

[Organization logo]

[Organization name]

Commented [16A1]: All fields in this document marked by square brackets [] must be filled in.

PROCEDURE FOR PRODUCTION AND SERVICE PROVISION

Commented [16A2]: Delete if organization doesn't provide services.

Commented [16A3]: If you want to find out more about production and service provision, see:

Understanding Product & Service Provision in IATF 16949
<http://advisera.com/16949academy/blog/2014/10/07/understanding-product-service-provision-iso-9001/>

Commented [16A4]: Adapt to the existing practice in organization.

Code:	
Version:	0.1
Created by:	
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Date of version:	
Signature:	

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	0.1	16949Academy	Basic document outline

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1. Purpose, scope and users

The purpose of this procedure is to describe the process of production according to demanded quantity and deadlines, in line with the request for product quality according to customer request.

The procedure is applied in realization of the production process.

Users of this document are persons responsible for the process of production in [organization name].

2. Reference documents

- IATF 16949:2016 standard clauses 8.5, 8.5.1.3,8.5.1.4; 8.5.1.7, 8.5.2, 8.5.2.1, 8.6
- Procedure for Document and Record Control
- Procedure for Competence, Training and Awareness
- Procedure for Purchasing and Evaluation of Suppliers
- Procedure for Design and Development
- Warehousing Procedure
- Procedure for Management of Nonconformities and Corrective Actions
- Procedure for Equipment Maintenance and Measuring Equipment
- [Working instruction]
- [Visual aids]

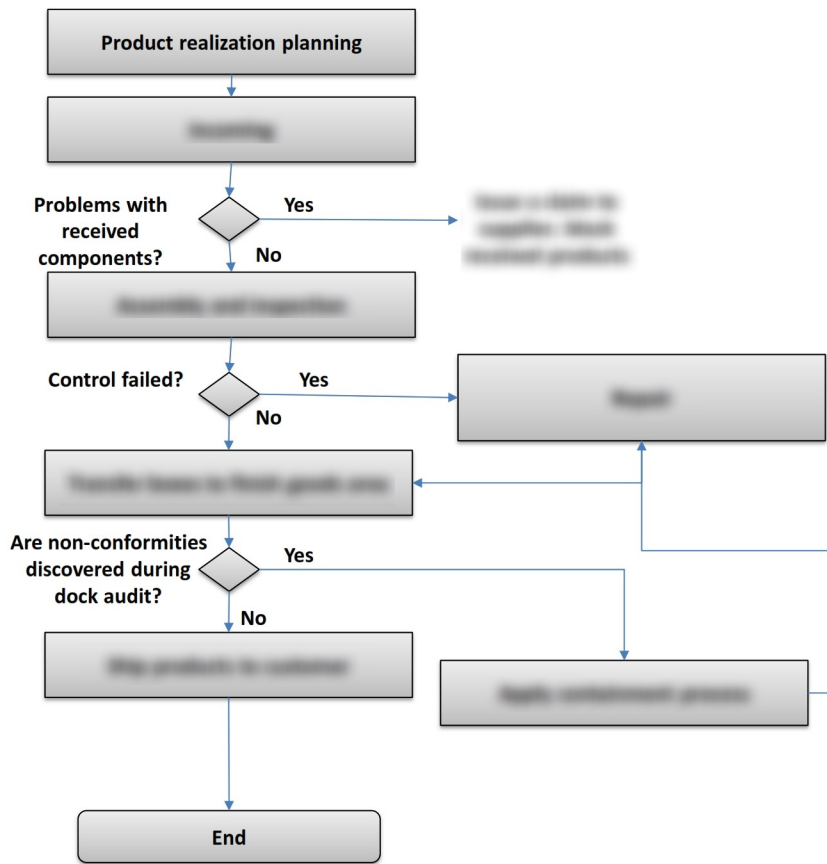
Commented [16A6]: List the names of instruction manuals used in this process.

Commented [16A7]: Refer visual aids/samples used.

