

Spot Fusion

Spot Weld Inspection System

Spot Welding Inspection

100% inspected spot welds
Completely **automated**
Real-time reports



Strokmatic[®]
Innovation Technology

Transforming the Automotive Industry's Future

Pioneering Automation

With **25 years** of excellence in the industrial sector, **Strokmatic** stands out as a **leader** in automation solutions. Since **2016**, it has been expanding its horizons with a renewed focus on creating innovations in artificial intelligence for **industrial manufacturing**.

Introducing Spot Fusion

Our latest advancement, Spot Fusion, is a revolutionary solution for **online** spot welding inspection. This cutting-edge system **ensures** comprehensive and accurate inspection, significantly enhancing the quality of automotive manufacturing while **reducing operational costs**.

Transforming Spot Welding Inspection

Traditionally, resistance spot weld inspection is performed manually using methods such as hammer and chisel or ultrasound, depending on expertise and limited to sampling. Globally, with millions of vehicles and billions of welds produced annually, only **1% of joints are inspected**.

With Spot Fusion, That Has Changed

- 🕒 **Complete Inspection:** Evaluate 100% of the welds in line
- 🎯 **Advanced Precision:** Achieve accuracy of up to 98%
- 🔧 **Superior Quality:** Improve the quality and reliability of manufactured vehicles
- ⚙️ **Increased Production:** Reduce takt time by decreasing the welding cycle
- 💰 **Cost Reduction:** Minimize operational costs and enhance efficiency

Elevate your spot welding inspection with Spot Fusion innovative technology and take the quality of your automotive production to new heights.

Challenges in Spot Welding

- RSW Inspection
- Correct Parameterization
- Energy Savings
- Electrode Caps Savings
- Reduction of Spot Welds
- Scrap Reduction

Spot Fusion

Spot Weld Inspection System

- 100% Inspection of Spot Welds
- Increased Production
- Reduced Operational Costs
- Parameter Optimization
- Decreased Need for Manual Inspections
- Enhanced Quality of Body in White
- Detailed and Objective Evaluation of Welds
- Detection, Classification, and Visualization of Defects
- Energy and Electrode Caps Savings
- Reduction in CO₂ Emissions

On-Site Solution

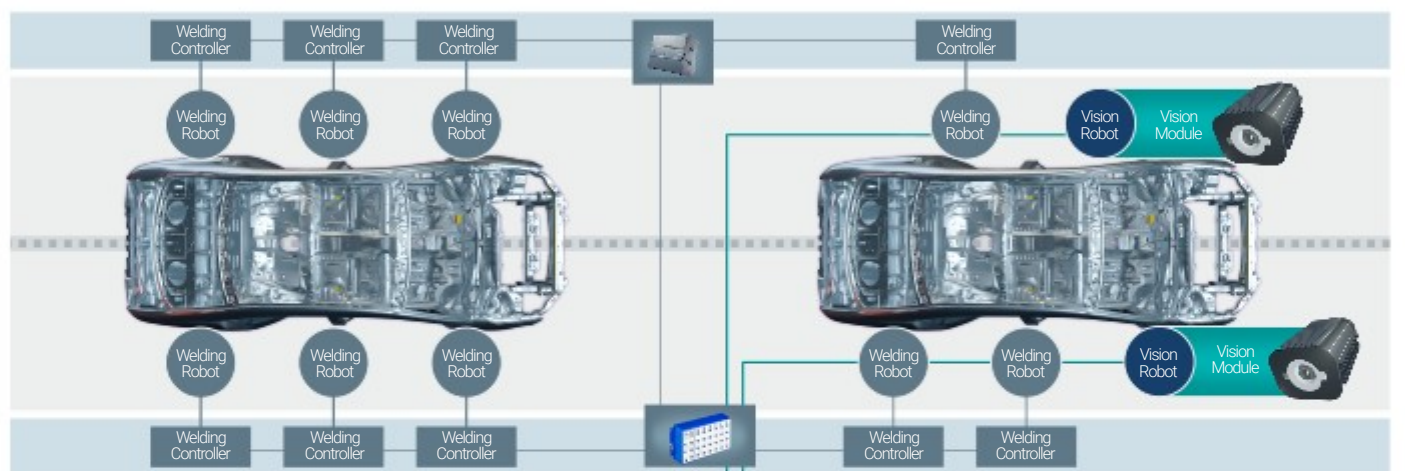


Experience excellence in spot welding inspection with Spot Fusion, a robust and flexible solution from Strokmatic Innovation. Designed to inspect 100% of welds, Spot Fusion merges proven hardware with advanced software, delivering unmatched precision in real-time.

