Cannon Automata



InsAlde Vision

Real-time defect detection







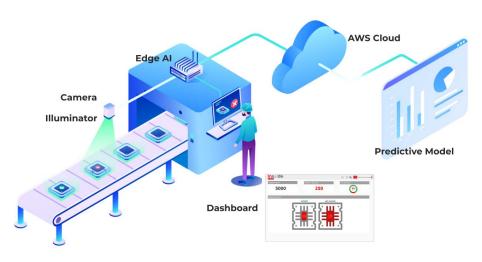
Flawless production control

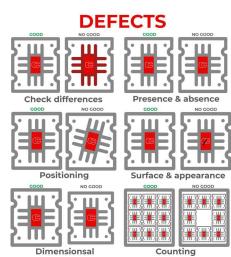
We developed InsAlde Vision as a dedicated application for detecting defects. Using Al applied to machine vision allows companies to solve complex industrial problems to ensure reliable and precise production control.

This fully-automated solution monitors and identifies nonconformities in real-time, constantly improving production processes and flexibly adapting to each sector and company's specific needs. Compared to traditional methods, InsAlde Vision autonomously detects the presence of defects that could not be seen before.

Our innovative system is easy to train and validate: the model trains on compliant parts, thus identifying anomalies that deviate from what is acceptable.

Our application handles a wide variety of product defects:





Machine vision and AI

A complete kit for consistent quality

Camera

Equipped with Global Shutter CMOS sensors, a GigE Vision interface and 8 megapixel resolution, our solution is ideal for capturing fast-moving objects with excellent image quality. The camera is robust, compact and highly adaptable to changing light conditions and minimizes motion blur in fast image processing applications, with exposure times starting from 1 µs.

Illuminator

Our continuous-use diffused light system, on axis with the camera, eliminates reflections from the lighting rig, ensuring optimal photographic capture.

Edge Al

Images are processed and classified locally by our Edge AI PC, a high-performance system with an Nvidia Jetson Orin NX module based on Linux. This solution guarantees high processing performance through its processor with a 64-bit NVIDIA ARM Cortex CPU and 32-core Tensor GPU.

AWS Cloud

Before operation, the model is trained and verified on the AWS platform. This optimizes the parameters with the aim of making increasingly accurate predictions. Once ready, it is locally installed on our Edge AI via license.

Dashboard

Information from Edge AI can be viewed from web browsers through simple and intuitive dashboards, providing you constant control over the process and its products to ensure maximum quality. The package can be integrated with our MES Quality module.

Why choose InsAlde Vision

- Makes control uniform for each product
- Improves product quality
- Increases production performance
- Reduces waste and errors
- Scalable for larger production volumes

We are part of the Cannon Group, an international machinery manufacturing holding, which comprises more than 30 companies and branches worldwide.

Dedication to continuous innovation and a solid commitment to reducing the ecological footprint are the drivers of all the Group's technology developments, with a clear focus on energy efficiency, resource consumption reduction, and emissions reduction.

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