes	R-R 50016	Yes	
	偏り＆線形性の報告	INT-S 3421	Yes	R-R 50017	Yes	
	合わせ＆機能の報告	INT- S 3065	Yes	R-R50017	Yes	
	繰り返し性＆再現性の報告	INT-S 2187	Yes	R-R 50019	Yes	
マスターの設定の詳細		26010-333	Yes	ISR 50016	Yes	
ゲージで製品を測定する際の作業指示書番号詳細		WI-26010	Yes	N/A	Yes	

コメント: ゲージのR&Rデータを添付しております。

サプライヤーゲージ承認: 名前: 供給 太郎 日付: 2019/5/3 サイン: 供給 太郎

ルノー/日産ゲージ承認: 名前: 日付: サイン:

注記：ルノー/日産による承認は、これによりサプライヤーの責任がいかなる方法でも軽減するものではない。

NISSAN MOTOR CORPORATION

5 - Manufacturing Process Development

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MOTOR CORPORATION

5 – Manufacturing Process Development
5.4 – Process Capability Study and Improvement

Activity Purpose:

- **Evaluate, monitor and manage** process capabilities in order to continuously achieve Nissan targets.

Note:

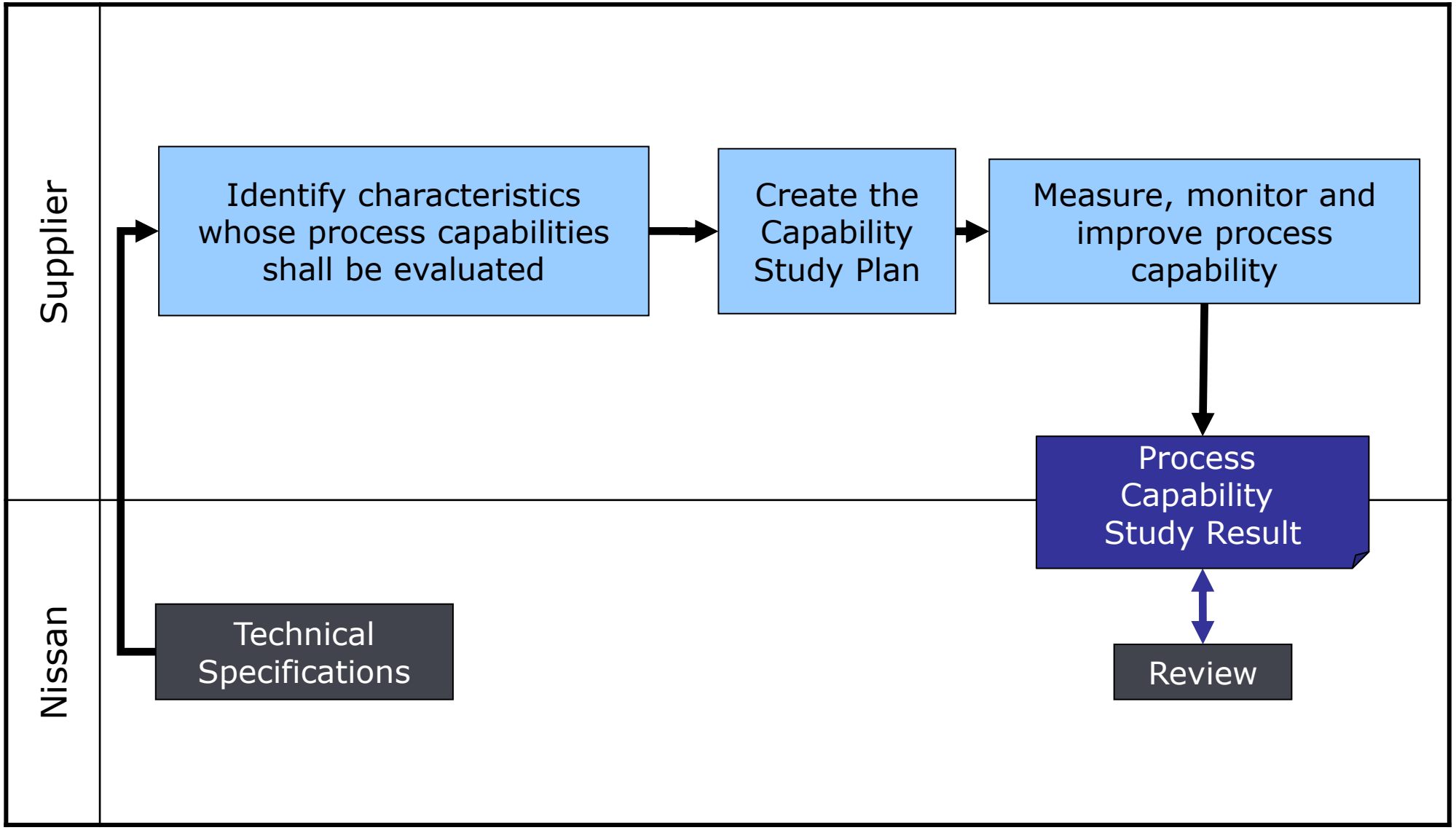
- All product shall be subjected to additional confirmation activities until capability requirements are achieved

