



OVERVIEW OF **PRODUCTION** SOLUTIONS

 **FirstStep.ai**

PRODUCT BROCHURE
v2025.04

Product Summary

The FirstStep.ai Full Crate Inspector (FCI) revolutionises crate inspection using advanced imaging technology, high-speed processing, and AI-powered accuracy. Designed for bottling companies, it ensures efficiency, accuracy, and operational control in high-volume operations.

Benefits

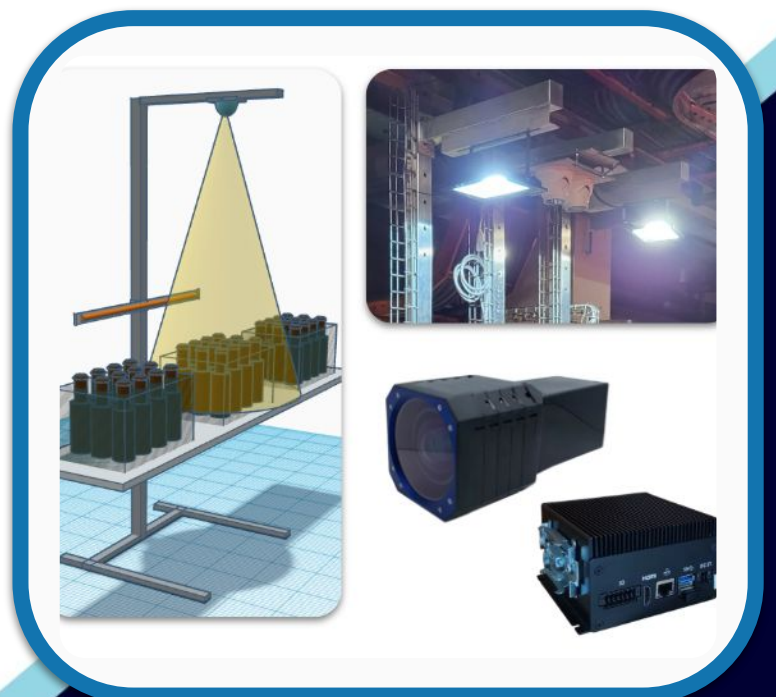
Handles up to 7,200 crates/hour, reduces manual interventions, enhances traceability, and ensures precise quality control. Delivers real-time insights, supports seamless adaptability, and enables data-driven decisions for improved productivity.

Unique Selling Points

1. **Advanced Technology:** Combines cameras, computer vision, and AI for detailed inspection.
2. **Non-invasive Installation:** Overhead cameras eliminate conveyor belt integration.
3. **Brand Adaptability:** Automatically handles brand changes without manual adjustments.
4. **Real-Time Reporting:** Tracks production with detailed, shift-based, and daily reports.

Key Features

- Processes up to 7,200 crates/hour with high accuracy and LED lighting.
- Central image storage for audits and traceability.
- AI-powered detection of dirt, broken bottles, and foreign objects.
- Optional features include crate rejection, dual-lane support, and failover databases.



Closed Loop Rejection

Product Summary

Closed-loop Rejection provides real-time product rejection directly from the conveyor belt using AI-powered quality inspection. Integrated with the Full Crate Inspector (FCI), it ensures precise and automated quality control by detecting subpar products and confirming successful rejections.

Benefits

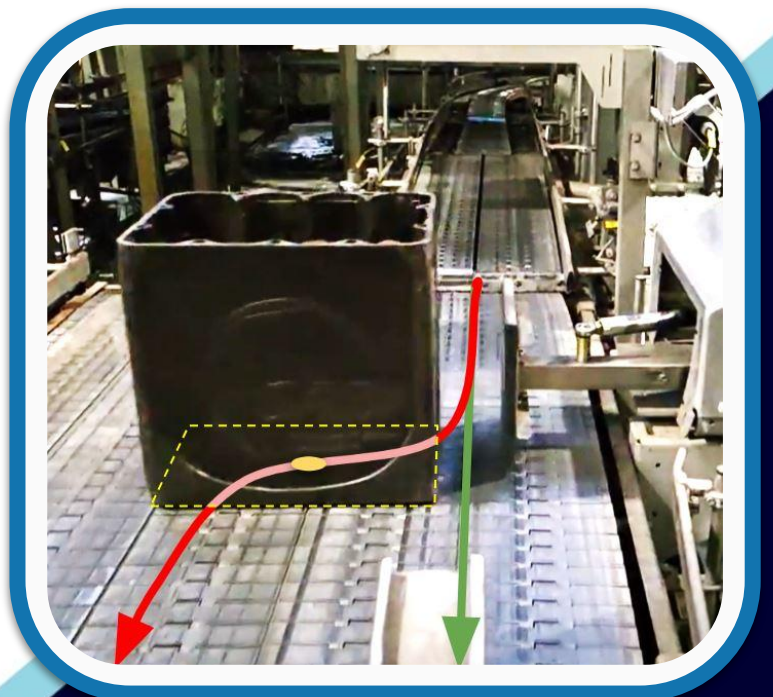
Delivers accurate real-time rejection, enhances quality assurance, ensures automated feedback loops, and reduces manual intervention. Supports seamless integration with existing systems and provides reliable, data-driven quality control for improved efficiency.

Unique Selling Points

1. **AI Integration:** Uses AI-powered inspection for precise rejection of defective products.
2. **Closed-loop Feedback:** Confirms successful rejections with real-time monitoring.
3. **Seamless Compatibility:** Designed as an add-on for the FCI for enhanced functionality.
4. **Reliable Automation:** Ensures consistent quality control with minimal manual input.

Key Features

- Real-time rejection linked to FCI inspection using EDGE computing and SCADA/DCS systems.
- Monitors rejector actions to confirm successful rejection for feedback accuracy.
- Requires direct integration with conveyor systems, ensuring precise operation.
- Installed by system integrators for robust and reliable functionality.



Client Success Story

Client: Anheuser-Busch (AB InBev Southern Africa)

Challenge: Frequent errors in human quality inspections leading to inconsistent crate quality and internal disputes over delivery and raw material quality.

Solution: Implemented the FirstStep.ai FCI, ECI and Closed Loop Rejection.

Result: Eliminated the need for human quality inspections, strengthened brand association with quality, resolved internal disputes over delivery and raw material quality, and significantly enhanced operational efficiency.

Quotes from client:

- "Results are incredible"
- "Project payback period is looking like days, not years!"
- "No one has seen rejection done without [physical] sensors or triggers"



All Solution Categories



Production Intelligence

Optimise production with AI-driven quality control.



Monitoring Intelligence

Forecast and prevent downtime with AI-powered monitoring.



Safety Intelligence

Ensure safety across your plant with AI-enhanced monitoring.



Operations Intelligence

Streamline shift-based operations with AI assistance.

