Introduction

Our mission is to create and deliver high-quality and innovative products, technical solutions and services that contribute to our customers' competitiveness and create value for our employees and shareholders.
To achieve this mission, we have to set ourselves ambitious quality objectives.
These **objectives** are **to reach 15 PPM** and **0 red** Safety and Regulation **alerts by 2008**. Zero defects and zero tolerance of non-Quality is the FES Faurecia Excellence System objective. The **Breakthrough Quality Plan** is implemented to bridge the gap between our current quality performance and these demanding objectives.
At Faurecia, purchased parts account for over 60% of our overall costs. As such, **Faurecia's performance is highly dependant on that of our suppliers**. To achieve our customer's quality, cost and delivery objectives, we are determined to establish and develop close and long-term relationships with our suppliers. The involvement of our suppliers within this partnership will be managed through this manual, which offers a standardized global approach and focus on product development. This approach will achieve improved involvement and communication between Faurecia and our suppliers, setting out the minimum requirements expected to achieve our customer's total satisfaction.
The Supplier Requirements Manual sets out Faurecia policy and procedures for the selection of suppliers and the management of the panel. We must apply this policy strictly if we are to achieve our quality goals and satisfy our customers.

Jacques Lemorvan
Executive Vice President Purchasing

Kiichiro (Ken) Sato
Senior Vice President Group Quality

SUPPLIER QUALITY PLAN

PANEL	NEW PROGRAM ACTIONS		ACTIONS for PRODUCTION			
►			Measure	Action	Escalation	Close
	APQP (31 elements)	Key Characteristics				
► GCP General Conditions of Purchase		Risk assessment	ppm	Containment <24h	top offender meeting	
► Vendor Profile		Control plan (> Prototypes)	Incorrect Parts Qty			
► Assessment (self, on-site)		Run at Rate /		8D (<10d)	Special AUDIT : 8D + 20 questions on control plan	lessons learned
► QAA Quality Assurance Agreement		& MPT Mass Production Trial	nb of Qp's Complaints			=> full 8D < 60 days
► Social & Environmental compliance			(pf1,pf2,pf3)			
► Confidentiality agreement		PPAP		Charge Back		Δ ==>
==> ▼▼▼			pf4	Non Quality Costs		Panel status
Expertise level		Launch Readiness	(end Customer complaint)			
(Exp, Designer, Manuf, sub-cont,..)		Early Containment		≡		
& Panel status P ; I ; H ; E						

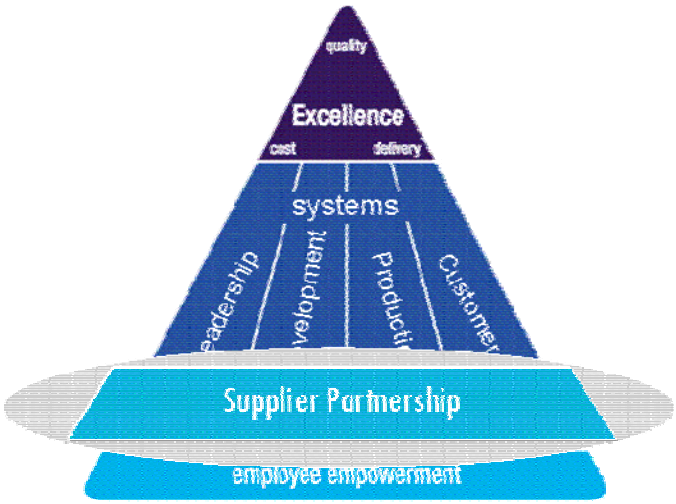
rev 2 replaces Quality Assurance Guide for Production Purchased Parts and Materials FAU-C-SP-4030
rev 3 21-03-2007 changed title ; some corrections ; added capability info in APQP 27

Contents

Appendices

THE FAURECIA EXCELLENCE SYSTEM

Within FES, the basis of our operating culture, the Supplier Partnership is key in ensuring that we work with you to achieve our common goals



Scope

Faurecia's Supplier requirements contained in this manual are applicable to all Supplier Manufacturing sites and include production parts, service parts as well as assemblies which are supplied to Faurecia plants.

This manual reinforces the Faurecia Purchase Order Terms and Conditions and the General Purchasing Conditions.

The QAA (Quality Assurance Agreement) formalizes your agreement to the present manual. To that end, this manual is an appendix to the signed QAA.

Supplier Quality System requirements

Standard

Faurecia recognizes the Global ISO/TS 16949:2002 (or ISO 9001 where applicable), ISO 14001 and OHSAS 18001 (international Occupational Health and Safety management system) Standards and other Customer requirements as they apply to automotive production and relevant service part organizations. Accordingly, all Faurecia suppliers are required to establish documents and implement effective production, quality and management systems compliant with these requirements, including those specified by the Customer requirements.

Audits/ Assessments

By audits and assessments, Faurecia reserves the right to verify supplier compliance to the above listed requirements on-site for those suppliers identified as having a high impact to Safety, Fit, Form, Function, Quality and or Customer down-time, and requires all production suppliers to verify their sub-suppliers and subcontractors' certification compliance to the above mentioned standards.

Special Quality System Requirements

The SUPPLIER undertakes to:

- **Comply with the environmental regulations and requests** (material and substances reporting, recycled content, recycling solutions, European Directive on End of life vehicles and its annexes, customers' special requests)

- **Guarantee that no critical / hazardous material and substances** such as heavy metals are contained in its Parts and Materials according to ELV directive (2000/53/EC and its updated Annex II. see the consolidated text of the ELV Directive on the following website www.europa.eu.int). Hexavalent chromium will have to be suppressed from all the corrosion preventative coating applications from the 1st of January 2007 (as the regulation deadline was set at the 1st of July 2007)).

- **Provide material documentation data** for entry in one of the below systems:
  - IMDS (International Materials Data System) (German, Asian, American OEM's & Renault since May 2006)
  - MACSI (PSA Client) = specification N° PSA B-20 0250
  - Toyota COV method: TSZ0001G Toyota Engineering Standard: control method for substances of environmental concern

- **Comply with all Faurecia quality management procedures in development**, including:
  - Use of Faurecia APQP (Advanced Product Quality Planning) tool to ensure that preventive quality actions are used
  - Comply with PPAP (Production Part Approval Process)
  - Use of other automotive industry standard tools & procedures such as: FMEA (Failure Mode and Effects Analysis), MSA (Measurement System Analysis) and SPC (Statistical Process Control) as defined in AIAG (Automotive Industry Action Group) procedures or other tutorial documents)

- **Use at least the PPM TARGETS requested by Faurecia** as one of its key performance indicators.

- **Include any production, inspection measuring and test equipment** provided by Faurecia in its own quality management system, if nothing else has been agreed upon.

- **Set up and maintain a Sub-Supplier management** system in accordance with the here described requirements and including:
  - Documented evidence from the Supplier on the follow up of second tier quality management system
  - Follow up the quality of the bought out parts using other suitable measures (including PPM quality target setting, special key characteristics follow up, Validation plan, Control plan, Run@Rate and Process audit, PPAP and Initial Samples submission,...).
  Faurecia reserves the right to carry out process approval at the sub-supplier on its own initiative in case of major problem or risk.

- **Put in place an early containment plan for all Program start up (**minimum 3 months before PreSerie deliveries and up to 3 months after SOP without defects, extended for the same period when defects are found**) and product changes.**
  This containment plan will include a reinforced Control Plan for all parts and, for risky parts or at explicit demand of Faurecia, a Quality Wall per Faurecia definition in "7 Quality Basics" will be implemented (i.e., specially but not only 1° parts delivered to the End Customer named "Traded parts", or 2° when Supplier process audit or Run @ Rate audit are not satisfactory),
  For each Quality Wall, a specific agreed identification (proof that the parts went through the quality wall) must be added on the packaging.

- **Put in place a Containment in case of PF4 or proven repetitive failures** exceeding the PPM target (refer to “Serial” § below).

Panel Management

A supplier will be integrated with a Panel status into the vendor list when it complies with the Faurecia business criteria (financial strength, expertise, foot print, quality and environmental assessment …) and have signed the following documents:

- General Conditions of Purchase
- Quality Assurance Agreement (QAA)
- Confidentiality Agreement (when requested by Faurecia)
- Compliance to Social and Environmental requirements

Supplier's expertise

- EXPERT
An expert supplier co-operates with Faurecia to define the functional specifications, propose solutions and participates in design. It is autonomous and responsible for its processes and designs; it will manage and design complete sub-assemblies.

- DESIGNER
A designer supplier designs parts based on Faurecia functional specifications, designs complex parts with full design & process responsibility.

- MANUFACTURER
A manufacturer is responsible for its own production processes. Faurecia is responsible for the design (detailed specifications).

- SUBCONTRACTOR
A subcontractor is considered as an extension of Faurecia manufacturing. It is responsible for the compliance of its process to Faurecia specifications and it manufactures parts in accordance with the definition file.