- The supplier shall continuously monitor and reduce variation in both product and manufacturing process characteristics.

Output Documents & Submission Timing

	Phase 1			Phase 2			Phase 3			Phase 4			Phase 5		
	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Process Capability Study Results (PCSR)							4	4	4	4	4	2	4	4	4

5 – Manufacturing Process Development
5.4 – Process Capability Study and Improvement



5 – Manufacturing Process Development
5.4 – Process Capability Study and Improvement

- **Purpose:**

  Evaluate, monitor and manage process capability in order to maintain a capable and stable process condition that continuously achieves compliant parts.

- **Capability Process & Target**

- Each special characteristic must have a process capability index (Cpk) > 1.33 all along mass production; to assure the target value in serial life, demonstration shall be available before part approval. The demonstration should include adequate margin (e.g. Cpk >1.67 with trial parts etc.), verification of process control, etc.

- Each normal characteristic must have a process capability index (Cpk) > 1.00 all along mass production; To assure the target value in serial life, demonstration shall be available before part approval. The demonstration should include adequate margin (e.g. Cpk >1.33 with trial parts etc.), verification of process control, etc.

5 - Manufacturing Process Development

5.1 Process Failure Mode and Effects Analysis

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5 – Manufacturing Process Development
5.5 – Confirmation of Full Volume Conditions

Activity Purpose:

