

FILTER VISION SYSTEM



SYSTEM OVERVIEW

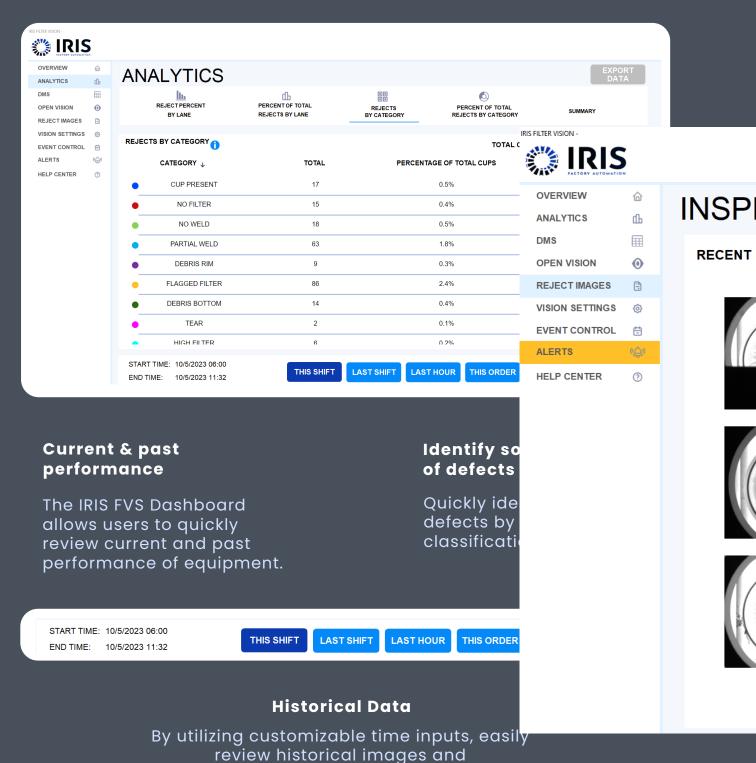
IRIS Filter Vision Systems provide cutting edge Deep Learning vision inspections with reject classification and advanced data analytics for the single-serve coffee industry.

IRIS seamlessly combines quality control systems and real-time data analytics, empowering rapid machine issue identification and delivering crucial information for enhanced equipment maintenance.



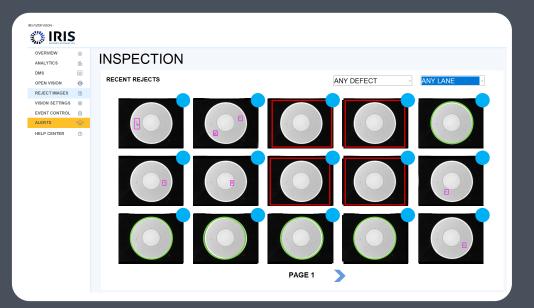
System Features

Real-Time Data Analysis Tools



inspection data.





Diagnostic Data

The IRIS Filter Vision System allows users to quickly review reject images to help diagnose equipment.

One-Click Sorting

Easily sort viewing options on system conditions by lane and/or defect classification.

ANY DEFECT



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| 🔅 IRIS | | | | | M maintenance ~ |
|---|----------------------------|----------|----------------------|---------------------|-----------------|
| O) Users | Event Control | Delete | Save Edit | ① Add New | |
| Home | | | | | |
| Analytics | If Any 🗸 defects are above | 1.3% 🗸 | on lane 1 🗸 for | last 10 minutes 🗸 🗸 | Show message |
| Reject Images | | | | | |
| Calibrate | If All 🗸 defects are above | 0.7% 🗸 | on lane 4 💙 for | last 30 minutes 🗸 🗸 | Show message |
| Recipes | | | | | |
| Event Control | If Any 🗸 defects are above | 1.0% 🗸 | on lane 7 🗸 for | last 60 minutes 🗸 🗸 | Show message |
| C Service Log | | | | | |
| Help Center Settings | if All 🗸 defects are above | 0.5% 🗸 | on lane 16 \vee for | this shift 🗸 🗸 | Show message |
| | | | | | |
| | If Any 🗸 defects are above | 1.3% 🗸 о | on any lanes 🗸 🛛 for | last shift 🗸 🗸 | Show message |
| | | | | | |
| | If Any 🗸 defects are above | 1.3% 🗸 | on all lanes 🗸 for | Last 10 minutes 🗸 🗸 | Show message |
| | | | | | |

Customizable Alert Settings and Quick-Viewing

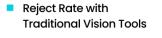
Set alerts based on pre-set thresholds and view current trending alarms.



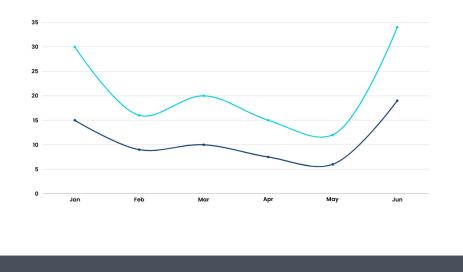
Deep Learning Vision Inspection

with Defect Classification

TRADITIONAL VISION INSPECTION VS AI



Reject Rate Using AI Vison Tools

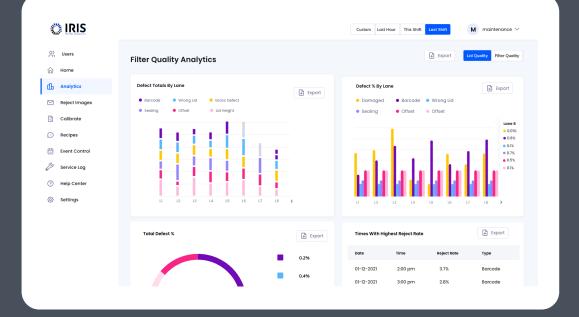


50% ↓ reduction in false rejects

Al-Based IRIS Vision systems can reduce the overall reject rate by an average of 50%.

Root cause analysis

The IRIS FVS Vision systems is able to leverage the use of deep learning algorithms to detect the smallest variation based on predefined classifications customizable to your manufacturing requirements.



Subtle Defect Detection

Using deep learning algorithms, IRIS FVS allows for inspection of more subtle defects than traditional vision tools.



Tear in filter



Application Fits

The IRIS Filter Vision System is better suited for standard variation in raw materials such as filter paper.

Common Defect Types

- No cup / filter / weld
- Partial or skip welds
- Flagged / Folded-in filters
- High filter
- Holes/ tears in filter
- Debris / foreign material





High Speed Inspection

The IRIS Filter Vision system is capable of inspecting 800 pods / minute and does not require stationary pods for inspection.

Small Footprint

IRIS FVS only requires 4.7" of space in Filter forming / filler equipment.



Accessible Design

The IRIS Filter Vision System comes equip with telescopic rails allow for full system extension outside of machine. Specifically designed for as little adjustments as possible, ideal for maintenance activities such as cleaning and calibration.

Stand alone HMI

Alternative HMI and Electrical Panel mounting options are available for optimal monitoring of the system from anywhere.





Automated Vision Systems for Enhanced **Precision** and **Efficiency**

The Full Line of Vision Offerings



Filter Vision System

- Real-time data analysis
- Deep learning vision classification with vision inspection
- High speed inspection
- Small footprint
- Accessible design
- Stand alone HMI kiosk for system control monitoring



Barcode Scanning System

- Advanced user interface
- High speed processing classification with vision inspection
- Low profile design
- Recipe based lighting control
- Intuitive user experience



Overwatch Vision System

- Traditional Automated Inspection
- Al-Based automation inspection
- Track and trace
- Small footprint
- Predictive analytics