Panel status

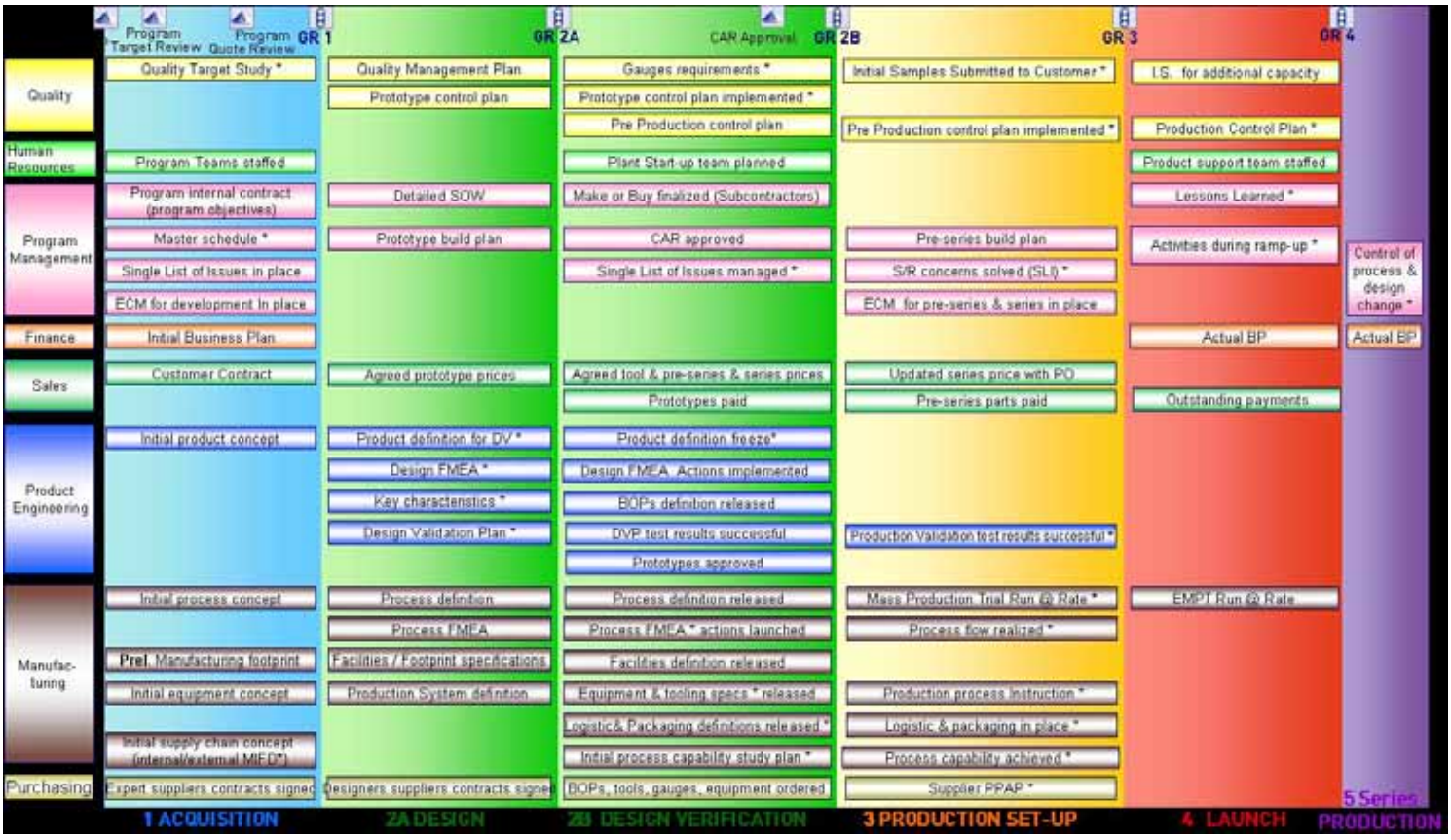
P = Panel	Fully approved supplier for development and production. Only class A suppliers may be considered within this status. All criteria are in accordance with our policy.
I = Investigation	In the Vendor List but not yet assessed or pending because of other criteria not being fulfilled (Finance, Development…)
H = on Hold	No consultation for new development. Production orders maintained.
E = Eliminate	Not acceptable supplier. To be eliminated from the vendor list

DEVELOPMENT PHASE;
Quality Requirements in Programs &
ADVANCED PRODUCT QUALITY PLANNING **(APQP):**

As 80% of the final product performance is determined during the development phase, effective program management is the key to our success. Faurecia's objective is to work closely with its suppliers through partnerships. It is Faurecia's intention to provide the framework (a common language) within the development phase, which will **enable a structured, managed program that delivers reduced development costs, with the achievement of all set targets** (quality, cost and delivery).
Program Management System (PMS) is the Faurecia management tool used during this phase. PMS reviews must be set and gates or other milestones respected. To succeed, the supplier must:

> Set and agree on quality requirements including timing plan at the beginning of the development phase
> Implement corrective action plans on product and processes prior to SOP (start of production)
> Deliver Initial Samples out of Run at Rate production, right first time and on time

Project Organization & General planning steps



rev 2 replaces Quality Assurance Guide for Production Purchased Parts and Materials FAU-C-SP-4030
rev 3 21-03-2007 changed title ; some corrections ; added capability info in APQP 27

The principal phases of the product development at Faurecia and the end Customer are:

1. **Acquisition** The supplier project launch is carried out at the end of a preparation period during which the supplier takes note of Faurecia needs, defines and plans work to realize and dimension its resources and abilities.
2. **Product and Process Design and Development**: at the agreement on the development data, the supplier conceives the components of the BOP (Bought out Parts or POE “Pièces Ouvrées Extèrieures”) allowing to fulfill the requirements specified by Faurecia.
3. **Production set-up and Pre-Series** After the definition agreements and their justifications made by the supplier during the product and process development and design step, the supplier realizes products which fulfill the Faurecia requirements. For each part delivered to Faurecia, the supplier realizes trials allowing checking if the product answers to the specified requirements and validation plan.
4. **Launch** From the product definition choice, the supplier conceives its manufacturing process, implements and qualifies it referring to the objectives specified by Faurecia.
5. **Production**

During each PMS phase, **the supplier's performance will be tracked and monitored** to ensure that suppliers achieve their targets set at each review.

- All suppliers are required to produce advanced quality plans to support the development of new products and/or services, in accordance with the guidelines in the Advanced Product Quality Planning and Control Plan (APQP) as detailed below
- All suppliers are required to report the status of plan activities on a regular basis.

Advanced Product Quality Planning (APQP) : Introduction

Advance Supplier Quality (ASQ) manages the APQP for external suppliers with the support of the Program Buyer and the D&D Product/Process Design. The APQP process is designed to ensure that external suppliers integrate preventive quality actions into their work methods.

The APQP process consists of **31 elements** deployed within the phases of the program. Responsibility for each element is either Faurecia, Supplier or shared as defined in kick off meeting:

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	APQP ELEMENTS	DEFINITION
1	**Program Steering Committee**	Faurecia program team reviews key program information and timing
2	**Confidentiality Agreement**	Enable both Faurecia and Supplier to ensure confidentiality when required
3	**Special Characteristics (1, 2)** **Key Characteristics**	A Key Characteristic is a product characteristic (material, dimension, performance) or a process parameter whose variation can affect: - compliance with the regulations (environment safety); - compliance with safety requirements for the user of a vehicle or a product; - the satisfaction of the final customer through quality reliability or durability of a Fit, Form and Function ; - The possibility of using the product by downstream customer (mountability, workability). They are identified based on the Drawings, the Process flow diagrams, the Control plans and other engineering documents **Steps** 1°) Designate the KPC Key Product Characteristics based on S/R & F/F; Drawings and Eng. Specs; using D/FMEA, Functional Analysis, TCM Tolerance control management, …. 2°) Plan & Verify (prototype Control plan, DVP, capability study, PVP) 3°) Improve KCC Key Control Characteristics resulting in Work instructions and finalize in production Control plan 4°) Monitor in Series production , update Control plan when needed
4	**Technical Input Requirements**	Technical data reviewed and relates to the latest engineering changes
5	**Technical Reviews**	Meeting attended by potential suppliers to assess the supplier proposition. At this stage a LOP (List of Open Points) is opened and then updated along the Program (refer below for details)
6	**Risk Assessment (0&1,2,3)**	Done in each phase of the Program Criteria includes but not limited to: • Product Process complexity • Responsibility (Design, mandated ..) • R&D Capacity • Timing (tooling, equipment, facilities) ; Volume; Ramp up • Safety / legal ; Product environmental impact • Supplier facility and workforce (new,) • Past concerns & assessments results LESSONS LEARNED; KNOWLEDGE MANAGEMENT review open issues in LOP • Logistics & Packaging ; Communication • PPAP, Run @ Rate / MPT results • Early containment in place
7	**Master Schedule (1,2)**	Planning describing tasks and milestones to be able to create a product responding to the program objectives. The supplier must build a master schedule based on Faurecia milestones
8	**Team Feasibility Commitment (1,2)**	Analysis to confirm that the product can be produced by the supplier according to the quality, planning and cost requirements. Comments presented in a PDCA format Supplier to justify its quality commitment, by communicating the corresponding means & measures to be taken which will

		allow the supplier to demonstrate its ability to follow the targets (estimations, return on experience, feedback on similar products, related action plans). This document to be co-signed by the supplier, the Faurecia design and the tool expert according to the criticity of the product/process used.
9	**Sourcing Committee**	Internal Faurecia decision making
10	**Sourcing Decision / Contract**	Purchasing/development contract Decision In case of a Mandated Supplier or sub-supplier, a SOW (3 or 4 Parties Statement of Work ; OEM , Faurecia, Supplier , Sub-Supplier) must be part of this element
11	**Program Review / Kickoff (1,2,3)**	3 reviews at begin of each phase In some cases, supplier day may take place
		APQP Initializing meeting and program review according to PMS milestones. Defines the Project tracking The advancement of the Supplier plan will be followed during the project review during where the supplier will introduce these subjects : - Quality - Costs - Planning Milestones and Deadlines - Product – Process The detailed agenda and the report is proposed by the Supplier has to be sent to FAURECIA and approved two days before the review. The Supplier review report will be sent to FAURECIA within one week.
12	**Design FMEA**	Failure modes and effects analysis. To establish an action plan for the product improvements.
13	**Design Review**	Review design product details including the functional requirements, the assembly and the manufacturing. Defines the characteristics (KPC,KCC) needing particular controls
14	**Prototype Builds**	Prototypes Control plan to be defined Serialized parts & Inspection data
15	**Design Verification Plan (DVP)**	Test program allowing checking that the product reaches the requirements and targets.
16	**Drawing / Specification Freeze**	Drawings signed off by Faurecia engineering, as engineering approval
17	**Process Flow Chart**	Representation of the entire manufacturing process flow
18	**Process FMEA**	Potential Failure modes and effects analysis of the process . Permit to establish an action plan for the process improvements.