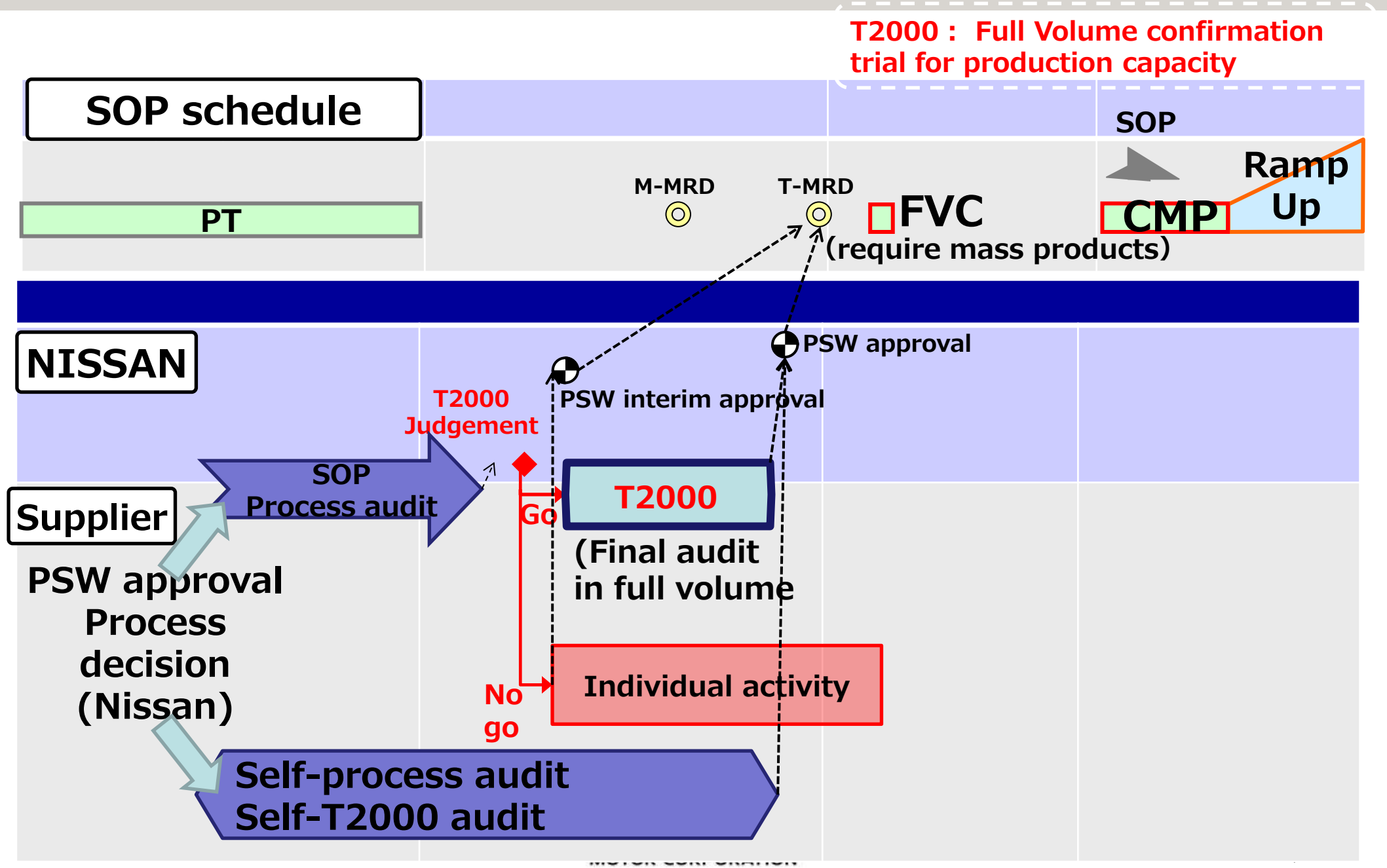
- **Conduct** a manufacturing trial to **confirm** that the process **achieves** Nissan **targets**

Note:

- The **Supplier Process Qualification Self Review** document shows the results of the self-review done by the supplier about the compliant process development confirmation. It is done prior to the Product-Process confirmation (before PSW agreement)
- The Supplier must prove his process is capable of making good parts at full speed in SOP representative conditions by making a final parts build before SOP. The documents Examples of manufacturing trial are:
  - Run @ Rate trial
  - significant production trial
  - line speed demonstration
  - T2000
  - Capacity Audit

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5.5 Confirmation of Full Volume Conditions