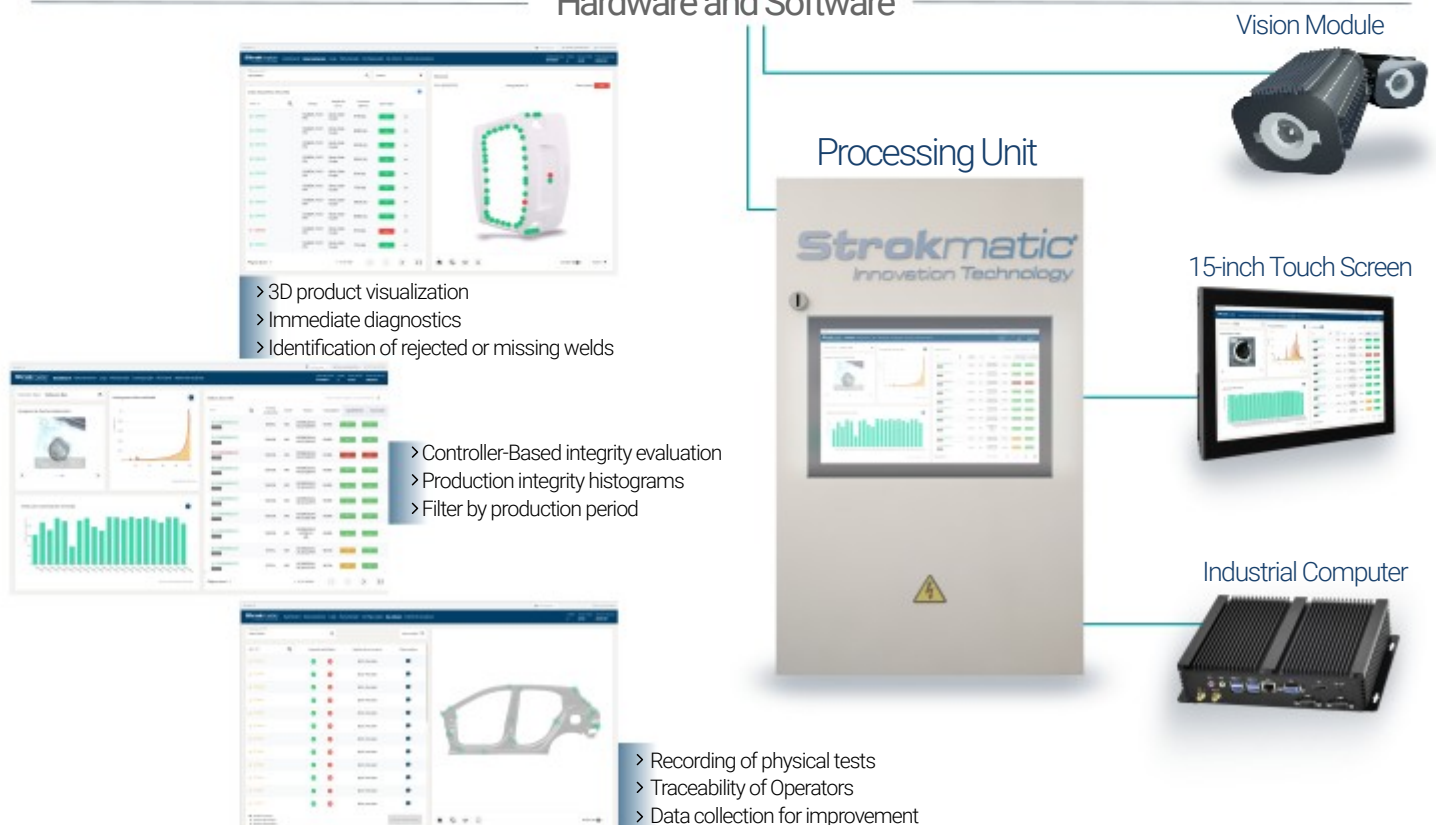
The system provides high accuracy in defect detection, enhancing production quality and efficiency. With rapid data processing, comprehensive analytical reports, and real-time updates, Spot Fusion is modular and customizable, adapting to your evolving needs.