19	**Facilities, Tools & Gauging**	New equipment and Tooling review to evaluate design, timing and acceptance. Gauge review to ensure accurate measure of part characteristics according to MSA.
20	**Control & Plan (2 &3)**	List of planned tasks (Operator, Maintenance, Lab, …) to ensure Product conformity => process parameters and product characteristics 3 Levels : - Prototype (see element 14) - Pre-Production - Production
21	**Packaging and Logistic**	suitable packaging method for delivery of the final product
22	**Training Plan**	Supplier workforce trained on • Working instructions • Master samples, photo book and quality surface • Control path Launch support team at supplier location is formalized (see note in item 29)
23	**Appearance Approval**	Agree on visual judgment (grain, test and brightness) Develop timing plan to achieve (ex Go to Graining for Graining approval) Existence of Boundaries samples & Defects library (photo book) signed-off before SOP
24	**Product and Process Quality File**	Start of appropriate program documentation (full completion at PPAP element n° 30)
	Supplier / Launch Readiness	Supplier readiness includes **production trials**, at customer full capacity, to check that manufacturing process is capable of producing components that meet quality performance and quantity requirements before SOP in case of new program or industrial transfer in compliance with safety and environmental requirements. Its **key elements are :** **- Supplier MPT (Mass Production Trial) element 25** **- Process Audit element 26 and** **- Capability study element 27** In addition, the **SUPPLIER will have to check by himself and report (**monthly in phases 3 and 4, to the ASQ & Program buyer) the product & process design and development progress based on a **Launch Readiness** checklist (refer to appendix)
25	**Trial Run @ Rate** **MPT (Mass Production Trial)**	Quality and Capacity Supplier Readiness is evaluated in 3 steps: 1°) **PT** : Upon completion of 1st Off-Tool parts, the supplier measures 5 parts / cavity or tool and records the trial results under the PTAR (Production Trial Analysis report) ; this report sent to ASQ for evaluation 2°) **MPT**: Mass Production trial , run with presence of ASQ, with goal to check the full capacity and with a check list per workstation, (specific tools and equipments 100% in place)

<table>
<tr><td></td><td></td><td>3°) EMPT Extended Mass production trial
Repeated item 2 if needed
.
The “Mass Production Trial”:
is mandatory
produces parts for final Production Part Approval
These parts have to be validated through the Production Validation Plan (PVP)
Therefore MPT timing is before production validation at the latest SOP –(3 months + PVP lead time)
date must be defined at Gate Review 1 and confirmed (detailed date) at Gate Review 2
must be carried out at the supplier production location</td></tr>
<tr><td>26</td><td>Process Audit</td><td>Audit performed per the MPT check list or per the automotive standards (VDA 6-3, FIEV, AIAG) , Process Quality Audit Faurecia</td></tr>
<tr><td>27</td><td>Process Capability Study</td><td>Machine, Short Term & Long Term Capability studies performed on KPC & KCC
<table>
<tr><th rowspan="2">Programme phase</th><th rowspan="2">Characteristic (1)</th><th rowspan="2">Capability Target (2)</th><th rowspan="2">Type of Capability Study (3)</th><th rowspan="2">Minimum Sample size (6)</th><th colspan="3">Targets for calculated capabilities (4)</th></tr>
<tr><th>30 p</th><th>50 p</th><th>100 p</th></tr>
<tr><td>Before & during 1st Production Trial</td><td>Special</td><td>1.33</td><td rowspan="2">Machine Cmk</td><td rowspan="2">30 parts in a row</td><td>1.60</td><td>1.54</td><td>1.48</td></tr>
<tr><td>S/R</td><td>1.67</td><td>1.97</td><td>1.90</td><td>1.83</td></tr>
<tr><td>Mass & Extended Mass Production Trial</td><td>Special</td><td>1.33</td><td rowspan="2">Short-term Cpk</td><td rowspan="2">25 samples of 2 parts</td><td rowspan="4">NA</td><td>1.54</td><td>1.48</td></tr>
<tr><td>S/R</td><td>1.67</td><td>1.90</td><td>1.83</td></tr>
<tr><td rowspan="2">Serial Life</td><td>Special</td><td>1.33</td><td rowspan="2">Long-term Ppk</td><td rowspan="2">50 parts at random</td><td>1.54</td><td>1.48</td></tr>
<tr><td>S/R</td><td>1.67</td><td>1.90</td><td>1.83</td></tr>
</table>
(4) This column shows the minimal value to reach as a result of the capability study, depending on sample size, to meet the 1.33 / 1.67 target for the true capability.</td></tr>
<tr><td>28</td><td>Production Validation plan</td><td>Based on off-tool, off final process parts</td></tr>
<tr><td>29</td><td>Early production containment plan</td><td>Enhanced documented control plan approved by the ASQ, including a Quality wall (as defined in Faurecia 7 quality basics) implemented on critical parts</td></tr>
<tr><td></td><td>Launch Support team :</td><td>During any program launch at a Faurecia production facility, selected suppliers may be required to provide on-site representation. The supplier’s launch support representative(s) must be knowledgeable, capable and empowered to make decisions.</td></tr>
<tr><td>30</td><td>PPAP Production Parts Approval</td><td>• All suppliers are required to obtain full approval from the Faurecia receiving facility per the below requirements based on of the AIAG Production Part Approval Process (PPAP) Manual,4th Edition
Approval based on the Initial Samples and associated documents integrating the below items (retention at supplier versus submission to Faurecia can be discussed, however Control plan and FMEA abstract are mandatory parts of the Submission package)
• All sample submissions are to be Level 3 unless otherwise specified.</td></tr>
</table>

		• PPAP SUBMISSIONS OVER 1 YEAR OLD Whenever Faurecia is required to submit PPAP to their customer, all suppliers PPAP documentation must be no more than one year old. At that time, all PPAPs over one year old are to be updated upon request by Faurecia, regardless of the supplier's business relationship with Faurecia's customer
	PPAP Production Parts Approval Items	- Cover sheet also named "PSW" Part Submission Warrant stating :reason , index, with Part history file - Sample parts (IS, Initial Samples) - Design Records (drawings, specifications): - Design FMEA - Bill of Material (BOM) & Sub-Suppliers PSW: - Test results (material, performance) - Dimensional Results & Fitting - Appearance approval report (Style, Visual) & Border samples existence (+ photo book when required) - Process flow diagram - Process FMEA: - Control plan - Checking aids description - Key Characteristics: file as part of Control plan - Process capability: - Measurement System Analysis (for Repeatability) - Compliance to regulations & Restrictive substance report (IMDS, …), all suppliers must provide evidence of Materials, Substances, and Recyclability data submission and acceptance by Faurecia with every PPAP submission. Either a copy of the acceptance note or a print out of the 'Recipient Data' from IMDS is considered as the only valid evidence of submission. PPAP approvals will not be granted for the parts not accompanying this documentation. Faurecia suppliers are responsible for cascading this requirement and collecting data from their respective sub-suppliers. - Marking (with shipping label and sample part label) - Traceability: - Packaging (description and acceptance) - Laboratory Scope and Accreditation - Run @ Rate / MPT Mass Production trial(results) - Early containment plan description and Operators training plan - LOP
31	**Transition to Series & Lessons Learned**	Review the LOP and End of APQP Transfer to series production

APQP tracking: the "status report" and the LOP (List of Open Points)

APQP is applicable to BOP's but also to COP (carry over parts) and specific raw materials, using a restricted list of the above elements.

The ASQ organization within Faurecia Purchasing monitors and manages selected suppliers from new product release through the start of production.

The advancement and the delivery time of each deliverable are show in an APQP synthesis chart named "status report". This synthesis will be used as support in the progress meeting and in the project APQP review. The supplier must contribute to its monthly update all along the program phase.

A **status** is assigned to each APQP element according to the risk for the project represented by a color:

Green: delivery conform and on time.

Yellow optional use (depending on End customer requirements when used)

=> **in progress;** deliverable not conform and/or not achieved at time being, AND if achieved at expected agreed date, is not endangering the Program

Red: Delay and/or unacceptable quality of the delivery; no action plan or unacceptable action plan concerning quality, cost, or delay on the project. An Intervention must be planed.

In order to allow a Convergence plan, an **LOP** will be maintained for open issues with this content:

Entry date	date of entry of the item in the LOP (noted YY/MM/DD for sorting possibility)
Last date modif	date of last update of the item n°
Supplier	name of supplier; possibility also to add its location
Module	name of module (ex IP, TC; DP) if a program integrates more than 1 module
Part	Part designation
APQP related n°	element of the APQP which is under deviation; may be more than just one; count up to 4 possible APQP elements for a single "item"
Issue / Problem	describe the deviation & the root cause (text)
Action	(text)
Responsible	name of the leading person
Dept	department of the responsible
Support/Contributor	name of the other involved persons
Deadline	date
Status	opens (with progress shown 25%, 50%, 75%) /closed
Issue level	escalation requested depending on management involvement required (1 = ASQ or Program buyer; 2= program management 3 = Director Level & functional org. such as commodity or SQC)

Packaging and Logistics

Parts delivery conditions are in the supplier logistic specifications. The packaging and transport mode must ensure the delivered products integrity, to the reception at FAURECIA or at the customer for the "Traded parts".
For the BOP packaging, the SUPPLIER is responsible for the development, the investments, the cleanliness and the maintenance. The requirements are:

- Recycling packaging
- Recycling protection
- « bar code » Identification

Other requirements may be specified by Faurecia according to the needs of the Faurecia delivery plant.
For the "Traded Parts" (i.e. Parts Delivered directly to the End Customer (“PLS”), the SUPPLIER is responsible for the Packaging design recommendations which will have to be submitted and accepted by the End Customer.

Marking

Each component must be marked to permit the material identification regarding their recycling. This marking must be visible after the final assembly.
The material type mark must be in accordance with the FAURECIA requirement:
After assembly, no marking has to be visible on the visible side. In all cases, the marking area must be specified on the supplier drawing following agreement by all concerned parties. In the case of large parts, the marking will have to be repeated.
The marking has to be in accordance with the relevant requirement with individual traceability.
The product part(s) must contain the flow chart number and the trademark.
OEM Marking
FAURECIA Marking

Inspection report:

At any project stage, all parts deliveries must be accompanied by a control report of the delivered parts containing either:

- Fully measure: according drawing and CAD model => Qty by cavities to be agreed with the Faurecia (normally 5parts by cavity)
- Partly measure: according the SC/CC points and other points defined for end of each gate
  => 30 parts by cavity for capability

The control report will be in accordance with the relevant norm or requirement (for example: chemical analysis, mapping…)

Exchanges CAD models / Numerical supports

The CATIA version to use will be confirmed during the Request for Quotation. During the supplier choice, the supplier designers will have to be trained on this version and the proceeding modules (SOLIDE, GSM) and surface modeling. The CAD models will have to respect the Faurecia conception methods.
In case the supplier is present on the Faurecia site; its staff will work in the conditions defined by Faurecia, with a secure access. The accesses will be defined by Faurecia. The supplier will have to use the numerical structure defined by Faurecia.

MATERIALS SPECIFICATIONS

The European instruction n° 2000/53/EC*(article 4.2) concerning out of use vehicles demands that the components and materials of the vehicles sold after the 01/07/2003 do not contain any lead, mercury, cadmium and chromium VI excepted in the conditions notified at Appendix II.
An action plan for substitution of forbidden substances must be provided in case of parts containing such substances.
Special case for the Chromium VI present for rust free prevention covering : In case of impossibility of the specifications respect or the objective price, a case by case request will be made. This one will indicate the quantity of chromium, the quantification measure used and the replacement solutions.

