Q-Check

Equipment Inspection Platform

User Manual

Covers the Inspector and Administrator Interfaces

Powered by Quarion AI · Customer Discovery Edition

Introduction

Q-Check is a tablet-based equipment inspection platform that replaces paper checklists with a structured digital workflow. Each inspection is timestamped, operator-identified, and stored for instant retrieval during audits.

This manual is organized into two sections:

- Part 1 — Inspector covers everything an operator needs to sign in, conduct a pre-operation inspection, and submit results.
- Part 2 — Administrator covers the management console used by safety managers and supervisors to build templates, configure equipment, review flagged inspections, and generate reports.

> ℹ️ *This is a Customer Discovery Preview. Data is simulated and no backend server is required. Contact your Q-Check dealer or Quarion AI to discuss a production deployment.*

PART 1 — Inspector Guide

This section covers the tablet interface used by operators and inspectors to perform and submit pre-operation equipment inspections.

1.1 Overview of the Inspection Workflow

Every inspection follows the same five-stage sequence:

1. **Device Setup**
   Choose Fixed Mount or Portable mode. In Fixed Mount mode, the tablet is pre-configured for one piece of equipment. In Portable mode, you scan or select the item you are inspecting.
2. **Sign In**
   Badge in with your Employee ID or scan your badge QR code. Only authorized, trained operators are permitted to conduct inspections.
3. **Inspect — Area by Area**
   Work through each inspection area. For each check item, tap Pass or Fail. If you select Fail, a note field opens for you to describe the defect.
4. **Area Observations**
   Each area includes an open observations box (top right of the inspection screen). Use it to record general conditions that do not relate to a specific check item.
5. **Review & Submit**
   When all areas are complete, a summary screen shows your results. Review any flagged items, then tap Submit to sync the record.

1.2 Getting Started — Device Setup

Fixed Mount Mode

Tablets mounted directly to a forklift, pump station, or other fixed equipment are pre-configured by your administrator. When you power on the tablet or approach it, the equipment is already identified. Tap Continue to sign in.

Portable Mode

A tablet carried between multiple pieces of equipment requires you to identify the item before signing in. Two methods are available:

- Scan QR / Barcode — Tap the scan zone and aim the tablet camera at the QR code affixed to the equipment. The system identifies the item automatically.
- Select from List — If the QR code is damaged or not yet installed, use the dropdown list. Items are grouped by type (Forklift, Golf Cart, Process Pump, Conveyor, Security Route, etc.).

> ✦ *Once an item is identified, a confirmation card appears showing the equipment name, serial number, and location. Verify these before proceeding.*

1.3 Signing In

After the equipment is identified, the sign-in screen appears. Two options are available:

Credential Login	Enter your Employee ID (e.g., OP-001) and PIN, then tap Sign In.

QR / Badge Scan	Tap Scan Zone and hold your employee badge or QR code to the camera.

⚠️ Only trained and authorized operators may sign in and conduct inspections. Sharing credentials or allowing an uncertified operator to sign in on your behalf is a policy violation and may expose your organization to OSHA liability.

1.4 Conducting the Inspection

Screen Layout

The inspection screen is divided into three sections:

Header Bar (top)	Shows the current area name, area counter (e.g., Area 2 of 7), safety warning if applicable, progress bar, and page dots.
Photo + Observations (upper half)	The left side shows the reference photo or illustration for the inspection area. The right side provides a free-text Area Observations box for general notes.
Checklist (lower half)	All check items for the current area, each with a Pass button and a Fail button. Scrolls if items exceed the visible space.

Recording Results

For each numbered check item:

- Tap Pass — the card turns green and the item is marked compliant.
- Tap Fail — the card turns red and a note field appears. Describe the defect clearly.
- Items marked (opt) are optional. Recommended but not required for submission.

✦ *You can change a Pass to a Fail or vice versa at any time before submitting. Your most recent tap is always the recorded result.*

Navigating Between Areas

Tap Next area → at the bottom right to advance. Tap ← Back to return to a previous area and change any answers. The progress dots at the top change color as areas are completed (green = done, red dot = failures recorded, open = not yet reached).