Its modular concept allows you to start with a foundational system and expand as necessary. Easy integration with hardware and technology, including deep learning models for multi-stage production classification, ensures the best detection rates.

Installation Topology



Hardware and Software



Technical Features

-  **Integration and Data Collection:** Welding controllers from different manufacturers
-  **Real-Time Processing:** Up to 420 spot welds per minute
-  **Communication with Automation Network:** EtherNet/IP, Ethernet, DeviceNet, PROFINET
-  **Storage Capacity:** Data from months of production
-  **Compliance Reporting:** Customized to customer quality criteria
-  **Vision Module:** IP65 with internal processing, auto-adjustable lighting, and distance calibrator
-  **System Configuration and Secure Data Visualization:** Dedicated Spot Fusion software
-  **Structural Integrity Assessment of Spot Welds:** Using deep learning models
-  **Power Supply:** 110/220V, 50/60Hz
-  **Certifications:** CE and UL

Specialized Support

Strokmatic excels in the industrial sector by providing artificial intelligence solutions aimed at total quality in manufacturing processes. With Spot Fusion, you gain not only advanced hardware and software but also benefit from our deep expertise and specialized support. Our extensive experience allows us to offer optimized and cost-effective solutions tailored to meet your technological needs.

We offer global support:

Phone

E-mail

Remote Access

On-Site Visits

Training



Trust **Strokmatic** to Ensure Continuous Value and **Support** Over Time

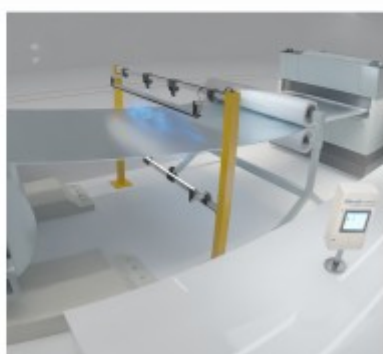
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Explore Other Solutions



VisionKing[®] Surface Inspection System Underbody

In final assembly, it is essential to ensure that all parts and components of the vehicle's underbody are correctly assembled. The absence of any item can lead to critical failures, compromising vehicle performance. To ensure **perfect large-scale assembly**, VisionKing offers **precise checks**, coupled with **increased speed and productivity on the assembly line**.



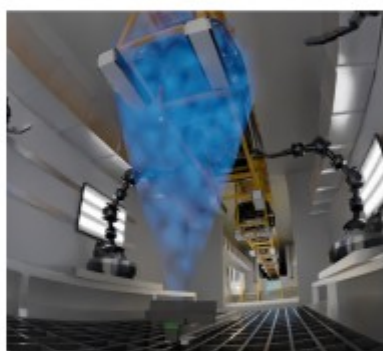
VisionKing[®] Surface Inspection System Steel Coil

Coils supplied by steel manufacturers, which feed stamping lines for body panel production, often exhibit defects such as lumps, cracks, warps, and coating failures. **VisionKing** addresses these issues by **ensuring that only defect-free panels** are cut. This not only **eliminates** production process failures but also **prevents damage to the stamping tools**, ensuring **quality and efficiency** in component manufacturing.



VisionKing[®] Surface Inspection System Body

Ensuring a flawless automotive surface at all stages of production is essential for delivering a visually perfect vehicle. **VisionKing** is a versatile system applicable **from stamping to primer painting**. It provides significant increases in **productivity** and **ensures superior quality**, fully meeting customer visual expectations.



VisionKing[®] Surface Inspection System Adhesive & Sealant

The structural integrity of the car body and its sealing against air and water are crucial for user satisfaction. Assessing the proper application of these materials during production is a complex task that requires rigorous controls and frequent inspections, often resulting in extensive rework campaigns. **VisionKing** supports manufacturers in the Body and Paint Shop phases, **eliminating deposition failures** and **optimizing the use** of these valuable materials.

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