Hazardous substances reporting

The European instruction 67/548/EEC demands the localization of all the hazardous substances listed in the Appendix 1 of the instruction. A global list for automotive industry has been made and is annually updated on the http://www.gadsl.org website. Renault uses a special list in the 00-010-050 standard. A declaration for chlorinated parts must be done for this OEM (00-010-060 standard).

Metal raw material

All materials used must be to the specifications and grade declared on the drawing. These must be the same as those used during the homologation, testing and production of the validated initial samples.
In order to ensure that there is no confusion, it would be advisable to provide a material certificate with all deliveries and/or to state clearly the material grade/specification used on the delivery note.

Plastic parts basic rules

For the plastic material choice, the supplier will provide all technical justifications in case of a proposal based on a material not part of the Approved Material Reference (AMR or RMA Référence Matière Approuvée) list.

SERIAL PRODUCTION PHASE

The objective during the serial production phase is to maintain world-class suppliers as selected from the panel and developed during the Program.
During the series production phase, supplier's performances are consolidated and monitored against Faurecia Business and Performance criteria. For any deviation from the objectives, the supplier will develop corrective action plans.
Supplier performance will be managed on two levels:

> Plant Division/Product Group/Group level
> Commodity level

EVALUATION OF SUPPLIER PERFORMANCE

Faurecia measure the supplier‘s quality performance by recording each claim (named Qp) in a Faurecia group level system named QSS (Quality Steering System)
Evaluation of supplier performance is done according to following indicators:

- Quantity of “**incorrect parts” & PPM**
- **Number of Complaints** (Qp) ; with emphasis on number of PF4 & S/R related complaints
- Supplier reactivity measurement with nb of Qp not closed / closed
- **PFx level** = The disturbance generated by the failure as defined below
  4 levels of “perturbation of flow ” are stated according to the disturbance generated by the failure:
  PF1 Disturbance of the supply flow
  PF2 Disturbance of the production flow
  PF3 Stoppage of FAURECIA production line
  PF4 Claim from FAURECIA customer or S/R claim

A **“part”** is the unit ordered by the customer/invoiced by the supplier. It can be:

1. A separate part or assembly
2. A collection of parts (e.g. seat or door panel collection)
3. Liquid products: liter, …
4. Sheet and coil material: sheet or unit weight (kilogram, pound, ton, …)
5. Roll deliveries: linear meter, m², …
6. Powder products: kilogram, pound, ton, …
7. Fasteners (Pins, Bolts, Nuts, …): packaging unit

An **incorrect part** is a component, assembly, part, collection of parts or materials identified in the Series Phase as not meeting the quality level approved at the PPAP and/or at any other subsequent agreement with the customer. They include parts with packaging and labelling issues but not missed or late deliveries.

Problems caused by Faurecia personnel or Faurecia designated carriers are not to be taken into account. The same rule applies for problems caused by Faurecia designed packaging under the condition that a formal document has been sent by the supplier to the Faurecia denying any responsibility in case of problem due to this packaging. If not, the Faurecia designed packaging is supposed to be accepted by the supplier.

How to count parts in a packaging unit ? (For big containers, the packaging unit is usually the same as the handling unit; for small boxes, the packaging unit is the small box and not the handling unit)
If an incorrect part is found by the customer in a packaging unit, we count all parts in the
Packaging unit. If other packaging units are then doubtful:
• We count all parts in the packaging unit when the packaging unit is sorted by Faurecia
• We count only the incorrect* parts when this activity is organized by the supplier in Faurecia premises.
• We do not count any part if the supplier replaces the packaging unit by a new one.
Those rules apply to mislabelled packaging units
* In case the parts didn't necessitate rework as such but a temporary production set up,
We count only the parts used to allow for this set up.

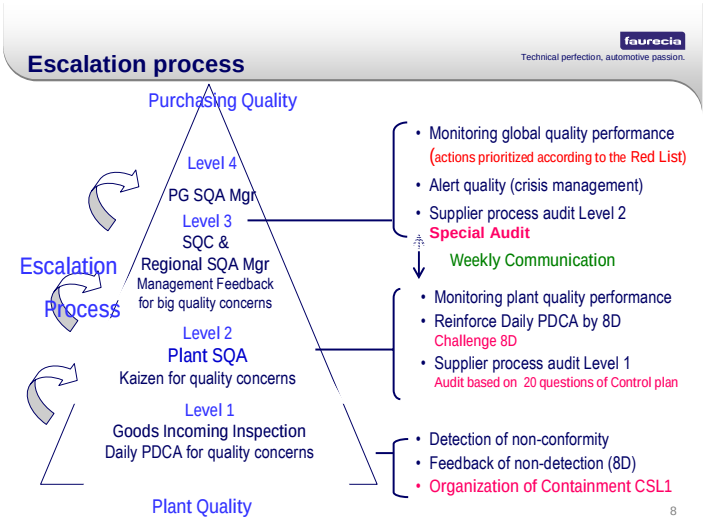
Cases of yard blockages, deviation and warranty returns:
• We count parts involved in a yard blockage according to customer records.
• We do not count parts for which a formal deviation has been granted and which
Have not entered the customer facility before the date/time of the formal deviation
agreement.
• We do not count warranty returns.

The same unit and time period applies for numerator and denominator of the PPM ratio.
In case of several defects within one part, count only one part as defective.

ESCALATION IN CASE OF POOR SUPPLIER PERFORMANCE

Each non-conformity leads to a claim for which the Supplier is expected to answer by using the 8D problem solving management detailed in chapter hereafter.

In case of repetitive defects, the escalation process leads to entry in a Red List followed by either Top offender meeting or to Special audit



1°) Special Audit at supplier

- Confirm "Capitalization & Transversalization of 8D" in 1-hour meeting
  (by using 8D checklists)
- Perform special audit "20 Questions on Control Plan" in 2 hours at shop floor
- If result is not acceptable, repeat process next month

2°) Top Offender Meeting at Faurecia

Attendees : Supplier General Manager; Quality Mgr, Key Account Mgr
Process :

- Current Performance indicators
- 8D presentation on each key Problem
- "Progress Plan"
  including estimated Quality level after implementation of all the actions
- Open points
- Next steps & conclusion

8D PROBLEM SOLVING MANAGEMENT

When purchased material does not meet standards (e.g. quality, engineering change level, adherence to test specifications, etc.), or last qualified PPAP, a quality claim (Qp) is emitted by Faurecia based on the QSS system.

SUPPLIER is requested to:

- **submit to Faurecia an 8D document** using the procedure and chapters below to document the problem and prevent its reoccurrence (see attachment: 8 Disciplines Methodology).

.

D1. Description & Sketch	**(5W, 2H)**
D2. Risk on similar products and processes _	
D3. Containment	**In 1 day (24 hours)**
D4. Root cause of non detection	**(this is often forgotten)**
D5. Root cause of non conformance	**5 why's**
D6. Countermeasure to non detection and non conformance	**in 10 working days**
D7. Effectiveness of action plan _	
D8. Lessons learned	**in 60 working days**

- deploy the Quick Reaction Quality Control (QRQC) when needed to complete a full analysis (see attachment: QRQC Follow up).

A) Actions required within 1 day (24 hours) = CONTAINMENT

All 8Ds shall be answered with a short-term solution based on containment.
Containment is a list of actions detailing where and how the SUPPLIER will protect Faurecia from receiving this defect again and shall include, at a minimum:

- **Inspection of all finished stock/ ALL parts: Parts in SUPPLIER facilities, parts at Faurecia, parts on truck, parts at the End Customer**
  Control of material at Faurecia facilities may be performed by SUPPLIER personnel (whenever possible) or by an external firm at Supplier expense. If necessary, Faurecia will assist the SUPPLIER in arranging services from an external firm.
- **Update of Supplier's end-of-line inspection procedures and instructions** including an evaluation of checklists, methods, gauges, etc.
- **Labeling** of parts, racks, boxes, etc. of checked parts, clearly marked with the purpose of the extra check and the number of Qp report.

The importance of these containment actions cannot be stressed enough, and the SUPPLIER is expected to implement them IMMEDIATELY upon receipt of the 8D to prevent the release of additional incorrect material into Faurecia process.

Should a **pf4** occurs 'or a **new occurrence of the same failure** escape SUPPLIER internal containment efforts and arrive at Faurecia, an additional inspection named "**Temporary Quality wall"** will be required in the form of a formal Containment 1 or Containment 2.
Choice between Containment 1 and 2 depends on the frequency and severity of the failure.

- **Containment 1** (CSL-1) is an **additional** 100% control station (not the standard end of line check) set up **by SUPPLIER at its plant**, using own manning. Results shall be sent at a specified interval to the Faurecia plant SQA.
- **Containment 2** (CSL-2) is a second **additional** 100% control station (additional to the already existing CSL-1) **by using of an external 3rd Party company** to inspect for non-conforming parts. 100% of parts shall pass through this inspection prior to delivery to Faurecia plant. Supplier Plant Manager and Quality Manager shall sign CSL-2 documentation.

Containment action shall continue until SUPPLIER has shown its process capable of providing products according to specification and the pipeline is clean from any non-conformance. Once imposed, neither CSL-1 nor CSL-2 will be lifted until zero defects have been found for the length of time specified by relevant Faurecia representative at start. To stop this CSL-1 and/or CSL-2, a process audit could be performed.

b) Actions required within 10 working days: definition of permanent actions

The 8D shall be updated with a detailed description of the root cause (based on a 5 why analysis) and the final long-term solution. This means:

1) a statement of root cause for both NON DETECTION (how it escaped Supplier process) and NON CONFORMANCE (how the failure occurred)
2) A description of containment actions taken
3) The definition of permanent actions

Root Cause of non detection must be specially documented.
Human Error is not and never has been an acceptable reply! Where human error is unavoidable, controls must be in place to prevent the defect from leaving SUPPLIER plant.

Where immediate implementation of the long-term solution is not possible, an Action Plan shall be provided including due dates for each item. An updated copy of this plan showing progress made shall be sent to Faurecia on a weekly basis (or as otherwise agreed), until all items are complete with proven capability of the long-term solution.