Area Observations

The Area Observations text box (top right of the screen) is for general comments about the area being inspected — for example, "Engine bay is clean but oil level was on the low end" or "Bay 3 lighting is dim, reported to facilities." These notes are saved per area and submitted with the inspection record.

1.5 Completing and Submitting

After the last area, tap Complete √. The Summary screen displays:

- Total checks, passed, failed, and skipped
- A warning if any items failed, noting that the equipment should not be placed in service until the issue is cleared by a supervisor

When ready, tap Submit & Sync to Database. The record is saved with your name, a timestamp, the equipment ID, and all check results and notes.

> ⚠️ Do not operate equipment with one or more failed check items. Notify your supervisor immediately. The equipment must be cleared by an authorized reviewer before use. This is required under 29 CFR 1910.178(q)(1).

Starting a New Inspection

After submitting, tap New inspection to return to the Device Setup screen and begin a fresh inspection session on the same or a different piece of equipment.

1.6 Tips for Inspectors

- Allow enough time. The expected completion time is approximately 30 seconds per check item. Rushing may flag your record for supervisor review via the velocity analysis tool.
- Be specific in failure notes. "Leaking" is less useful than "Hydraulic leak at left tilt cylinder seal, approximately 2–3 drops per minute, fluid on floor."
- Use Area Observations for context that does not fit a specific check. These notes support your record during any future audit or incident review.
- If you are interrupted mid-inspection, do not close the app. The inspection remains open where you left off.
- Contact your supervisor if you are unsure whether an item passes or fails. When in doubt, record a Fail and add a note.

PART 2 — Administrator Guide

The Admin Console is accessible by signing in with an administrator account. It provides tools for managing templates, equipment, employees, and inspection data. Access the console by tapping Manage & Review on the landing screen and signing in as an Admin.

2.1 Dashboard

The Dashboard provides a real-time summary of inspection activity across your facility. Key performance indicators are displayed at the top:

Inspections	Total inspections completed in the selected period.
Pass Rate	Percentage of inspections with zero failed check items.
Failed Checks	Total number of individual check items recorded as Failed.
Avg Completion	Average time per inspection in minutes.
Active Inspectors	Number of unique operators who completed inspections in the period.

Filtering

Five filter dropdowns allow you to narrow the dashboard view to a specific subset of data:

- Operator — show inspections by a specific employee
- Item ID — show inspections for one specific piece of equipment or route
- Type — filter by equipment category (Forklift, Golf Cart, etc.)
- Template — filter by inspection template used
- Location — filter by facility location (Bay, Line, Dock, etc.)

When filters are active, an amber notice bar appears and KPIs update to reflect only the filtered data. Charts continue to show the full dataset for context. Tap ✕ Clear filters to restore the full view.

Charts and Analysis

- Daily Volume & Pass Rate — bar chart of inspection count by period overlaid with pass rate trend line.
- Pass Rate by Equipment Type — horizontal bar chart comparing compliance by type.
- Top Failed Checks — ranked list of the most frequently failed individual check items across all equipment.
- Equipment Status — quick-view grid showing current pass/fail/overdue status by unit.
- Activity Heatmap — shows inspection frequency by day of week and shift hour.

Generating a PDF Report

Tap Generate PDF to produce a formatted report based on the current filter state. The report includes the KPI summary, a full inspection log, and a table of all failed check items. A print dialog opens — select "Save as PDF" to download.

2.2 Templates

Templates define the inspection checklist for each type of equipment or route. Each template is organized into Areas (inspection zones), and each area contains individual Check Items.

Selecting a Template

Use the dropdown in the Template Builder header to switch between templates. The current version number (e.g., v3) is shown next to the template name.

Creating a New Template

Tap + New to create a blank template with one default area. Enter a name by editing the Area Label field. Add check items using + Add check within each area.