3. General product realization process

3.1. Manufacturing process generic flow

Commented [16A8]: This is only an example of a process flow for an assembly line – you should create your own process flow that is specific for your product by using PPAP templates.



3.2. Product and service realization planning

3.2.1. Defining resources for production and service provision

According to [document name], [job title] makes an internal purchasing order that specifies

[redacted]

used during product realization.

[Job title] supervises information systems used to track products in different stages of realization,

[redacted]

Based on information systems, [job title] plans and optimizes the loading according to firm and forecasted customer orders.

3.2.2. Validation of production

[Job title] must conduct the validation of all processes of production before they enter into the serial phase. This is done by reviewing the production process design and development and ensuring quality requirements. It also follows the activities as defined and agreed with customer in the contract phase.

As part of validation, [job title] must determine:

- Criteria for review and approval of process
- [redacted]
- [redacted]
- [redacted]
- [redacted]

By using methods defined in the Control Plan, [Job title] creates the necessary records to provide evidence that the realization processes and resulting products meet predefined requests.

[redacted]

3.2.3. Identification and traceability

[Job title] must identify the product through the entire production process and define methods of

[redacted]

the level of risks for employees and customers. These plans define methods for:

- Identification of suspect and nonconforming products
- [redacted]
- [redacted]
- [redacted]

Commented [16A9]: E.g. Production Plan, Customer Request, Project, etc.

Commented [16A10]: E.g. Warehouse Manager

Commented [16A11]: Typically is Logistic Manager or Production Planner.

Commented [16A12]: Examples are: just in time sequence production for JIT plants, Kanban...

Commented [16A13]: Typically, is Logistic Manager or Production Planner.

Commented [16A14]: This is entered in Quality Plan.

Commented [16A15]: This is entered in Quality Plan.

Commented [16A16]: Adapt to organization.

Commented [16A17]: This is done when previous validation didn't give expected results.

Commented [AT18]: Control Plan is used as a base for product and process control – for each level there is.

Commented [16A19]: E.g. serial number, Working order ID, bar code, software ID, expiring date, production date, labeling, accounting documentation, etc.

[organization name]

- Proving the effectiveness of the training of involved employees

3.3. Production and service provision realization

Production is executed in controlled working conditions, which implies compliance with all technical and technological requirements defined in documents necessary for the production process.

Prior to the start of the process, and for each product and/or process change, [job title] supervises the process, ensuring compliance with all technical and technological requirements defined in the Control Plan during project phases.

If a violation of working conditions occurs, [job title] is obliged to stop the production process until the violation is corrected.

If production is restarted following a total shutdown of a workshop or plant, [job title] performs the restart according to the Production Restart Checklist.

3.3.1. Availability of information that defines product or service characteristics

In cyclic production, [job title] gathers information about product characteristics from the following sources: [name the sources].

3.3.2. Availability of working instructions

[Job title] is responsible for creation of working instructions for the following process activities: [list activities].

3.3.3. Usage of adequate equipment

[Job title] is responsible to ensure that all equipment is in operational condition and, on [job title]'s request, ensure the availability of equipment for the production process.

If requirements for equipment maintenance and working environment are specified by the customer, [job title] is responsible for ensuring compliance with these requirements.

3.3.4. Customer property

Commented [16A20]: This refers to law and legal requirements.

Commented [AT21]: Adapt to your organization.

Commented [AT22]: Typically, is the person who maintains production process documentation, - Engineering or Quality; adapt to your organization.

Commented [AT23]: Typically, is the person who maintains production process documentation, - Engineering or Quality; adapt to your organization.

Commented [16A24]: E.g. Product Specification, law and regulatory requirements, instructions, catalogues, etc.

Commented [16A25]: Delete if there is no cyclic production.

Commented [16A26]: E.g. Customer Request, Project Task, etc.

Commented [16A27]: Delete if organization doesn't perform this type of production.

Commented [16A28]: Working instructions are needed for more complex activities that have precisely defined order of execution operations and/or appropriate measuring is needed. They can be in form of Quality Plans, Flowcharts, drawings, etc.

