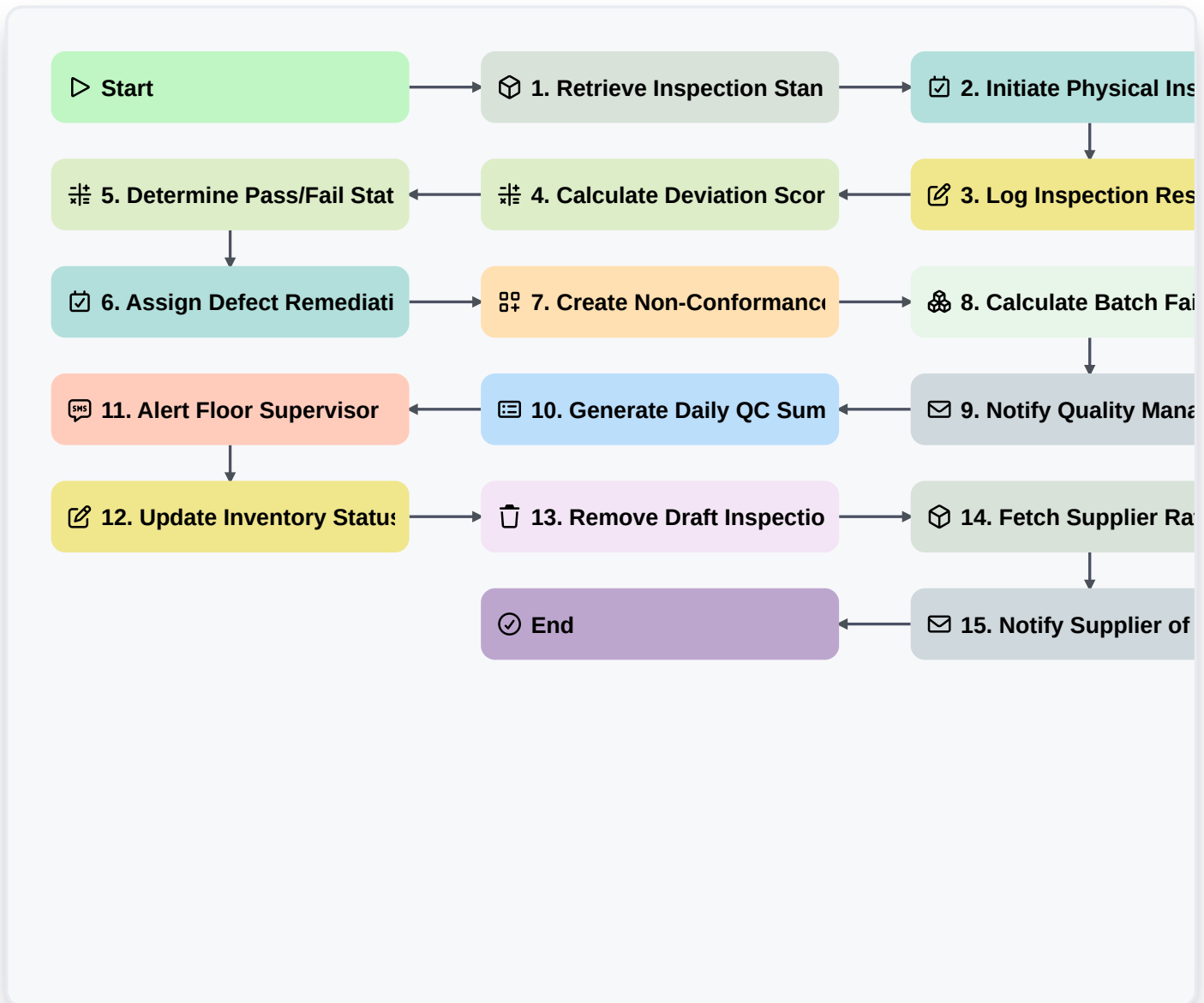


Quality Control And Inspection Workflow



▷ Start

Start of the Workflow/Process.

📦 1. Retrieve Inspection Standard

Fetch the specific quality standards and tolerance thresholds from the 'Product Specifications' data model.

📝 2. Initiate Physical Inspection

Assign a task to the Quality Inspector to perform the manual visual and measurement check.

📝 3. Log Inspection Results

Update the current Inspection Entry with measurements, pass/fail status, and photos captured during the task.

📊 4. Calculate Deviation Score

Calculate the difference between the measured value and the standard tolerance using a formula.

📊 5. Determine Pass/Fail Status

Execute logic to compare the Deviation Score against the allowed threshold to determine final status.

📝 6. Assign Defect Remediation

If the status is 'Fail', create a task for the Production Supervisor to address the identified defect.



7. Create Non-Conformance Report (NCR)

Generate a new entry in the 'Non-Conformance' data model to track the failure details.

8. Calculate Batch Failure Rate

Aggregate all inspection entries within the current production batch to calculate the percentage of failed units.

9. Notify Quality Manager

Send an email alert to the Quality Manager when a critical defect is detected or a failure threshold is reached.

10. Generate Daily QC Summary

Create a standardized report summarizing all inspections, pass/fail ratios, and identified defects for the day.

11. Alert Floor Supervisor

Send an SMS to the Floor Supervisor if a high-priority defect requires immediate line stoppage.

12. Update Inventory Status

Update the 'Inventory' data model to move items from 'Pending Inspection' to 'Released' or 'Quarantined'.

13. Remove Draft Inspection

Delete incomplete or duplicate draft inspection entries to maintain data cleanliness.

14. Fetch Supplier Rating

Retrieve the historical performance rating of the specific supplier associated with the batch.

15. Notify Supplier of Defect

Send an automated email to the supplier with the details of the Non-Conformance Report.

End

End of the Workflow/Process.