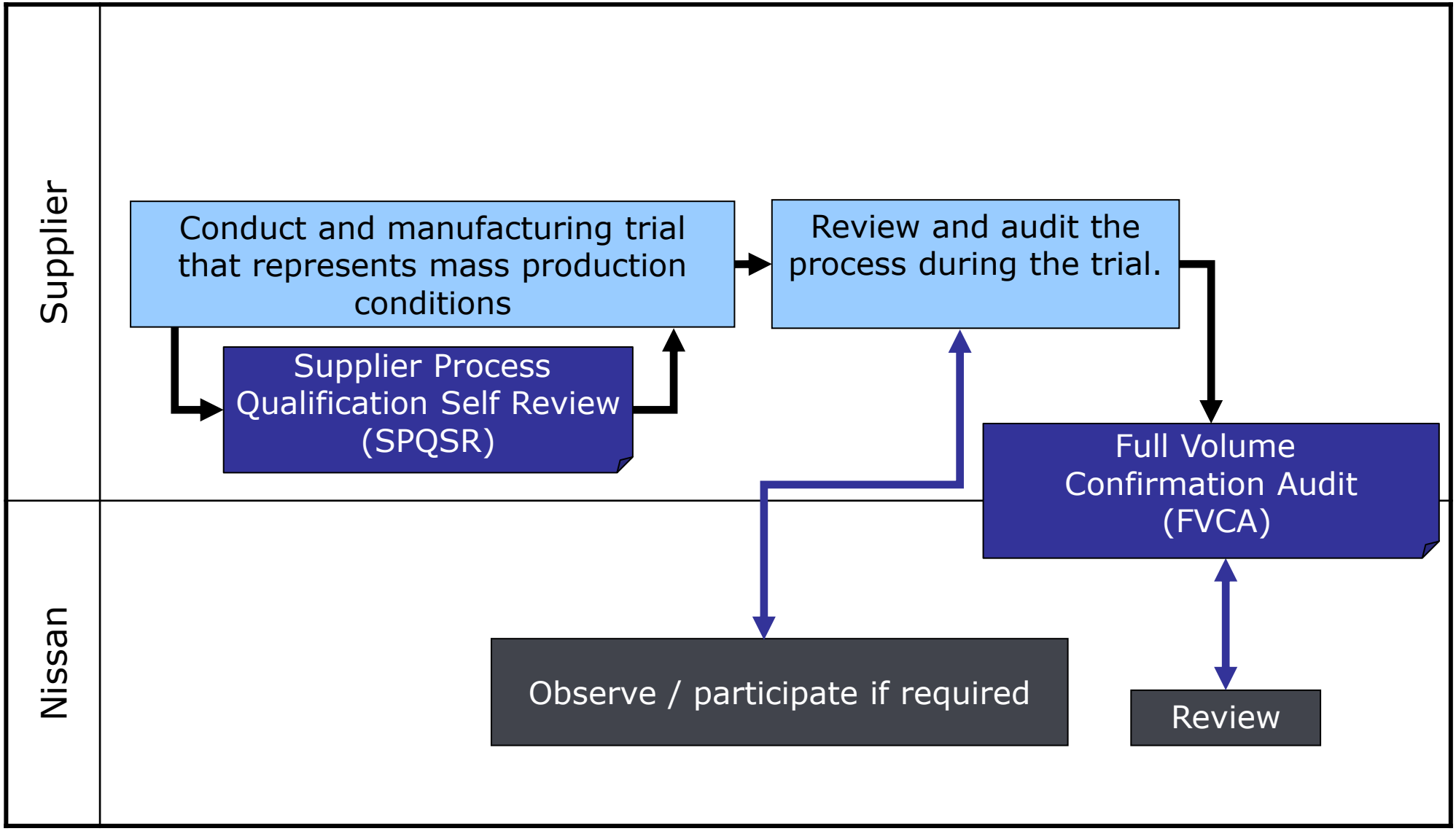


5 – Manufacturing Process Development
5.5 – Confirmation of Full Volume Conditions

Output Documents & Submission Timing

	Phase 1			Phase 2			Phase 3			Phase 4			Phase 5		
	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Supplier Process Qualification - Self - Review (SPQSR)										3	4	4			
Full Volume Confirmation Audit (FVCA)										4	4	4			

5 – Manufacturing Process Development
5.5 – Confirmation of mass production conditions



