

Smarter Inspections. Superior Results.

CENDIANT® INSPECTION SOFTWARE SOLUTION

Musashi Al's Cendiant® inspection solution combines deep learning software, inspection hardware, and real-time insights to automate the inspection of complex parts.



 \checkmark

DETECT

surface defects quickly

V 1

VISUALIZE

data in real-time

 \checkmark

SIMPLIFY

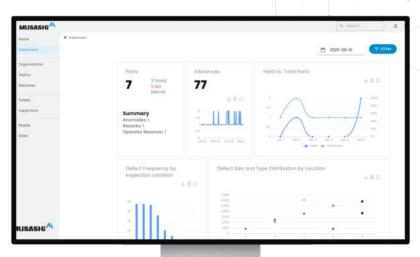
hardware maintenance



REDUCE

your cost of quality





KEY SYSTEM ADVANTAGES



Part Traceability



Zero Quality Escape



Lower Cost of Quality



24/7 Engineer in the Loop Support



Data Safety & Security



Advanced Al Algorithms

CENDIANT® INSPECT

One Platform. Complete Visibility & Control.

Whether retrofitted into existing lines or delivered as new equipment, **Cendiant®** is a turnkey solution for manufactuers looking for the precision, speed, and visibility needed to develop proactive, data-driven quality control strategies.

- · Detects defects, missing features, misassemblies, and more
- · Allows for local data storage or cloud connection
- Prevents quality escapes with high-performing AI detection

CENDIANT® QUALITY INSIGHTS

Secure Inspection Data at Your Fingertips

- · Cloud-hosted dashboard for part history and defect trends
- Real-time production monitoring alerts & custom notifications
- Secure access from any device with encrypted exportable data

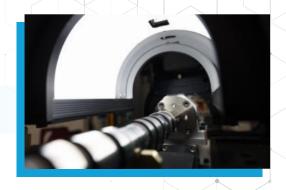
ACTIVE i® DEEP LEARNING ALGORITHM PIPELINE



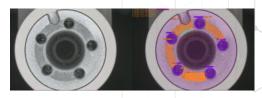
Training begins with defect free data, enabling anomaly detection. Defects can then be identified for instance segmentation.



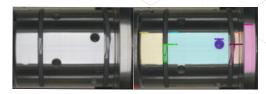
	Anomaly Detection	Defect Detection & Classification
Data Requirements	20-30 Good Samples	50-100 Samples Per Defect Class
Defect Detection	Yes	Yes
Defect Classfication	No	Yes
Gauging or Measurements	No	Yes



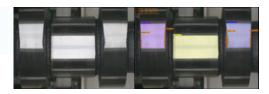
DEFECT EXAMPLES



Surface Roughness



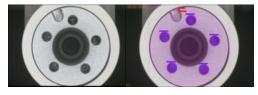
Misassembled



Underfill



Crack



Dent



Porosity

CQI GEN 2

The New Standard in Automated Inspection

With faster-learning AI models, modular hardware, and a new proprietary control system, **Cendiant® Quality Insights Gen 2** enables quicker deployment, lower hardware costs, and seamless scalability.





UP TO 30%

cost reductions in the AIS



2X FASTER

time to value



EASY MAINTENANCE

and expert support



Gen 2 gives manufacturers a standardized inspection subsystem, the core Al-driven portion within the larger automated inspection cell into a modular design.

This approach streamlines deployment, reduces cost and system footprint, and provides flexibility to integrate with their preferred PLCs, safety systems, and robot brands.

DASHBOARD FEATURES



Daily Dashboard

Customizable charts and graphs to capturing output of the last 24 hours of quality inspection.



Customer Support

Real-time communication with inspection experts over the cloud.



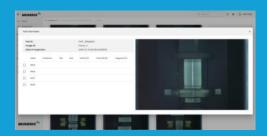
Image Gallery

Access all inspection images (defect and defect free parts)



Notifications

Fully customizable, end users can configure for specific defects and statuses.



Inspection Log

A detailed record of all part inspections performed by the system. Flag and comment on inspection images.



Hardware Health

Track the health of critical system components including cameras and Al processing units.

INTEGRATION PATH OPTIONS



Turnkey System

Musashi Al delivers a complete inspection system, partnering with your automation provider to supply and commission a fully integrated inspection cell.



Internal Integration

Musashi Al provides the inspection substation, while your internal automation team handles integration with existing equipment or production cells.