COST RECOVERY POLICY:

Suppliers are liable for all costs incurred by Faurecia when the cause is the supplier's responsibility.
Applicable charge backs to external suppliers are outlined below by some examples and **indicative** values (these values are finalized with the Supplier in the QAA (Quality Assurance Agreement)):

Administrative charge Each Quality Problem (Qp) has an administrative charge covering the collection of data and documentation of the quality incident/spill.	115 Euro per complaint (multiplied in case of reoccurrence)
Operating costs of protective measures; o **extra Incoming Inspection &** o **Sorting of parts** (, Suspect Material In-House, at Customer Location or Third Party Warehouse and Contractor Costs) o **Destruction/**Disposition of Scrap	33 Euro / hour Or contractor costs
Rejects of completed and/or semi-finished PRODUCTS	Real costs
Costs incurred in the downstream operation stage or Third Party claims	BASED ON REAL COSTS + handling charge
o **Retrofit of sub-assemblies or vehicles**	
o **Production & Machine Downtime**	@ standard machine rate
o **Staff costs associated**	55 Euro / hour
o **Lost production time &** o Overtime to Avoid Production Interruption	Based on direct+ indirect labour of the stopped line
o **Transportation costs** ; Premium Freight Costs including Air Charter if Required	
o **(re) packaging & handling costs**	55 Euro / hour if internal or BASED ON REAL COSTS IF EXTERNAL
o **Travels and extra- trip to customer**	
o **Claims charged by the CUSTOMER**	
o **Costs of an expert and** Outside Lab Testing	

PRODUCT / PROCESS & PRODUCTION CHANGE REQUESTS (PCR):

- Supplier must propose any change information using the PCR form (in appendix) and must request approval in writing from Purchasing and all Faurecia receiving facilities
- Faurecia Purchasing and all receiving facilities must approve all changes in advance,
- Samples may be required for review and to evaluate potential impact on Faurecia's manufacturing processes.
- Submission for PPAP approval is mandatory prior to the shipment of the "new" parts (or from new location) unless specifically waived.
- After Faurecia written approval, the first delivery with "new" parts must be identified
- The tool move plan must include the requirements of a production bank if necessary to ensure Faurecia's Production and Service requirements are not affected.

EXTENDED SHUTDOWN / START- UP AUDIT:

Faurecia Purchasing and ALL receiving Faurecia facilities must be notified in writing prior to an extended production shutdown and must submit a completed audit at restart.
Examples of extended shutdown/start-up periods include Customer change-over, scheduled preventative maintenance for Tooling, Machinery or Processes or the anticipation of a work stoppage due to Union Contract Negotiations.

APPENDIX 1: GLOSSARY

FMEA	Failure Modes and Effects Analysis	Risk analysis to avoid failure in series
8D	8 Disciplines methodology	In problem solving
Extranet	(or Supplier Extranet)	IT application used to gather list of the suppliers and their status. The production suppliers must enter their Certification status by themselves in this system
FES	Faurecia Excellence System	
HSE	Health, Safety and Environment	
IMDS	International Material Data Sheet	
KPI	Key Performance Indicator	
SQA SQC ASQ	Supplier Quality Assurance (acronyme anglais retenu) Supplier Quality Commodity Advanced Supplier Quality	In plant Dedicated to a commodity In Programs
APQP	Advanced Product Quality Planning	
PMS	Program Management System (acronyme anglais retenu)	
PPAP	Production Part Approval Process	
ECR ECO PCR	Engineering Change Request Engineering Change Order Purchased Part Change Request	 Form to be used by supplier for communication
KPC	Key Product Characteristics	
KCC	Key Control Characteristics	
SC	Special Characteristics (also Key Characteristics)	Those retained as part of the control plan
S/R	Safety/Regulation	SRC Safety Regulation Characteristics
SQA File EDI IS FIFO f.f IOD ISO MOB	Supplier Quality Assurance File / Product and Process Quality File) Electronic Data Interchange Initial Samples First In, First Out Free Format Issues de l'Outillage Définitif International Standard Organization Make Or Buy	F : Dossier d'Assurance Qualité F: Echantillons Initiaux First parts from a series process =Off-tool parts
LOP	List of Open Points	Open issues list
PDCA PF PF4	Plan Do Check Act Perturbation of Flow Disturbance of flow level 4, i.e. any disturbance to Customer's production leading to a claim from the Customer (whatever the level of disturbance at the Customer's (such as rejection, sort-out, stoppage production line) for which the supplier is held responsible).	
QAA	Quality Assurance Agreement	QSV in Germany
BOP MPM MPT MSA PPM QCD	Bought Out Part Mis-deliveries per Million Mass Production Trial Measurement Systems Analysis (from ISO/TS 16949) Parts Per Millions Quality Cost Delivery	F : Pièce Ouvrée Extérieure
Qp	Quality Problem	Quality claim entered in QSS
QSS	Quality Steering System.	IT application collecting quality data –access from Group Quality Intranet.
SOP	Start Of Production	F: Démarrage série (DMS)
SOW	Statement of Work	Description of work packages responsibilities between Parties (OEM, Faurecia, Supplier, sub-suppliers)
STD	Standard	
UAP	Autonomous Production Unit APU (Unité Autonome de Production)	
WIP	Work In Progress	

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APQP Status Report - PART

FAU-F-SPG-6400

Part:		Supplier:	Expertise Level	Date:
Teil A		Supplier A	DESIGNER	
FAURECIA Reference	Safety Part	Program:	Part Status:	Engineering Level / Patch color:
	YES	PPP	BOP	

Cust.Phase:		Raw Mat		Index Drawing		Critic Level:		Version	RHD	Decoration:		Numb. Cavities:	
Cust. Referenc		Com. Ref. of Raw M.		Drawing No.:		Sup mandat		Grain:		Color:		Parts/ Vehicle	

added elements

	APQP Elements	PND Program Need date: PMS PHASE 1	PMS PHASE 2	PMS PHASE 3	PMS PHASE 4	COP requirements	Raw Mat. Requirement	Present Status	Perspect. Vision	Supplier Timing: PMS PHASE 1	PMS PHASE 2	PMS PHASE 3	PMS PHASE 4		Closed CW	Responsible F/S	Remarks & ref of Document in support
(1) Proposal	1. Program Steering Committee																MINIMUM REQUIREMENTS
	2. Confidentiality Agreement							OK						0			Minimum requirements for COP
	3. Special Characteristics						Y	OK						0			are indicated with Y in blue column
	4. Technical Input Requirements						Y	OK						0			
	5. Technical Reviews						Y	OK						0			Minimum requirements for
	6. Risk Assessment *(2x in Phase1)*					Y	Y							0			specific Raw material are in Brown
	7. Master Schedule													0			
	8. Feasibility Commitment													0			
	9. Sourcing Committee													0			
	10. Sourcing Decision/Contracts													0			
(2a) Product Design	11. Program Review/Kickoff *(2x in Phas*													0			
	12. Design FMEA													0			
	13. Design Review													0			
	14. Prototype Builds													0			
	15. Design verification Plan													0			
	16. Drawings & Specifications Freeze					Y	Y							0			
(2b) Process Design	17. Process Flow Chart													0			
	18. Process FMEA													0			
	19. Facilities, Tools & Gauging													0			
	20. Control Plan & Testing													0			
	21. Packaging					Y	Y							0			
	22. Training Plan													0			
(3) Prod. Set-up & Pre-	23. Appearance Approval & Boundary samples													0			
	24. Product/Process Quality file					Y								0			
	25. Trial Run @ Rate / MPT													0			
	26. Process Audit													0			
	27. Process Capability Study													0			
	28. Production validation plan													0			
PPA	29. Early Production Containment Plan													0			
	30. PPAP					Y	Y							0			
(4)	31. Transition to Series & Lessons Lear													0			
														0			

☐ PND = Program need Date S = Supplier CW = Calendarweek

FAURECIA Attendees

Supplier Attendees

Name: Signature:
Program Buyer

Name: Signature:
Supplier Quality Manager

Name: Signature:
SQ (ASQ)

Name: Signature:
Supplier Program Manager

Name: Signature:
Engineering

Name: Signature:
Supplier Manufacturing Manager

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Launch Readiness checklist

Supplier executive confirming this status review;

Name | Title | Date

Supplier
Supplier Location

Programme

Faurecia location delivered
Part (s)
Revision level EO# ECR #
Review Date
Follow up date

Description | Part number(s)

Item	Readiness Criteria (for criteria with * , document must be attached or forwarded)	G	Y	R	Concern	Recovery Plan (If Status R or Y)	Due Date	Resp. Person's Name
Product definition	Are all changes known and introduced per agreed timing?							
	Are CC/SC Critical & Special characteristics identified ?							
	Can you confirm you at the latest Engineering level?							
Tooling and equipment	Is your tool acceptance done?							
	Are your tool changes complete?							
Process Planning	Do you have a Launch plan for this part (including below items) ?							
	First off tool, Trial Runs, , PV testing							
	Is your control plan ready and taking into account the 7 Quality basics?							
Sub Supplier	Are your Tier 2/3/4 suppliers ready ?							
	Have you verified their readiness? (attach BoM with name and part) *							
Personnel	Are your Employes fully trained?							
	Is your launch support team identified (use appendix to document) ?							
Quality Control	Are the 7 Quality Basics audited weekly (as part of the Control plan)?							
	Is your Early containment / Quality wall ready/approved and in place? *							
	Are all APQP activities correct/ready? Are you at full PPAP? *							
	Have Master Samples/Boundary samples & photobook been agreed?							
Production Capacity	Are you at full Run@Rate approval? (please submit PTAR Process Trial acceptance report) ?							
	Is an MPT Mass Production Trial (at Tact Time Production) planned?							
Logistics	Are you receiving Schedules/Delivery Requests/Releases/Purchase Orders?							
	Has your old stock been purged from old versions?							
	Do you have enough containers/labels? Is part identification agreed?							
	Is your minimum inventory in place ?(per Faurecia agreed coverage; 5 days unless otherwise agreed)							
	Is your transportation routing ready?							
Escalation & Support to launch	Has your emergency phone list been updated & sent? ** per appendix example							
	Has your contact/support person to support Faurecia in-plant been identified?							