5 - Manufacturing Process Development

5.1 Process Failure Mode and Effects Analysis

5.2 Manufacturing Process Design

5.3 Tooling, Gauges and Facility Management

5.4 Process Capability Study and Improvement

5.5 Confirmation of Full Volume Conditions

5.6 Activities during Ramp-up

5.7 Identification and Traceability

5 – Manufacturing Process Development
5.6 – Activities During Ramp-up

Activity Purpose:

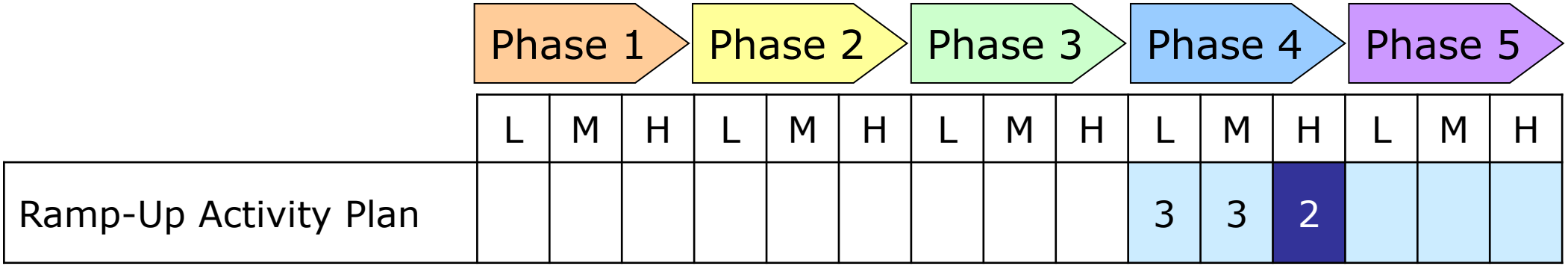
- **Plan** and **implement** additional activities to **ensure** quality and delivery requirements are **maintained** during the launch period.

Key Points of Activity:

