

Standard Operating Procedure (SOP): Production Line In-Process Quality Checks

This SOP details the procedures for **production line in-process quality checks**, including the frequency and methods of inspection, criteria for product acceptance, documentation requirements, and corrective actions for non-conforming items. The purpose is to ensure consistent product quality throughout the manufacturing process, minimize defects, and maintain compliance with industry standards and customer specifications.

1. Scope

This procedure applies to all production line operations requiring in-process quality evaluations. It is relevant for operators, quality control (QC) inspectors, and production supervisors.

2. Responsibilities

- Production Operators:** Perform in-process checks and report deviations.
- QC Inspectors:** Conduct and document inspections, verify corrective actions.
- Production Supervisors:** Ensure SOP compliance and facilitate training.

3. Frequency of Inspection

Process Step	Frequency	Responsible Person
Raw Material Check	Start of each shift	QC Inspector
Assembly Inspection	Every 30 minutes	Production Operator
Final In-Process Check	Per batch/lot	QC Inspector

4. Methods of Inspection

- Visual inspection for surface defects, labeling, or contamination
- Measurement of critical dimensions using calibrated tools (e.g., calipers, micrometers)
- Functional tests as specified in the product specification

5. Criteria for Product Acceptance

- Conforms to approved drawings/specifications
- Meets functional and performance requirements
- Free from defects such as cracks, dents, contamination, or mislabeling
- Passes all measurement and functional tests

6. Documentation Requirements

- Complete in-process inspection checklists/forms for each shift/batch
- Record all inspection data, observed defects, and actions taken
- Maintain records for traceability as per company policy (minimum retention period: 2 years or as required by regulation)

7. Corrective Actions for Non-conforming Items

- Isolate and clearly label non-conforming items to prevent unintended use.
- Document details of non-conformance and notify the supervisor or QC lead.
- Investigate root cause and determine disposition (rework, scrap, or return to supplier).
- Implement corrective and preventive actions as necessary, and record actions taken.

8. Revision History

Version	Date	Description	Approved By
1.0	2024-06-25	Initial SOP Release	QA Manager