Duplicating a Template

Tap Duplicate to create an exact copy of the current template with "(Copy)" appended to the name. Use this as a starting point when creating a variant (for example, duplicating the LP Gas forklift template to create an Electric variant).

Editing Template Structure

Add area	Tap + Add area in the areas column to append a new inspection zone.
Area label	Enter the name for the area in the Area label field. This appears on the inspector's screen.
Safety warning	Enter a warning message that will be displayed prominently at the top of the area during inspection (e.g., "Engine must be off before this inspection").
Add check item	Tap + Add check within an area to append a new check item.
Check label	The inspection question or condition to be verified.
Hint text	Optional guidance text shown below the label on the inspector's screen.
Required toggle	Mark items as Required or Optional (opt). Optional items are recommended but not blocking.
Delete check	Tap × to remove a check item from the area.

Linking Area Photos

Each area can display a reference photo or illustration on the inspector's screen. To link a WordPress-hosted image:

- In WordPress: Media Library → click your image → copy the File URL from the right panel.
- In Q-Check: open the Template Builder, navigate to the area, click the photo zone (the image placeholder in the top-left of the area editor).
- Paste the URL in the dialog and click Set image. A preview confirms the image loaded correctly.

> ✦ *Upload purpose-built reference photos showing exactly what the inspector should examine. A clear photo of the hydraulic cylinder seal area is more useful than a full-unit shot.*

Saving and Versioning

Tap Save template to save your changes. The version number increments automatically (e.g., v2 → v3). Version history is recorded for audit purposes.

Deleting a Template

Tap Delete. Because deletion is permanent, confirmation is required: a second tap within 4 seconds confirms the deletion. You cannot delete the last remaining template. Before deleting, ensure no active equipment is assigned to the template.

2.3 Checklist Registry

The Checklist Registry lists all configured inspection items — forklifts, golf carts, pumps, conveyors, security routes, and any other items assigned a template. Each row shows the item's current status, assigned template, location, and last inspection time.

Filtering the Registry

Use the Type and Location dropdowns to filter the list. Tap ✕ Clear to restore the full registry.

Item Status

Pass (green)	Last inspection completed with no failures.
1 Fail (amber)	Last inspection had one failed item; supervisor review pending.
Fails Open (red)	One or more failures recorded and not yet resolved.
Insp Due (amber)	No inspection recorded today. Unit may not be cleared for service.

Configuring an Item

Click Configure → on any row to open the equipment panel. Three tabs are available:

- Details — shows equipment ID, serial number, type, location, and mount mode. Toggle between Fixed Mount (tablet is permanently assigned to this item) and Portable (inspectors scan a QR code before each session).
- Template — assigns the inspection template for this item. The assigned template's area structure is shown for reference.
- Notifications — configure who receives alerts when inspections have failures. Add recipients with their name, email, and optional SMS number. Choose which notification methods to use per recipient and set the trigger condition (any failure, critical items only, 2+ failures, or when grounded by supervisor).

> ℹ️ *Email and SMS delivery will be activated in the production build. The notification configuration you set now will carry forward.*

QR Code

The Details tab includes a QR code for each item. Print and affix this to the physical equipment for portable-mode scanning. Tap Download QR to save the image.

2.4 Employees

The Employee Directory lists all personnel with their roles, certifications, and inspection history statistics.

Employee Drill-Down

Tap View history → on any employee row to open a detailed inspection history. The drill-down shows:

- Stat summary bar — total inspections shown, pass rate, flagged count, average completion time, and number of distinct equipment types inspected.
- Filter controls — filter by date range (last 7 / 30 / 90 days / year), equipment item, and location.
- Inspection log — table of every inspection with date, time, equipment, location, template, checks passed/failed, duration, and a velocity indicator.

Velocity Analysis

Each inspection row includes a velocity flag based on completion time relative to the number of check items (expected average: 30 seconds per check):

√ Normal	Completion time is within the expected range.
⚡ Fast — review	Completed in less than 70% of expected time. May indicate cursory inspection. Review the record.
⏱️ Slow	Took more than 2.2× expected time. May indicate interruption or equipment issue worth noting.