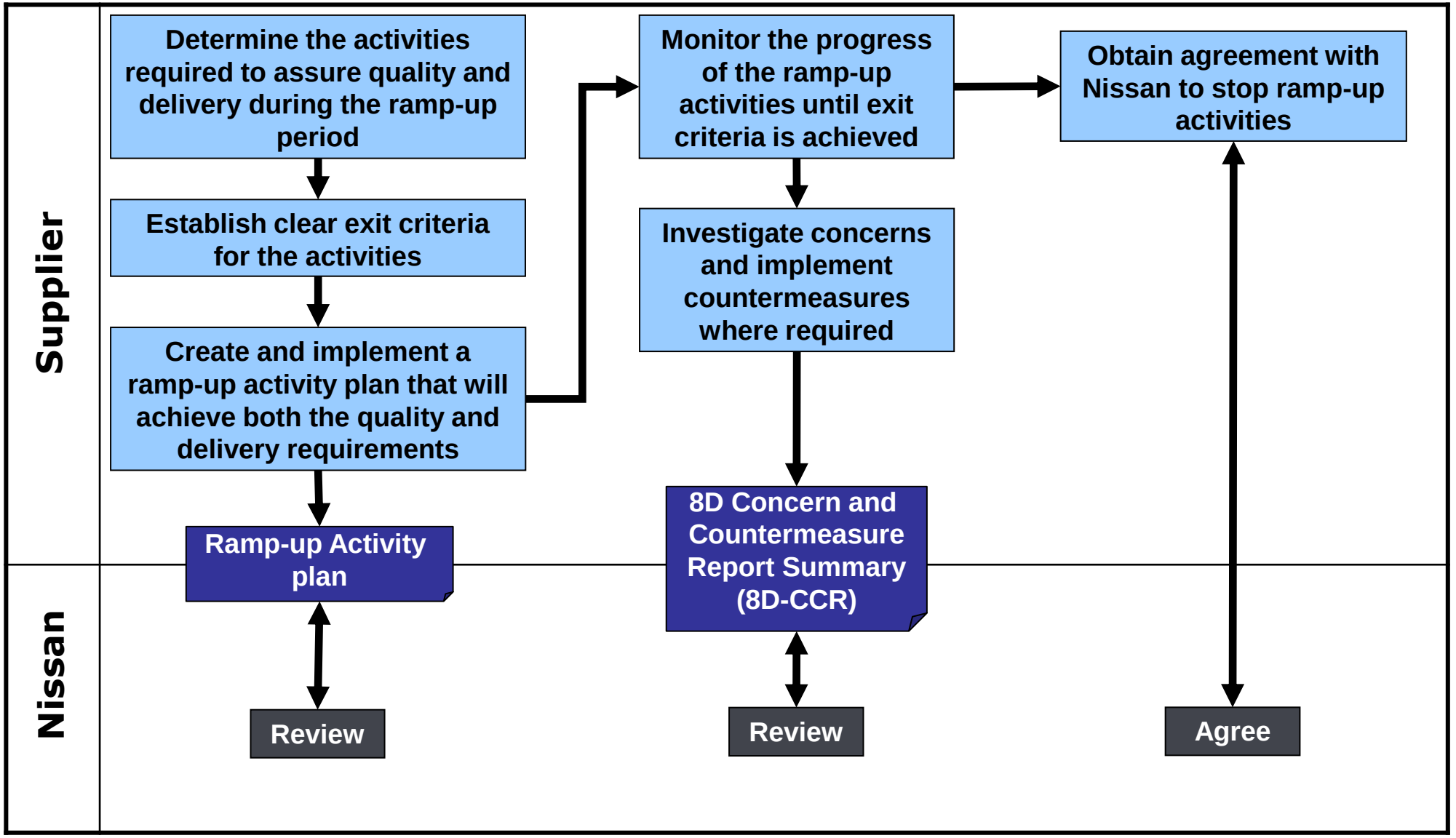
- The activities during ramp-up have two distinct objectives:
  -achievement and maintenance of the **quality** requirements
  -achievement and maintenance of the **delivery** requirements

- The Ramp-up activity shall have clearly specified **exit criteria**.

Output Documents & Submission Timing



5 – Manufacturing Process Development
5.6 – Activities During Ramp-up



5 - Manufacturing Process Development

5.1 Process Failure Mode and Effects Analysis

5.2 Manufacturing Process Design

5.3 Tooling, Gauges and Facility Management

5.4 Process Capability Study and Improvement

5.5 Confirmation of Full Volume Conditions

5.6 Activities during Ramp-up

5.7 Identification and Traceability

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5 – Manufacturing Process Development
5.7 – Identification and Traceability

Activity Purpose:

- To **ensure** that all products / parts are identified and controlled for traceability purposes.

