TRACKBOTT
Advanced AI Detection System

TRACKBOTT

THE AI-POWERED VISUAL INSPECTION SYSTEM

Unlock the potential of advanced AI with our visual inspection system, reducing human error and transforming the efficiency of your plant.

Evolutionary AI for Visual Inspection

TRACKBOTT employs AI to detect and recognize items during visual inspection. As the system operates, the AI evolves, continuously enhancing its capabilities. With TRACKBOTT, there's no need to pre-register product types; the self-learning AI adapts and improves accuracy with each inspection.

Reduce Dependence on Specific Personnel

Empower TRACKBOTT to learn precise criteria for identifying failing products on the inspection line. This ensures consistent results, eliminating variations in inspection criteria, slow response times, and decreased accuracy due to staff fatigue.

Comprehensive Data Logging for Future Resolution

TRACKBOTT maintains a detailed log of all inspected items, facilitating swift complaint handling and resolution. The logged data not only supports issue resolution but also contributes to upholding a consistent quality standard, preventing complaints from arising.

How TRACKBOTT Differs from Conventional Machine Learning AI :

TRACKBOTT utilizes a neural network to autonomously learn product attributes from data, enabling continuous improvements in the system over time.
This autonomous learning approach distinguishes TRACKBOTT from conventional machine learning AI.

Missing Item Detection

Conducts inspections on plastic containers of oval, square, and rectangular shapes to identify missing items, guaranteeing the completeness of assembled products, such as lunch boxes.

Foreign Matter Detection

Examines reusable containers on lunch box production lines to identify and eliminate foreign matter contamination. The system is proficient in recognizing contaminants such as hair, plastic, wood, aluminum, vinyl shards, onion skin, and other debris.

Inspection of Finished and Packed Products on the Shipping Line

Deployable at manufacturing plants, this system inspects finished goods packed in cardboard before shipment. It scrutinizes cardboard boxes for potential issues, including flap errors, dents, damage, staining, debris, and more.

Printed Label Error Checking

Compares data with the actual text on labels to ensure conformity with the original. Labels are generated from scans of actual label data, allowing for accurate and comprehensive error checking.

Fruit and Vegetable Defect Testing

The system is pre-trained to identify defects in produce, such as tomatoes, apples, and peaches. It calculates the defect rate based on matching items across these lanes. Upon detecting a defective product, it triggers a warning light and adjusts the lane speed accordingly.

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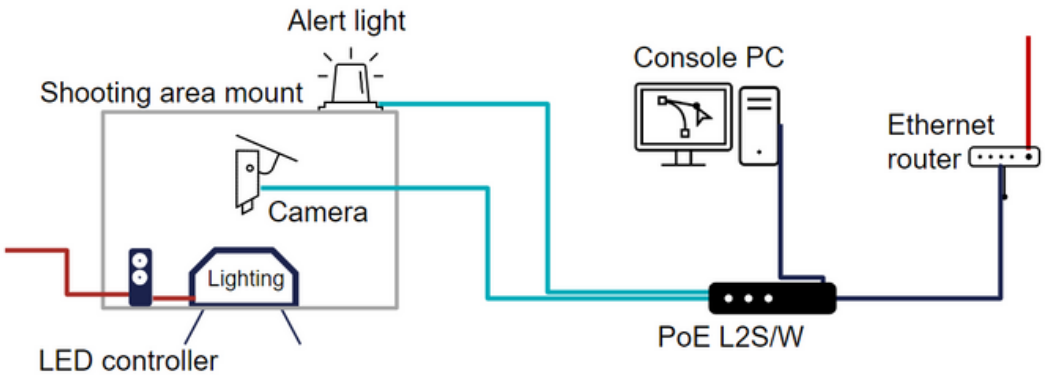
Equipment

TRACKBOTT comprises a camera connected to an AI console. Footage of the item under visual inspection is utilized to recognize, detect, and make decisions based on specific parameters.

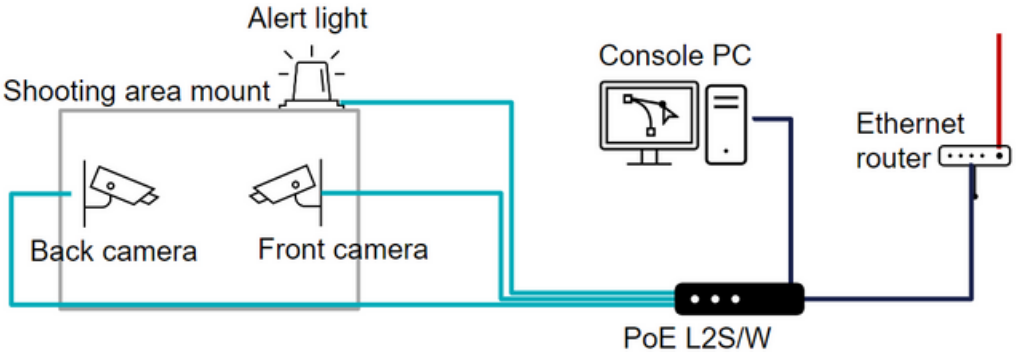
Assembly for Missing items/foreign matter contamination use case



Missing Items/Foreign Matter Contamination:

- A single AI console can efficiently manage up to four cameras (four lanes) simultaneously.
- The system's maximum processing capacity per lane is 1,500 items per hour.
- Primarily, the system signals issues through a warning light. When integrated with a culling lane, it can also transmit the necessary signal to the culling lane to achieve the desired outcome.