> ⚠️ A Fast flag is not automatic grounds for disciplinary action. It is a review prompt. The supervisor should compare the flagged record against the inspector's history and the equipment's condition.

2.5 Supervisor Review

Any inspection with one or more failed check items lands in the Supervisor Review queue. The pending count is shown in the nav tab and sidebar. Each card displays the equipment name, inspector, timestamp, and the specific items that failed.

Actions

√ Acknowledge — clear for use	Confirms that the failure was reviewed and the equipment is safe to return to service. Updates the item's status to Pass.
⊘ Escalate — remove from service	Grounds the equipment until corrective action is taken. Updates the item's status to Fails Open.
Full report PDF	Opens a formatted inspection report with equipment details, failed item list, and a supervisor sign-off block with a signature line.

> ✦ *Print the Full report PDF before acknowledging or escalating. The printed report with a supervisor signature provides the paper trail required if the incident is later subject to OSHA review.*

> ⚠️ Under 29 CFR 1910.178(q)(1), any truck found to be unsafe must be removed from service until repaired by authorized personnel. Acknowledging a failed inspection without verifying the repair has been made may constitute a violation.

2.6 Reports

The Reports section provides the same KPI summary, charts, and analysis as the Dashboard, but focused on historical period review rather than real-time monitoring.

Period Selection

Use the 7d / 30d / 90d range buttons in the top right to select the reporting period. The KPIs, charts, and equipment status reflect the chosen period.

Filtering

The same five-filter row available on the Dashboard (Operator, Item ID, Type, Template, Location) is also available on the Reports tab. Filters applied in Reports carry over to the Dashboard and vice versa. Tap ✕ Clear to reset.

Generating Reports

Tap Generate PDF to produce a PDF export of the current view. The report includes all active filters in the header so the scope is always clear. Use this for:

- Weekly or monthly compliance summaries for management
- Equipment-specific inspection histories for maintenance records
- Operator-level reports for performance review or OSHA audit preparation

2.7 Branding — Logo Setup

Q-Check supports displaying your company or dealership logo in place of the Q-Check wordmark. To configure:

1. **Upload your logo in WordPress**
   Go to Media Library → Add New → upload your logo file (PNG with transparent background recommended).
2. **Copy the File URL**
   Click the uploaded image in the Media Library → copy the File URL shown in the right panel (e.g., https://yoursite.com/wp-content/uploads/logo.png).
3. **Paste into Q-Check**
   Open the Q-Check HTML file in a text editor. Near the top, find the line: window.LOGO_URL = ""; Paste your URL between the quotes and save.

Your logo will then appear on the landing screen, the tablet topbar, and the admin console header in place of the text mark.

Appendix — OSHA Compliance Reference

Q-Check is designed to help organizations meet the pre-operation inspection requirements of OSHA 29 CFR 1910.178, the Powered Industrial Trucks standard. The table below summarizes the key obligations and how Q-Check addresses each.

OSHA Requirement	Citation	Q-Check Feature
Daily pre-operation inspection required	*29 CFR 1910.178(q)(7)*	Timestamped inspection record per session; enforced by per-shift scheduling
Unsafe trucks must be removed from service	*29 CFR 1910.178(q)(1)*	Failed items trigger supervisor review queue; equipment status set to Fails Open
Repair before return to service	*29 CFR 1910.178(q)(2)*	Acknowledge/Escalate workflow; status cleared only by authorized reviewer
Only trained operators may operate	*29 CFR 1910.178(p)(1)*	Employee ID sign-in links each inspection to a specific certified operator
Inspection records must be available	*OSHA enforcement expectation*	All records stored with full audit trail; PDF export on demand
All hazards must be identified	*29 CFR 1910.178(q)(7)*	Full OSHA-derived checklists for LP Gas, Electric, and other equipment types

> ℹ️ *Q-Check does not constitute legal compliance advice. Consult your EHS counsel or a qualified safety professional to evaluate your organization's compliance posture.*