Other comments

G	Fully completed
Y	On going ; not a "job stopper" if action plan is on time
R	Alert to Faurecia ; risk of late delivery or deviation required

instructions

The readiness checklist is a self assessment done at least monthly during the launch period
Completion progress should be visible by changes in colors from 1 month to the next
All completed part reviews to be sent by e-mail (.pdf) after Supplier Executive has verified (signed-off) compliance to the questions herein to the relevant Faurecia ASQ & Purchasing Program Leader)

Status review completed by (print name / title / date)

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CAPACITY Planning

	1	Part Number	PL4		4	Run@Rate Date	DD	
	2	Part Description			5	Supplier Name	XYZ	
	3	Faurecia Annual Capacity Planning Volume	pcs/year		6	Supplier Location	ABC MI	
	7	Process Step	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	
	8	Process Description						
		Units						
I - Supplier Working Standards	9	Working hours/shift	hours					
	10	Shifts/ day	shifts					
	11	Days/ week	days					
	12	Weeks/ year	weeks					
	13	**Total hours/year (9*10*11*12)**	**hours**					
II - Supplier Capacity Data	14	% of line for Faurecia parts (Allocation %)	%					
	15	Quoted Production Rate (part # item 1)	pcs/hour					
	16	Quoted % scrap	%					
	17	Quoted % line efficiency	%					
	18	**Adjusted production rate** (15*(1-16)*17)	**pcs/hour**					
	19	**Available capacity** (15*14*(1-16)*17)*13	**pcs/year**					
	20	**Utilization %** (3/19)	**%**					
	21	**Bottleneck operation**	**X**					

When off tool process trials completed , this sheet must be replaced by the PTAR form (Process Trial Acceptance report)

Supplier representative signature: _____ ASQ signature: _____

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FAU-F-SPG-2425/EN

SUPPLIER MASS PRODUCTION TRIAL REPORT

APQP ELEMENTS N°25 & 26

Date:

Program:

Supplier Plant :

Location:

Parts

Other attendees:

Supplier :

Faurecia :

§1 Mass Production Trial

Criteria	Result	Conditions for acceptance
Capacity	%	all processes reach 100% (number of good parts/hour vs target)
Quality	%	all checklist # items OK (FAU-F-SPG-3503)

(see spider chart & checklists attached)

§2 Main issues & corrective actions (1)

Manufacturing

Quality

Logistics

Training

HSE

Sub-Suppliers

(1) corrective actions are mandatory if criteria are not fulfilled

§3 Assessment

OK/NOK

Signature by ASQ

OK/NOK

Signature by Program Buyer

§4 Validation

Approved - Not Approved

Signature by Project Leader

Approved - Not Approved

Signature by Faurecia Plant Quality

Date of next revision:

FAU-F-DSG-3521

PRODUCTION TRIAL ANALYSIS REPORT

(P.T.A.R.)

Supplier :

Part Number :

To be used for First Production Trial

Part Name (family) :

Date :

Trial Leader	Supplier Manager	Supplier Quality Manager

PROCESS		TRIAL					QUALITY		CAPACITY				JUDGEMENT
									CYCLE TIME		EQUIPMENT DOWNTIME		
OP. No.	PROCESS NAME	TIME (HRS)	NO. PARTS PRODUCED	NO.GOOD PARTS	TARGET 'OK' PPH	ACTUAL 'OK' PPH	TARGET SCRAP (%)	ACTUAL SCRAP (%)	TARGET (Secs)	ACTUAL(Secs)	TARGET (Mins)	ACTUAL(Mins)	

Note : SCRAP= UNACCEPTABLE

If your trial results indicate you have not reached your target level, please supply pareto analysis of problem and countermeasure action plan

KEY : JUDGEMENT= TARGET VERSUS ACTUAL 'OK' PPH (Parts per Hour)

○ ACTUAL 'OK' PPH IS BETWEEN 90% -100% OF TARGET

△ ACTUAL 'OK' PPH IS < 90% OF TARGET. COUNTERMEASURES IDENTIFIES NO CONCERN TO 2nd PRODUCTION TRIAL (MPT)

✕ ACTUAL 'OK' PPH IS <90% COUNTERMEASURES NOT IDENTIFIED

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PART NUMBER: DATE: 20/12/2006

PART NAME:

SITE:

PROCESS:

MASS PRODUCTION TRIAL STATUS SHEET

to be used for Mass Production Trial and Extended Mass Production Trial

Trial Leader	Site Manager	Site Quality Manager

Calculation of Target Parts Per Hour

Peak demand:

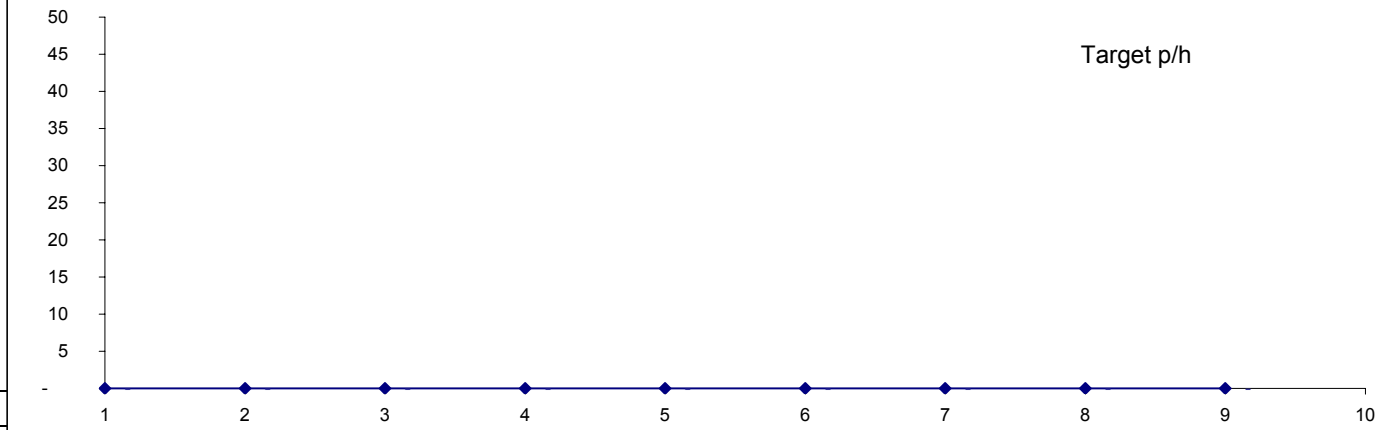
Opening Time:

Break Time:

Operating Time:

Parts per Hour:

Parts Per Hour (**p/h**)



TOTAL TRIAL TIME

		TRIAL NO. *(planned date)*	1	2	3	4	5	6	7	8	9
		DATE									
ACTUAL TRIAL RESULTS		TRIAL TIME HRS									
		OK PARTS									
		NOK PARTS									
		TOTAL									
PARTS / HR		TARGET NO.									
		OK PARTS									
		NOK PARTS									
		TOTAL									
		NOK PARTS (ppm)									
		REWORK (ppm)									
		SCRAPS (ppm)									
		JUDGEMENT (O, Δ, X)									

0: >=100% of target p/h ok parts
Δ:>=90% of target p/h ok parts>>PDCA
X:<=90% of target p/h ok parts>>PDCA

Comments:

SUPPLIER MASS PRODUCTION TRIAL CHECKLIST

		PROGRAM:							
		CUSTOMER:							
		SITE:	Date of trial:			SOP date:			
		Part name (family):	Part Number:			Process:			
		ITEMS	**tick**		**comments**				**Action plan**
Product	1	**Product definition** (last version drawing, Bill of Materials……)		X					
Manufacturing	2	**Equipment** (machine & tool) in final location validated vs specifications		X					
	3	Mass production **fixtures** used		X					
	4	**Production operation** sequence followed		X					
	5	Machine **cycle time** at mass production rate		X					
	6	**Standard operation** for machine(s) defined		X					
	7	Machine **process parameters** defined		X					
	8	**First production trial reporting** available		X					
Quality	9	List of **Special Characteristics** available (product & process)		X					
	10	**Control plan** completed (including Special Characteristics) and consistent with process flow diagram, Product FMEA & Process FMEA		X					
	11	**Checking fixtures** with appropriate instructions available. Repeatability & Reproductibility (R&R) acceptable .		X					
	12	**Machine capability** completed Cmk> 1,67		X					
	13	Following **Quality Basic** items in place :work station documentation, identification of non conforms, management of rework, reserved workstation, auto-inspection instructions, Poka-Yoke, process start-up		X					
	14	**Boundaries samples, master samples** in place and signed-off		X					
Training	15	**Team leader & operator** / qualified at the workstation		X					
	16	Parts manufactured by Team members / Operators only. Multi skills and multi posts matrix available and validated		X					
Logistics	17	**Plant Material and Information Flow Analysis** (MIFA) up to date.		X					
	18	Representative **packaging** for BOP& BIP validated in terms of product quality and workstation ergonomics		X					
	19	Representative **packaging for finished parts** validated in terms of product quality and workstation ergonomics (including individual protection)		X					
HSE	20	Equipment conform to **HSE** regulations (Health , Safety & Environment)		X					
Suppliers	21	100% **MPT** planned **successfully performed** for BOP & BIP.		X					
	22	Relevant **BOP, BIP and raw material** conformance according to Incoming Inspection requirements.		X					

(*)STATUS Calculation: If result OK: value is 10	X		OTHER COMMENTS:
If result NOK: value is 0		X	
Therefore, obtained points = the sum = S	0		
Total potential is sum of the lines X 10= P	220		
(except if NA not applicable)	N	A	
STATUS= (S/P)X100	0,0%		

Change designation : | **ECR #** | faurecia

APQP-BOP Purch Prod & Process Change Request. (PCR)

ISSUER : FAURECIA SUPPLIER

Section A. filled in by requestor Documents attached: No Yes List :

NOW	Supplier Name (Including Internal) Address Tel. No. Fax No.	
NEXT	Supplier Name (Including Internal) Address Tel. No. Fax No.	