Commented [16A29]: E.g. Maintenance Operator

Commented [16A30]: E.g. Production Manager

Commented [16A31]: E.g. Head of maintenance department

Commented [16A32]: This can be deleted if organization doesn't use Customer Property. See Quality Manual.

[organization name]

[Job title] is responsible for identification, verification, and protection of customer or external property owner using Notification to Customer about Changes on His Property.

3.3.5. Conducting measuring and monitoring

[Job title] must ensure availability of monitoring and measuring resources and define the method of the Quality Plan.

Commented [16A33]: E.g. Production Manager, Technology Engineer, etc.

Commented [16A34]: Other records can be defined as addition to Quality Plan, e.g. records for monitoring temperature, pressure, humidity, etc.

3.3.6. Control of changes

[Job title] reviews and controls changes to production and service provision in order to ensure conformance with the requirements and other changes in the Production/Service Change Control System.

3.3.7. Product release, delivery and activities after delivery

[Job title] is responsible for determining, at appropriate stages, by which degree the product conformance and approving shipment. Products that don't meet the requirements are handled according to the Procedure for Control of Non-Conforming Product and Procedure for Complaints and Product Returns.

[Job title] ensures that the release of products and services to the customer will not proceed until all requirements have been satisfactorily completed, unless otherwise approved by a defined authority and, as applicable, by the customer.

[Job title] defines the extent of post-delivery activities that are required, considering:

- Statutory and regulatory requirements
- The potential undesired consequences associated with the products and services
- The nature, use, and intended lifetime of the products and services
- Customer requirements
- Customer feedback
- Retention of records
- Identification of non-conforming products and services
- Identification of complaints
- Identification of product returns

Commented [16A35]: Adapt to organization's needs.

During servicing activities, [job title] is obligated to initiate correction of non-conformance using the Procedure for Control of Non-Conforming Product to ensure the conformity of product or service. If repair is required within the warranty period, it is provided at no additional cost and shall not be used.

3.4. Product preservation

Commented [16A36]: This should be deleted if organization is only service oriented.

[organization name]

[Job title] is responsible for preservation of product during production and service provision and the manufacturing process (incoming to delivery).

Commented [16A37]: E.g. Production Manager

During storage, [job title] is responsible for preservation and providing storage conditions for product storage in stocks, containers, packages. The results are recorded in the Inventory Form. [Job title]

Commented [16A38]: E.g. Warehousing Manager

Commented [AT39]: Adapt to your organization, E.g. Warehousing Manager.

[Job title] performs optimization of inventory turnover and ensure FIFO (First In/First Out) application for all materials, components and finished goods.

Commented [AT40]: Adapt to your organization, E.g. Warehousing Manager.

[Job title] is responsible for compliance with all customer and internal requirements regarding

Commented [16A41]: E.g. Driver

3.5. Production and Service Provision Process Flow

[Describe all activities of process flow]

Commented [16A42]: Here, describe all activities in process flow and define persons responsible for each activity, inputs and outputs of activity, necessary records about crucial activity parameters and how activity is executed.

[First tier manufacturing site – assembly process example:

3.5.0 Incoming

After a truck arrives with components delivered from the supplier, pallets are downloaded. Incoming inspection.

Quality technicians perform the incoming inspection and record the results in incoming inspection

OK batches are transferred to the warehouse and identified with green tags.

3.5.1 Transfer the components to assembly lines

According to the Production schedule in the ERP displayed on each assembly line, components are

3.5.2 Production start

Operators check the conditions in workstations (including process parameters, order, cleanliness and

[organization name]

Following assembly of first produced parts, quality technicians take control of the part and record the results in an information system database.

Process operators or first assembly unit is not performing the first made item and the process continues the assembly unit by starting a quality network.

3.5.3 Assembly process

Following a successful process start, the operator assembles components according work instructions and must not skip steps or substitutions. The end of the process is controlled by quality technicians and must not be affected by substitutions or manufacturing abnormalities. components and parts are found, they must be identified, recorded and isolated in red bins by operators.

The team which affects the first time operators and the quality department to report nonconforming parts and defective components to the production, quality and safety.

