

AI Defect Detection for Real-Time Manufacturing Quality

iWave ZeroDefects

iWave ZeroDefects delivers AI-powered defect classification and anomaly detection to transform quality control in manufacturing. Addressing the limitations of manual inspection and rigid rule-based systems, it enables real-time identification of known and unknown defects with high accuracy and consistency.

By continuously learning from production data, the solution adapts to evolving defect patterns while reducing false rejects and defect leakage. Optimized with the OpenVINO™ toolkit and running on Intel® Core™ Ultra processors, it accelerates inference on CPUs and integrated GPUs for efficient, low-latency edge deployment. This enables immediate detection, faster root cause analysis, and reduced reliance on manual review.

With actionable analytics and structured defect insights, manufacturers can improve yield, reduce scrap, and drive data-driven process optimization at scale.



*iWave ZeroDefects transforms quality control with **real-time AI defect detection and data-driven process optimization.***

Key Intel-Enabled Features



Real-Time Inspection



Defect Accuracy Boost



Adaptive Anomaly Scan



Scalable Edge AI Ops

Accelerate Business Transformation with Optimized, Ready-to-Deploy, Intel-Powered AI Partner Solution

- Uses the OpenVINO™ toolkit to enable low-latency AI inference at edge
- Combines AI models with Intel® CPUs and GPUs to improve detection precision
- Leverages the OpenVINO™ toolkit and PyTorch for dynamic anomaly detection
- Runs on Intel® Core™ Ultra processors for efficient, real-time edge deployment

Intel Products and Technologies

- [Intel® Core™ Ultra Processors](#)
- [OpenVINO™ Toolkit](#)

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Ordering Guidance: [iWave Platform](#)

Country/Geo: United States; Canada; Europe, Middle East, and Africa; Asia Pacific, Japan, Australia & New Zealand; People's Republic of China

Edge Verticals: Manufacturing

Edge Use Cases: Quality Control; Anomaly Detection; Quality Inspection; Operational Diagnostics; Predictive Maintenance; Operational Diagnostics

Learn more:

- [Innowave Tech Website](#)