CURRENT situation

PROPOSED change

Faurecia Plants involved

Faurecia Customer(s) & Program

Part Number
Part Describtion
Drawing Number
Design Note Number

DETAIL OF CHANGE

attach appendix when necessary

1. Date of Proposed Change

2. Reason For Change:

3. Explanation Of Change

4.Timing Plan Milestones

5. Validation plan & Containment plan explaining : How will Quality and Capacity Requirements be assured? (please include details of any planned safety Stock)

Signed:
Name: Position Date

Note: This document should be submitted to Faurecia Plant Purchasing manager & SQA at least 20 working days before the date of any proposed change

detailed plans filled in by requestor	Target date	date	Validation
Parts (master and boundary parts)			
Product Validation Test Report			
Appearance Approval Report			
Control Plan			
Detailed Process Flow Chart			
Process Capability Study result			
Gauge Specification/Approval			
Engineering Drawings			
Inspection Report			

detailed plans	Target date	date	Validation
Process Audit / Run@rate			
Delivery & Logistics Data			
Updated Production Capacity Plan			
Process FMEA / AMDEC			
Packaging Spec			
Operator training plan			
Quality commitment			
Detailed Planning including all tasks listed hereabove			
Other Requirements			

This section to be completed by Faurecia (ONLY)

Section B

Faurecia Log number
ECR number assigned
when Y refer above

Customer approbation needed
information
who
date requested
date obtained
reference of supporting document

Faurecia APPROVAL TO PROCEED WITH PROCESS CHANGE

Risk assessment done High Y/N
Feasibility commitment signed
NOT Approved "on hold"
Approval "go ahead"
Part Submission Warrant need Y/N

Signed
Plant Purchasing manager
SQA
Quality
Product engineering

CC
Commodity buyer
.....

Note: Faurecia approval to further proceed in a PCR does not remove the supplier responsibility on the accuracy and relavance of the information provided;

Supplier NOTIFICATION OF COMPLETION ECO number

Section C

Date of Completion

Date of Initial Sample Shipment into Faurecia

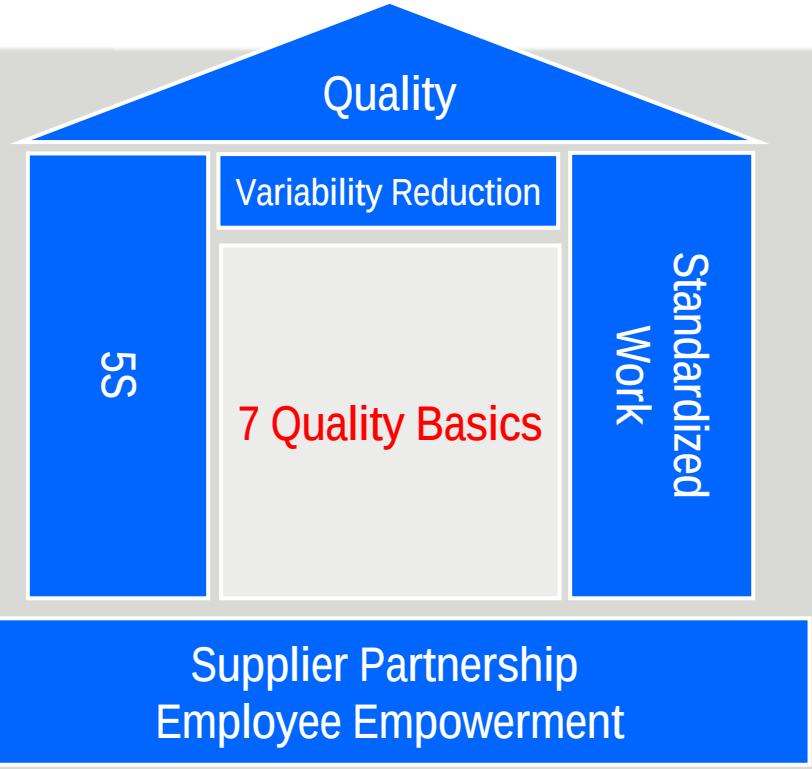
Date of First Series Production Shipment into Faurecia
How will 1st Production Shipment to Faurecia will be identified.
Position

Signed
We hereby warrant that the process change has been carried out in the line with the requirements detailed in this process change report, and that the product will meet all appropriate specifications and requirements of Faurecia and its customers.

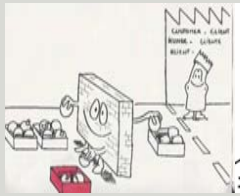
Section D

Date of Completion Signed Position SQA

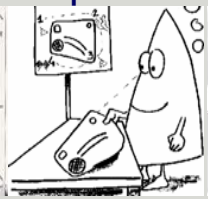
7 Quality Basics in Production



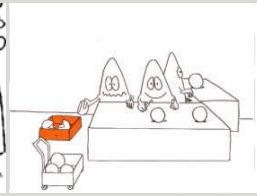
Final Inspection
& if needed Temporary Quality Wall



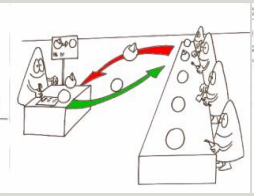
Self-Inspection



Red Bins

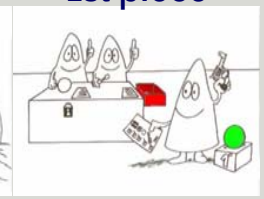


Rework under Control



Poka Yoke

OK 1st piece



QRQC
Quick Response Quality Control

20 questions on Control Plan

<LEVEL> 5:Very good(More than expectation) 4:Good(Expectation) 3:Average(Less than Expectation) 2:Bad 1:Very bad(Nothing)

	Evaluation item	Questionnaire	Point	Expectation (4point level)
1	**Final control (or Control at important process)**	How many checking points do you have?		Manufacturing operator clearly knows exact number of checking points, which corresponds to the standard, and also less 10 checking points.
		Do you have Working instruction (Inspection instruction) for this?		Clear working instruction (inspection instruction) with photo (or picture) put in front of operator.
		Is this working instruction (inspection instruction) coherent with control plan ?		All checking points in working instruction (inspection instruction) are coherent with control plan, and matching with process flow diagram.
		Are frequency, responsible person and action in case of Not OK clear?		Clearly defined boundary sample, frequency, responsibe person, and the action (scrap or repaire) in case of Not Ok in working instruction (inspection instruction).
		How do you decide your checking points?		Checking points should be up-dated from feedback of final customer (warranty), and customer (PPM), and past internal problems.
2	**Daily check sheets(DCS)**	Do you have DCS for checking points records including tally sheet?		Have DCS for daily doccument of all defects coherent with working instruction (inspection instruction).
		Do you have graph for dimension check result?		SPC graph with OK tolerance, process capability with action rule is clearly displayed somewhere in plant.
		Do you have OK first part?		They identify incoming parts are OK or NOK. They can retain parts to be used before inspection is finished.
		Do you have check sheet for OK Start of Poka-yoke or test equipment?		OK Start of all Poka-yoke and test equipment done with check sheet.N/A
3	**Not OK parts control**	In case of not OK, do you scrap or repair parts?		Operator respect their instruction sheet with boundary sample which is clearly showing "Scrap or repaire".
		How do you distinguish scrap and repaire?		Scrap parts go to red box; repair parts to repair place with identification.
		In this case, do you feed back to occurence process?		Immediate feedback to occurrence process, and feedback to GAP leader in case of escalation.
		In this case, do you stop inventory?		In case of sample check, can clearly identify suspected inventory parts with its traceability.
		How do you repair your parts?		Working instruction sheet for repair is clearly displayed, including which parts can be reuse, where they return repaired parts.
4	**Customer feed back**	Do you have pareto for PPM (even from the next process as customer)?		Weekly tracking chart with parato by causes for PPM displayed somewhere in plant.
		Do you have action plan for Top 5?		PDCA exist for Top5 items. Problems completely killed after action.
5	**Incoming parts control**	Do you have incoming parts inspection area in the plant?		They identify incoming parts are OK or NOK. They can retain parts to be used before inspection is finished.
		Did you decide checking points with your suppliers?		Checking points clearly shown in inspection report from supplier. Geometry nor inspected as we know that is very important in the final product.
		Do you have file with periodical inspection report from supplier for this check result?		Existing file with periodical inspection report from supplier. OK/NOK should be clarified.
		Do you periodically audit your suppliers to prevent quality concerns?		Audit plan existing; audit suppliers to improve quality results.
		Total		

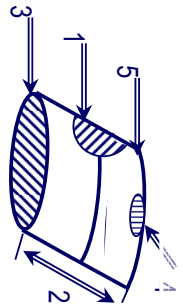
Control Plan strictly applied
=> Inspection instructions at the work station

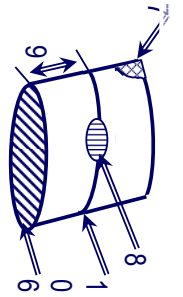
faurecia

Technical perfection, automotive passion.

N°	Check point	By	Frequency	Criteria	If not OK
1	Deformation	Visual	100%	OK - NOK sample	Repair
2	Dimension A	Micro meter	1/120	± 0.2 mm	Scrap
3	Dimension B	Gauge	100%	Go - No go gauge	Scrap
4	…	…	…	…	…
5	…	…	…	…	…
6	…	…	…	…	…
7	…	…	…	…	…
8	…	…	…	…	…
9	…	…	…	…	…
10	…	…	…	…	…

1 such sheet also for Containment / Quality wall





8 Disciplines Methodology 1

The standard problem solving method used at Faurecia for problem solving is the 8D (D=Discipline) and every reply to a Faurecia claim must contain an answer to each of this items

D1: Problem description	**What is the problem ?**
D2: Risks on similar products and processes	**Do I have same problem elsewhere?**
D3: Containment actions (<24h)	**How to contain?**
D4: Root cause for non-detection	**Why sent?**
D5: Root cause for occurrence	**Why made?**
D6: Corrective action plan (<10days)	
D7: Effectivenes	
D8: Lessons learned (<60 days)	**What did we learn. (how to capitalize and transversalize?**

Problem Solving Forms.

- For most complex quality problems in a production line, the use of the **QRQC Board** is recommended as a support to a problem solving team. Notes are handwritten. A copy or photo of the board can be attached to the 8D report in order to prove that the claim was handled in a team work.
- **For all cases , the SUPPLIER answer MUST include a documentation of every 8D element** (either by mail, .doc, .xls, .pdf or .ppt)

D1 –Problem Description

TOOLS

- **5W+2H** (What? Why? Who? When? Where? How? How many?) together with **Is / is not / Differences** (mandatory)
- **Tracking Chart** (mandatory)

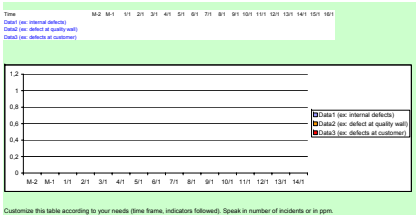
5W+2H and Is / is not / Differences (compare Good part/ Bad part)

The essence of the ***Is / Is not / Differences*** tool is to ask oneself not only why under some circumstances the problem occurs, but also why, under *other* circumstances, the problem *does not occur.*
And from there, identify differences.
Typical questions include:

- (**What**?) Why this part / this reference and not that one?... Difference?
- (**Who**?) Why Mr. X and not Mrs. Y?... Difference?
- (**Where**?) Why here and not there? Why this process and not that one?... Difference?
- (**When**?) Why today and not yesterday?... Difference?
- (**Why**?)
- (**How**?) Why this way and not that way (ex: detection)?... Difference?
- (**How many**?) Why more with A than with B?... Difference?

