

Standard Operating Procedure (SOP): Production Batch Tracking and Inventory Allocation

This SOP details the process for **production batch tracking and inventory allocation**. It covers the methods for accurately recording production batches, assigning unique batch numbers, monitoring batch status throughout the production cycle, and ensuring traceability. Additionally, it outlines inventory allocation procedures to manage stock levels efficiently, allocate materials to specific batches, and maintain accurate inventory records. The goal is to enhance production transparency, improve inventory control, and support quality assurance and regulatory compliance.

1. Purpose

To establish a standardized procedure for tracking production batches and allocating inventory, ensuring traceability, process efficiency, and compliance with quality and regulatory requirements.

2. Scope

This SOP applies to all personnel involved in production, inventory management, and quality control.

3. Responsibilities

- **Production Staff:** Record batch details and status updates.
- **Inventory Control:** Allocate, monitor, and record inventory usage by batch.
- **Quality Assurance:** Audit batch records for accuracy and traceability.
- **Supervisors/Managers:** Review documentation and ensure SOP adherence.

4. Definitions

- **Batch Number:** A unique identifier assigned to each production batch for tracking.
- **Inventory Allocation:** Assignment of materials or stock to specific production batches.
- **Traceability:** The ability to track the history, application, or location of items.

5. Procedure

5.1 Batch Recording and Number Assignment

1. At the start of production, complete a batch record form (electronic or paper).
2. Assign a unique batch number according to the batch numbering system (e.g., YYYYMMDD-###).
3. Record the following details:
 - Product name/code
 - Production date/time
 - Personnel involved
 - Assigned batch number
4. Input batch details into the batch tracking system or logbook.

5.2 Batch Status Monitoring

1. Update batch records at each key production stage (e.g., start, in process, completed).
2. Document any deviations, issues, or status changes as they occur.
3. Quality Assurance must verify and sign off on batch completion and status.

5.3 Inventory Allocation

1. Review the production schedule and required materials list for each batch.
2. Allocate raw materials/components from inventory as per batch requirements.
3. Record inventory usage in the inventory management system, referencing the respective batch number.
4. Adjust inventory balances in real-time to reflect material usage.
5. Maintain allocation records to ensure traceability from raw material to finished product.

5.4 Inventory Record Maintenance

1. Perform regular reconciliation of physical inventory with system records.
2. Document discrepancies and investigate causes.
3. Retain batch and allocation records for the period defined in the company's retention policy.

6. Documentation and Records

- Batch record forms/logbooks
- Inventory allocation logs/reports
- Audit trails from electronic systems
- Deviation and investigation reports (if applicable)

7. Review and Audit

1. Supervisors/Managers review batch and inventory records weekly.
2. Quality Assurance performs regular audits of the process and documentation.
3. Update SOP as needed based on audit findings and process improvements.

8. Appendices

Sample Batch Record Table

Batch Number	Product Name	Production Date	Status	Inventory Allocated	Comments
20240627-001	Widget A	2024-06-27	Completed	RM-1001, RM-1002	No deviations
20240627-002	Gadget B	2024-06-27	In Process	RM-1010, RM-1005	QC hold