Local Integration Partner

Musashi Al provides the inspection substation and works alongside your preferred local automation partner to integrate the system into your cell.

SYSTEM BENEFITS

Simplified Integration

Smarter Al Models

Lower Cost of Ownership

Edge + Cloud Continuity

Enterprise Connectivity

Enhanced User Experience

Fast-learning AI models, modular hardware, and a single IPC streamline onboarding, reduce complexity, and cut deployment time and cost.

More precise and efficient by focusing on key inspection regions, with reusable model libraries that reduce engineering effort.

Standardized, repeatable designs and generic PCBA cut hardware costs while improving scalability.

Run systems locally or connected to the cloud, with up to 3–4 weeks of data stored onsite to ensure production continuity.

API integration with ERP, MRP, and QMS platforms ensures quality data flows seamlessly across systems.

Optimized UI, configurable options, and enhanced customer support through ticketing workflows for easier adoption and ongoing support.

PLATFORM SECURITY



Regular Security Audits

Continuous monitoring, patching, and vulnerability testing

ISO 27001 Certified CSA Certified



Role-Based Access

Limit user permissions and maintain data integrity





Entrusted data encryption & certifications





STANDARD MACHINE DESIGNS (AUTOMOTIVE EXAMPLES)



	SPECIFICATIONS	SHAFT INSPECTOR	GEAR INSPECTOR	•
PPLICATIONS	Parts	Camshaft, Balance Shaft, Drive Shaft, Spline Shaft	Transmission, Differential, Bearings, Clutch Hubs, Planetary Assemblies	

IMAGING	Optics	Complete customization depending on part type and inspection requirements
	Inspection Software	Cendiant® Inspect
	Al Accuracy	Anomaly detection as small as 50 microns without magnification, 100% True Detection Rate, <5% Over Detection Rate
	Al Training	Employed Active i® for deep learning. See training requirements below. Instance Segmentation: 100 Defective Samples Per Defect Class

ACHINE SPECS	Integration	Inline, Offline, End-of-Line
	Supported Control Systems	Keyence, Mitsubishi, Allen Bradley, Siemens, ToyoPUC
	Supported Safety	OSHA, UL, NFPA-70, NEC, NFPA-79, ANSI B11.0, CSA
	Certifications	
MA	Power Supply	15-amp, 120-volt outlet

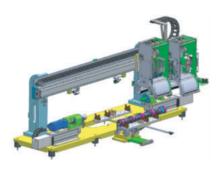
CUSTOM MACHINE DESIGNS

Applications

Automotive: Powertrain, Chassis, Electronics, Trim, Fuel and Exhaust, Safety-critical components Electronics Assemblies, Oil & Gas Fittings, Pipes and Assemblies, Medical Devices and Components, Food Processes, Aerospace.

DON'T SEE YOUR PART TYPE? Call to learn more about our customizations options.

HARDWARE OPTIONS



Standard Unit

A fully integrated package designed according to customer specifications. This solution is developed, installed, and seamlessly integrated into the existing system



Standard Platform

A fully integrated package designed according to customer specifications. This solution is developed, installed, and seamlessly integrated into the existing system



Turnkey Solution

A fully integrated package designed according to customer specifications. This solution is developed, installed, and seamlessly integrated into the existing system



WHY MUSASHI AI

Built by Manufacturers, for Manufacturers.

Founded in 2019 by Musashi Auto Parts, Musashi Al was created to keep pace with the high-volume, high-precision demands of modern manufacturing.

Today, our inspection ecosystem supports global leaders across major manufacturing organizations.



PARTNERSHIP HIGHLIGHTS

Enjoy turnkey solutions and effortless innovation as Musashi Al experts manage your model with ongoing iterations and programming support.



Hands-on Engineering Support



Continuous Al Improvement



Long-term Scalability & Value



Turnkey AIS Solutions

CENDIANT® INDUSTRY APPLICATIONS



Electronics



Oil & Gas



Food & Beverage

Discover how **Cendiant**® could apply to part production in your industry today.



Heavy Industries



Medical

BOOK A CONSULTATION

Our experts will assess your parts, processes, and site, then demo the Musashi Al ecosystem to give you a detailed project proposal with timeline and costs.

With the Musashi AI team, get long-term access to hardware integration and software support. Stay focused on what you do best - we'll handle the rest!