Tracking Chart

- *Define Indicators*
- *Define update frequency*
- *Define Target*. Typically: zero defect.



8 Disciplines Methodology 2

Hints

- Assign the appropriate cross-functional team – including experts whenever needed - to address all critical aspects of the problem.
- Go to the **real place** to really understand the problem.
- Look at the **real defective part** when available; compare bad parts with good parts.
- Look at reality. Use **real data**, be precise.
- Prohibit vague, generic problem statements that are the sum of several problems (i.e. *'high scrap rate'…*)
- Is it a recurring problem? If yes, fill in tracking chart prior to problem opening.
- Perform a 5W+2H for detection (mandatory) and creation (as much we know).
- Select *meaningful* indicators. Following several indicators in parallel might be a good idea.

IN PRODUCTION:

- Shift / daily ppm figures are not statistically relevant. Rather **monitor number of defects.** Typically: sent to customer; found at final inspection; created and detected at workstation.
- Is it a reworked part?
- For customer complaints, include an operator in the team.

Completion check-list

- Team with leader defined?
- Problem fully described with 5W+2H and is / is not / difference?
- Relevant indicators defined?
- Initial situation described on tracking chart?
- Target defined with deadline?

D2 - Risks on Similar Products and Processes

Objective

Identify risks on similar products and processes. To be carried out before step D3 (containment), because such similar products / processes might be impacted by the problem as well and would also need containment actions.

Hints

- Identify all potential scope of problem. Do not restrict containment to defective product. Do not forget other sites and other products (carry-overs, standard parts, standard designs…)
- If any additional processes and parts identified: does the problem have the same severity? Did it already occur? How many defects? Do those processes always *catch* the problem?...
- Draw a process mapping if unclear

Completion check-list

- Are all other products / processes identified with potential volume at risk?
- Need to warn other plants / R&D Centers?

Other products / processes which can be affected :
Other vehicles ?
How many defects on these products or processes ?
Same severity of defect for thoses products or processes ?
If other vehicles concerned, can the defect be detected ?
Potential volume impacted on those above similar products or processes ?

D3 - Containment Measures

Objective

Define the immediate actions to be carried out to protect the customer. They typically include an **immediate sorting out** of all parts identified as potentially at risk, then a **temporary containment (for major claim, a Quality Wall)** until definitive, robust countermeasures are in place.

Tools

Quality Wall check-list.
(Location : separated from the line but not too far; part flow clear, red bin available, tally sheet available and defects individually traced; trace part inspected; inspection instruction identical to final inspection; inspectors duly trained)

Completion check-list

- All risky parts identified?
- Sorting completed
- Cut-off part identified? (first part guaranteed OK to the customer)

D4 - Root causes of non-detection

This item is rarely documented ; please don't forget (same rules as D5)

D5 – Root Cause Occurrence

Preliminary check-list
- Control Plan and FMEA's checked?
- **OK 1st part done properly? Poka Yoke/process parameters checked**?
- Operators trained and standardized work followed?
- [Development] Product-process standards used?

Objective
Identify likely causes why the problem *was not detected* where or when it was created, then validate them.

Tools
- **FICS** –Factor Investigation and Compliance to Standards (mandatory)
- **Validation of likely causes** (mandatory) See QRQC Problem Solving Tool training package.
- **5 why's** (mandatory)
- **Gage R&R** (if necessary) See the **continuous and discrete gage R&R forms**,

Hints
- **FICS (Factor Investigation and Compliance to Standard) analysis:**
  . Difference between bad parts and good parts, what is the standard?
  . Examples of non-detection factors in production: inspection means, visual Inspection within standardized work, information availability, training, rework, inspection flow, workstation lighting, ergonomics, NOK parts identification, traceability, Poka yoke, people availability, cycle time…

.**Does reality (good parts, bad parts) comply with the identified standard** for the considered factor?	**Possible answers:** **Yes** O, **no** X, **doubt.** Δ
.**Is the standard relevant** (existing, updated, clear…)?	

- If relevant, attempt to reproduce non-detection.
- Validate root causes of non-detection *before* root causes of occurrence
- Make sure your measurement / inspection process is validated. Possibly carry out a gage R&R test.
- Once technical root cause of non-detection is found, do 5 why's to drill deep into *real* management / organizational root causes

Factor	Control Point	Standard	REAL situation NOK parts	REAL situation OK parts	Real vs. Std?	Std OK?	Investigation Plan to validate / eliminate factor: Investigation Action	Responsible / Deadline	Result - Defect reproduced?	Factor validated?
				EX	O X Δ	ok NOK doubt	Separate investigation actions from Corrective actions			

OK Real? Do all real data (NOK parts *and* OK parts) meet standard ? Yes => O; No => X; doubt (ex: can not be sure) => Δ
OK Std? Is standard updated ? Clear ? No contradictory with other standard ? No defective part produced when standard is met?
Factor validated ? To record whether factor is a real cause. Problem can not be reproduced => O ; Problem reproduced => X; Doubt => Δ

Completion check-list
- Can you prove logically **what is (are) the root cause(s) for occurrence?**
- What is the **management / organizational root cause?**

D6 - Corrective Actions

Objective
Define and then implement actions to eradicate the problem and check their effectiveness.

Hints
- Do not start corrective actions before proving you have completed D4 and D5.
- Check that implemented actions do not generate another problem.
- Create the **Lesson Learned Sheet** (template: 8D problem solving report, LLS sheet) just after implementing actions. This will right away:
  (i) challenge the **logic** of your action;
  (ii) highlight the **changes before / after** corrective actions
  (iii) highlight the **factors to be controlled** to prevent reoccurrence.
- **In Production:** check actual implementation of actions, understanding and training of operators, in all shifts.

NB: The launch or selection of corrective actions may sometimes require a prior validation by management

Completion check-list
- Corrective actions for both non-detection and occurrence decided and implemented?
- Lesson learned sheet created?

D7 - Verify Corrective Actions

Objective
Check effectiveness / robustness of D6 actions on selected indicators.

Tools
- **Tracking chart**.

Hints
- When using QRQC board, highlight on tracking chart the implementation date of corrective action and to see its effect on selected indicators
- Check effectiveness of detection

Completion check-list
- Are corrective actions effective (tracking chart)?
- Do corrective actions prevent defect creation?

Actions	Verification mode	Pilot	Deadline	Results
Effectiveness of corrective actions confirmed by indicators?				
Is detection effective ? (simulate defect to test detection)				
No recurrence for one month? (after action plan is completed and containment removed. (mandatory for S/R issues and customer complains)				
Operators trained in all shifts ? Can they correctly describe the changes ?				
Do corrective actions prevent defect creation?				

D8 –Lessons Learned

Objective
Identify definitive changes to make sure the problem will never occur again, anytime, anywhere (where problem happened, in the whole site, in other sites and for future developments).

Tools
- Lesson Learned Sheet
- PFMEA, control plan, workstation documents and any other standard to be updated.

Completion check-list
- Did we understand: **Why we did not *predict* the defect?**
- Objectives met?
- Information to personal OK?
- *Final* lesson learned sheet completed, displayed, disseminated?
- Are all standards directly related to problem (P-FMEA, control plan, work ins

1 -Establish new standards by Plant	Remarks	Pilot	Planned date	Actual date	Status
FMEA (mandatory)					
Control plan					
Maintenance plan					
Workstation documents updated					
Checking / measurement station					
Audit frequency					
Boundary samples					
Update standard product & process / master principles					
Lessons Learned Sheet					
2-Deploy to similar products or processes in the plant	Remarks	Pilot	Planned date	Actual date	Status
Knowledge management database / standard product & process updated?					

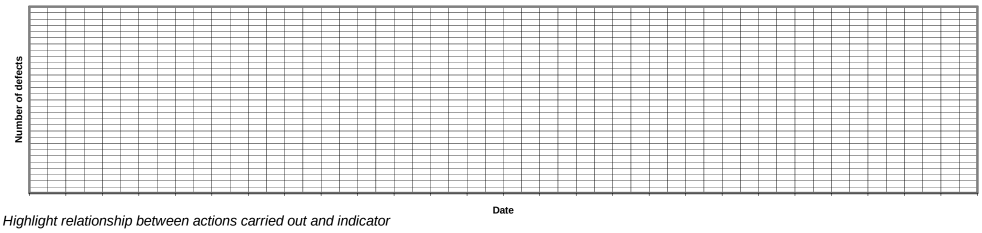
QRQC Follow up		
Team:	Opened:	
Steps	Meeting dates	Milestone review (name / sign-off)
D1 to D3		D3: by Quality
D4 to D5		D5: by Problem leader
D6 to D8		D8: by Plant Manager

D1 - Problem Description		
IS Defective parts? Problem? Where / by whom *detected* and how? Where / by whom *created* and how?	IS NOT & DIFFERENCES between defect locations, operators, machines, references, shifts, days...	D2 - Risks on similar products and processes

D3 - Containment

Action	Pilot	Dead line	Check by shift / Sorting results

D1 - **When** and **how many** ? + **Target** **D7. Indicators follow-up**



Highlight relationship between actions carried out and indicator

	Factor	Control Point	Standard	REAL situation NOK parts	 OK parts	Real vs. Std?	Std OK?	Investigation Plan to validate / eliminate factor Investigation Action	 Responsible / Deadline	 Result - Defect reproduced?	Factor vali-dated?
D4 - Causes of Non Detection											
D5 - Causes of Occurrence											

D4 & D5 - 5 Why's	Why?	V	Why?	V	Why?	V	Why?	V	Why?	V	D4 & D5 - Root causes

O = OK, X= NOK, Δ= Doubt , V= verify

D6 - Corrective Action Plan

Action	Responsible	Deadline	Check by shift
Lesson Learned Sheet			

D8 - Lessons learned

Action	Responsible	Date
Objectives met		
Operators informed		
Workstation docs. updated		
FMEA updated		
Control plan updated		
Design standards updated		