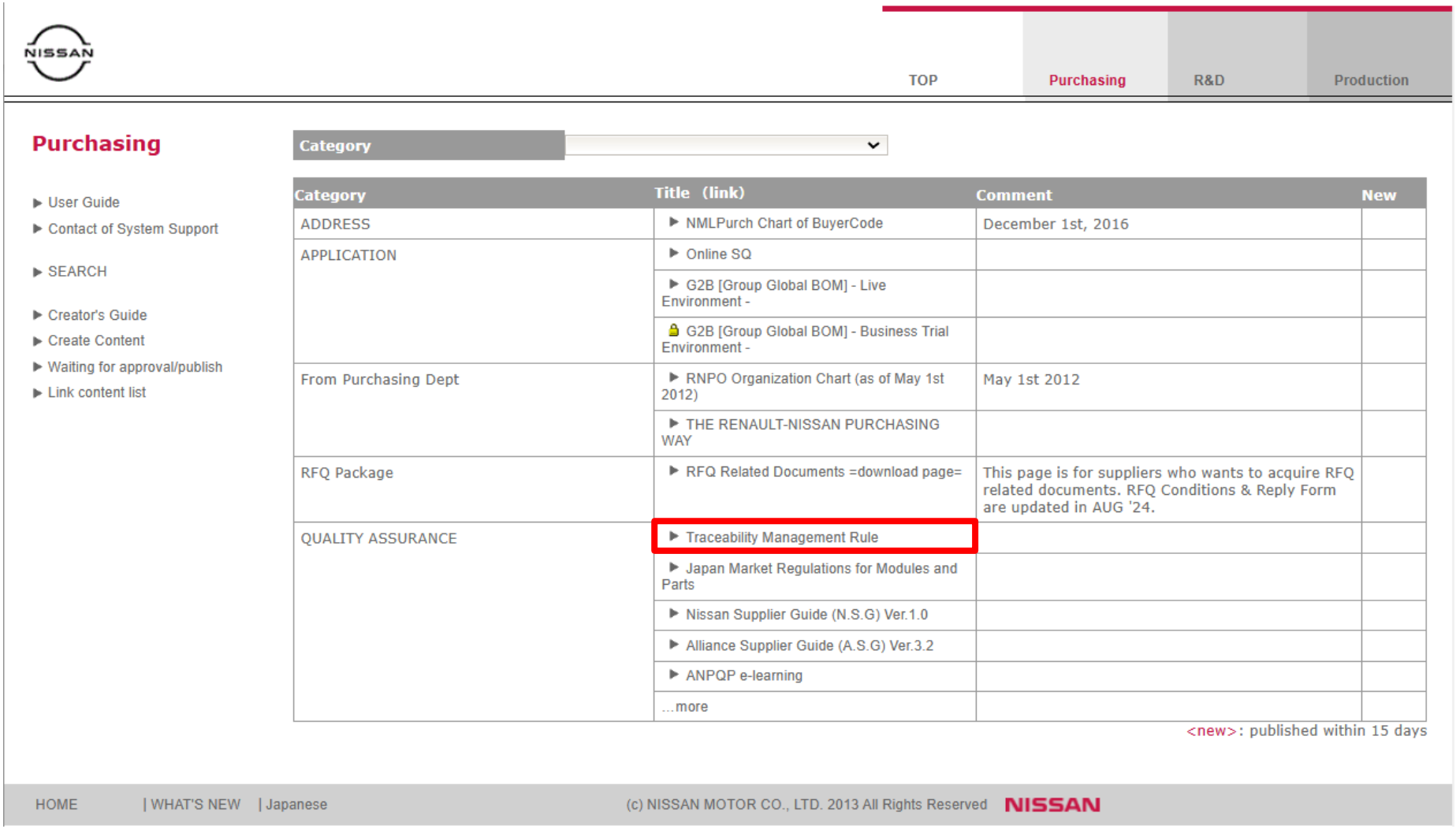
Key Points of Activity:

- Identification and traceability requirements may be **specified on the Nissan approved drawings** and/or data notes.

- The **Tier 1** supplier shall:
  - **manage traceability** for **all products and components** delivered to Nissan facilities.
  - **deploy** the **identification and traceability** requirements to their **sub-suppliers**
- Nissan have specific requirements for identification and traceability (for Nissan, refer to the unique requirements for each main Nissan region)

5 – Manufacturing Process Development
5.7 – Identification and Traceability

Nissan's Traceability Requirements Documentation Location (Japan)



NISSAN

TOP | Purchasing | R&D | Production

Purchasing

- ▶ User Guide
- ▶ Contact of System Support
- ▶ SEARCH
- ▶ Creator's Guide
- ▶ Create Content
- ▶ Waiting for approval/publish
- ▶ Link content list

