


Quality control and inspection automation

Automates quality inspection of manufactured signs by capturing production images, analyzing defects using AI vision, and routing items for approval or rework based on quality standards.

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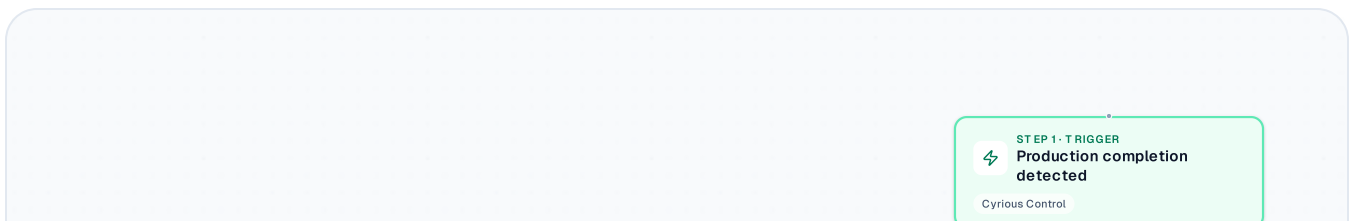


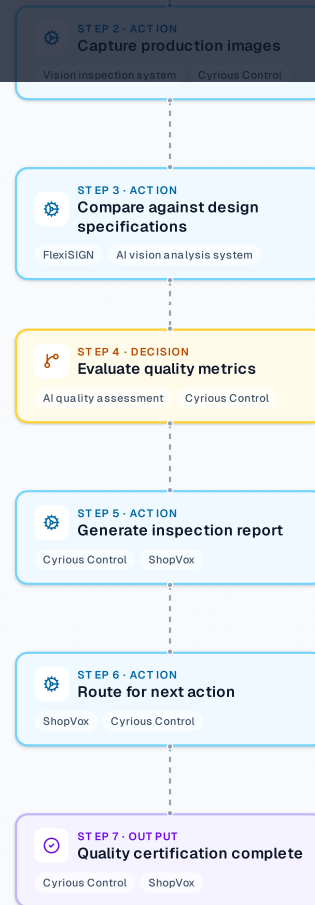
WORKFLOW TRIGGER

Sign production completion notification received from CNC machine or digital printer

Visual Flow

Each node represents an automated step. Connections show how data and decisions move through the workflow.





Step-by-Step Breakdown

Detailed explanation of each automated stage in the workflow.

1

⚡ TRIGGER

Production completion detected

System receives notification that a sign has finished production and is ready for quality inspection. Workflow automatically initiates based on job

2

 ACTION

Capture production images

Automated cameras capture high-resolution images of the finished sign from multiple angles. Images are stored with job metadata for analysis.

Vision inspection system

Cyrious Control

3

 ACTION

Compare against design specifications

AI system retrieves original design files and compares them pixel-by-pixel with captured images. Dimensional tolerances and color accuracy are validated against specifications.

FlexiSIGN

AI vision analysis system

4

 DECISION

Evaluate quality metrics

System analyzes comparison results and scores the sign against predefined quality thresholds. Determines if sign passes inspection or requires rework.

AI quality assessment

Cyrious Control

5

 ACTION

Generate inspection report

Detailed quality report is automatically created with defect annotations, measurements, and pass/fail status. Report includes recommendations for any required corrections.

Cyrious Control

ShopVox

6

 ACTION

Route for next action

Signs that pass inspection are automatically queued for packaging/shipping, while failed items are routed to rework stations with specific defect details.

ShopVox

Cyrious Control

7

 OUTPUT

Quality certification complete

Final quality status is recorded in the job management system and stakeholders are notified of completion or rework requirements.

Cyrious Control

ShopVox



Outputs

- Quality inspection report with pass/fail status
- Defect annotations and correction recommendations

- Updated job status in production management system

AI Business OS



Key Metrics

- First-pass quality rate percentage
- Average inspection time per sign
- Defect detection accuracy rate



Tools & Integrations

- Cyrious Control
- FlexiSIGN
- ShopVox
- Vision inspection system
- AI vision analysis system
- AI quality assessment

AI Business OS

Actionable AI implementation strategies for business leaders ready to transform their operations.

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