Nonconforming parts are repaired at a rework station by qualified employees and controlled by quality technicians. They are identified by using quality traceability system, then introduced to the process flow.

3.5.4 Finished goods storage

Internal handlers take the pallets from the packaging area and scans the bar code labels to record the transfer to the shipping area.

3.5.5 Shipping

Finished goods pallets are transferred to shipping areas by internal handlers. Pallets are stored and must be ready to deliver using ERP. They are loaded on truck, quality technicians perform a final audit to check the condition of storage, correct labeling and packaging.

Pallets are scanned, and the delivery transaction is recorded in ERP.

3.6. Resolving non-conformities

If a non-conformity of process or product occurs, the person who discovered the non-conformity notifies quality technicians, who are according to the Procedure for Control of Non-Conforming Product.

If the non-conformity can be resolved, the process is resumed; otherwise, [job title] stops the production process and acts according to the Procedure for Control of Non-Conforming Product and Procedure for Corrective and Preventive Actions, but can't change technological parameters.

Commented [16A43]: E.g. Shift Leader

4. Managing records kept on the basis of this document

Record name	Code	Storage	Responsibility
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[organization name]

		Retention time	Location	Protection	
Production Scheduling and Follow Form	PR.11.1	2 years	[office of Production Manager]	Records are stored in file cabinet [describe name/location]	[job title]
Production Change Review Record Form	PR.11.2	2 years	[office of Production Manager]	Records are stored in file cabinet [describe name/location]	[job title]
First and Last Part Approval Form	PR.11.3	2 years	[office of Production Manager]	Records are stored in file cabinet [describe name/location]	[job title]
Internal Failures Report Form	PR.11.4	2 years	[office of Production Manager]	Records are stored in file cabinet [describe name/location]	[job title]
Deviation Request and Approval Form	PR.11.5	2 years	[office of Production Manager]	Records are stored in file cabinet [describe name/location]	[job title]
Production Restart Checklist	PR.11.6	2 years	[office of Production Manager]	Records are stored in file cabinet [describe name/location]	[job title]
Inventory Form	PR.11.7	2 years	[office of Production Manager]	Records are stored in file cabinet [describe name/location]	[job title]

Commented [16A45]: Adapt the information in this column to the normal practice in your company.

Commented [16A44]: Adapt the information in this column to the normal practice in your company.

Commented [16A46]: If the record is in electronic form, write the name of the folder on Production Manager computer.

Commented [16A47]: If the record is in electronic form, write the name of the folder on Production Manager computer.

Commented [16A48]: If the record is in electronic form, write the name of the folder on Production Manager computer.

Commented [16A49]: If the record is in electronic form, write the name of the folder on Production Manager computer.

Commented [16A50]: If the record is in electronic form, write the name of the folder on Production Manager computer.

Commented [16A51]: If the record is in electronic form, write the name of the folder on Production Manager computer.

Commented [16A52]: If the record is in electronic form, write the name of the folder on Production Manager computer.

[organization name]

Notification to a Customer about Changes on their Property	PR.11.8	2 years	[office of Production Manager]	Records are stored in file cabinet [describe name/location]	[job title]
Quality Plan	PR.11.9	2 years	[office of Production Manager]	Records are stored in file cabinet [describe name/location]	[job title]

Commented [SS53]: This document is unnecessary if organization doesn't store and work with customer property.

Commented [16A54]: If the record is in electronic form, write the name of the folder on Production Manager computer.

Commented [16A55]: If the record is in electronic form, write the name of the folder on Production Manager computer.

5. Appendices

- Appendix 1 – Production Scheduling and Follow Form
- Appendix 2 – Production Change Review Record Form
- Appendix 3 – First and Last Part Approval Form
- Appendix 4 – Internal Failures Report Form
- Appendix 5 – Deviation Request and Approval Form
- Appendix 6 – Production Restart Checklist
- Appendix 7 – Inventory Form
- Appendix 8 – Notification to a Customer about Changes on their Property
- Appendix 9 – Quality Plan