Category

Category	Title (link)	Comment	New
ADDRESS	▶ NMLPurch Chart of BuyerCode	December 1st, 2016	
APPLICATION	▶ Online SQ		
	▶ G2B [Group Global BOM] - Live Environment -		
	G2B [Group Global BOM] - Business Trial Environment -		
From Purchasing Dept	▶ RNPO Organization Chart (as of May 1st 2012)	May 1st 2012	
	▶ THE RENAULT-NISSAN PURCHASING WAY		
RFQ Package	▶ RFQ Related Documents =download page=	This page is for suppliers who wants to acquire RFQ related documents. RFQ Conditions & Reply Form are updated in AUG '24.	
QUALITY ASSURANCE	▶ Traceability Management Rule		
	▶ Japan Market Regulations for Modules and Parts		
	▶ Nissan Supplier Guide (N.S.G) Ver.1.0		
	▶ Alliance Supplier Guide (A.S.G) Ver.3.2		
	▶ ANPQP e-learning		
	...more		

<new>: published within 15 days

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5 – Manufacturing Process Development
5.7 – Identification and Traceability

Nissan's traceability requirements

- Nissan requires traceability for all parts through either "individual control" or "lot control.“
- Parts subject to "individual item management" are published on the supplier portal.
- All parts excluding those subject to "individual control" must be managed by lot.
- If an Assy parts are including individual control parts as a component, the Assy parts must be managed as Individual Control Parts traceability.
- The numbering method is published on the supplier portal.

Other Supply Requirement Identification and Traceability–Japan-

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Application Scope

- It applies to all parts supplied to Nissan.

Key Point

- Based on the product characteristics, create lots to manage all critical processes (raw material handling, processing, assembly, and shipping).
- Setting Lot Numbers

Set numbers to facilitate easy tracking and searching of part history.

- Records of Lot Control

Keep records that associate lot numbers with manufacturing characteristics, so that manufacturing history can be easily identified when requested by Nissan.

Other Supply Requirement Identification and Traceability–Japan-

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Requirements for Important Part A

- Display of Lot Number
  - Display on Lot Number
  - Display on Lot Cards or Barcodes

- Delivery
  - As a general rule, the minimum delivery packaging (such as pallets) should consist of the same lot.

- Submission of a report regarding lot control for delivered parts
  - Before shipping new products, suppliers must prepare a notification regarding lot management procedures in accordance with the Lot Management Guidelines and submit it to Nissan.

Other Supply Requirement
Identification and Traceability–North America and Japan-

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Common requirements between Japan and America

- Give identification of first product with affixing the stamps on packing box. Indication size shall be about 50mm diameter.

  初 or NEW

- Give identification of first product for each delivery plant.
- In principle, the identification period shall be the first delivery lot.
- The New Product delivery notice is to be used for identification of product when first delivered to Nissan.



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Other Supply Requirement Identification and Traceability–North America -

- Suppliers shall conduct 'lot control' in manufacturing sites such as materials, processes, and assembly.
- Materials designated by Nissan North America (NNA) / Nissan Mexico (NMEX) must be delivered with an 'Itemized Packing List' or 'Lot Card' attached.
- Suppliers can determine the size of the lot, but to ensure proper management, it should be made as small as possible to provide identification and traceability within 3 hours of a request from NNA/NMEX.
- Important Part A and OBD parts shall be managed in lots individually (i.e., by each part).

Other Supply Requirement Identification and Traceability–Europe-

- Nissan requires suppliers to conduct effective lot control.
- Suppliers must display lot numbers for each product/part delivered to Nissan.
- Suppliers must display lot numbers for each product/part delivered to Nissan.
- The methods for management and lot display shall be specified according to the grade of the parts.
  - Grade A :

    Each unit must display a unique lot number.
  - Grade B :

    Lot numbers must be displayed on each container of parts to be shipped.
  - Grade C :

    Each group of products/parts to be shipped must be indicated with a unique supplier code that allows traceability according to the supplier's own system.
- Suppliers must submit their lot management methods to Nissan for approval before PT1. After approval, this method will be applied to the shipment of parts from PT1.