Finished products inspection line



Finished Products Inspection:

- A single AI console efficiently manages two cameras per lane.
- The system's maximum processing capacity per lane is 1,500 items per hour.
- The system typically signals issues through a warning light. When integrated with a culling lane, it can also transmit the necessary signal to the culling lane to achieve the desired outcome.

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Pricing

Our basic fee structure includes:

- Initial installation (equipment cost + setup cost)
- AI license fee (monthly)
- Maintenance support fee (monthly)

We also provide volume discounts based on the system's size, and our pricing is negotiable to accommodate your specific needs.

Basic monitoring equipment	Additional monitoring equipment	Basic monitoring license	Additional monitoring license
Single location to monitor	**One additional location to monitor**	**Single location to monitor up to 4 lanes**	**One additional location to monitor**
$23,500.00	**$11,500.00**	**$1,750/ month**	**$1,150/ month**
Installation and other expenses $1,500 (in addition to the above)	Installation and other expenses $1,500 (in addition to the above)	Maintenance/support fees of $150 (in addition to the above)	No additional maintenance/support fees
Varies based on area /installation location	Varies based on area /installation location		
- 1 AI console - 1 set of networking equipment - 1 set of monitoring camera + lens - 1 set of LED lighting + controller - 1 alert light - 1 mounting system	- 1 set of monitoring camera + lens - 1 set of LED lighting + controller - 1 alert light - 1 mounting system	- Major version updates to AI software - Checks detection results against the cloud database - AI console hardware maintenance - Remote operational support	- Major version updates to AI software - Checks detection results against the cloud database - Remote operational support

*Note that pricing may vary depending on items being inspected and the configuration of lanes at your plant

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Initial workflow for system deployment

Client
- Provide blueprints describing the plant's approximate size and allocation of space.
- Share photos/videos of the food and pre-packaging production lines.

TRACKBOTT
Utilizing the provided photos and videos, we submit questions about each location's required size and other parameters.

Client
Provide answers to the questions posed above

Online meeting scheduling (between client & Trackbott)

TRACKBOTT
Provide a tentative estimate.

Client
Approve the tentative estimate.

TRACKBOTT
Conduct the initial inspection of the plant, confirming inspection parameters such as position, dimensions, and location of power sources, etc.

TRACKBOTT
Provide a final quotation and schedule in advance of the system installation.

Client
Approve and confirm the final quotation and schedule.

TRACKBOTT
- TRACKBOTT staff visit your plant to commence system installation.
- Install mounting equipment (cameras + lighting).
- Connect computers to cameras & lighting via WiFi and configure lights.
- Conduct camera testing.
- Load the system with match patterns such as missing items, foreign matter, incomplete products, etc.
- Test the system's ability to produce matches based on the patterns for accuracy improvement.
- Activate AI visual inspection for actual lines in operation.

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FAQ

Q. To what extent can TRACKBOTT perform visual inspections?

A. TRACKBOTT can cover the same area as visible to the human eye.
It's important to note that it cannot inspect the interiors of objects, underneath them, or within the camera's blind spots.

Q. What types of industries tend to use TRACKBOTT?

A. TRACKBOTT is predominantly utilized in the manufacturing industry.
It is deployed on foreign matter contamination inspection lines, missing items inspection lines, beverage manufacturing lines (inspecting quantity dispensed, etc.), and finished product picking lines, among other applications.

Q. What types of products is the system practical for?

A. TRACKBOTT is effective for products that meet the following criteria:
1. Can the product be seen/detected by the human eye?
2. Is the inspection environment/items consistent (lighting, open sight lines, etc.)?
If your plant and products meet these conditions, TRACKBOTT is well-equipped to provide effective inspections.

Q. Can we terminate our agreement while our subscription is underway?

A. The minimum term of a TRACKBOTT contract is two years.
If two years have elapsed, you have the flexibility to terminate at any time.
*In the event of termination before two years, you will be billed the cumulative sum of license fees and support fees for the remaining months until the two-year term has been completed.

Q. Do you provide ongoing operational support?

A. Yes, we offer remote support through the AI console to better assist clients with immediate requests. This support covers assistance with using the system and addressing any questions or concerns.

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