



**eines**

**VISION SYSTEMS**

*A Konica Minolta Company*

# Wheel & Tire Solutions

Automatic Quality Control  
for Automotive Sector

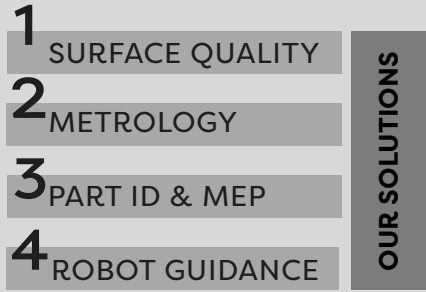
Make your plant

**SMART**

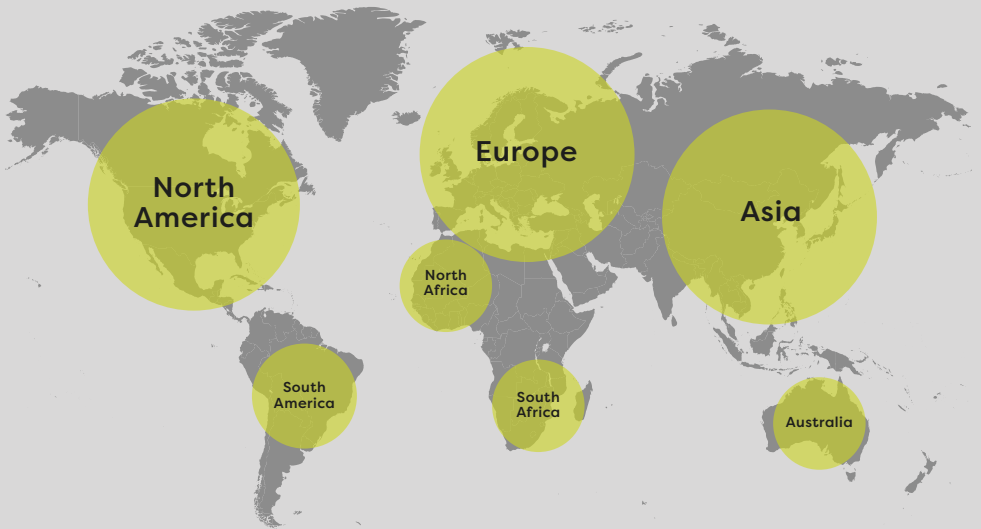
# WHO ARE WE?

We are a leading provider of advanced machine vision solutions, specializing in the development and implementation of cutting-edge technologies for automated quality inspection and manufacturing processes.

With a strong focus on innovation, precision, and reliability, we offer a comprehensive range of products and services designed to enhance productivity, ensure product quality, and reduce operational costs across various industries.



By leveraging state-of-the-art imaging techniques and artificial intelligence, we are at the forefront of transforming industrial automation, delivering customized solutions that meet the unique needs of each client.



Make your plant  
SMART

# Eines Rim Surface Inspector



100% In-line  
Inspection



High Accuracy with Deep  
Learning Technology



Checking of the  
Inside of the Spokes



Flexibility &  
Small Footprint



Data Analysis &  
Traceability



Cost Effective &  
Low Maintenance



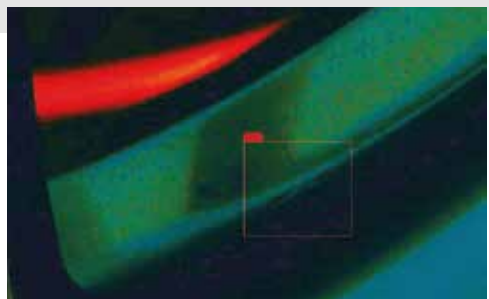
## | Technical Concept

The proposed system is designed for a moving production line, requiring only a centering device and a rotating motor for seamless integration. It is fully adaptable to your existing setup. Alternatively, a semi-automatic end-of-line system is also available, where an operator places the rim on the rotator for inspection.

The special light and cameras would need to be positioned accordingly, housed in a custom enclosure that isolates the inspection area from ambient light, ensuring that it does not interfere with the analysis.

The cameras take the images, which are then processed and analyzed with proprietary algorithms based on deep learning. The defects detected are of very small size, and even detectable in internal areas.

The system is designed for easy access to hardware components, such as the cameras, allowing for quick maintenance when necessary.



# Eines In-line Automatic DOT Code Reader



100% Production  
In-line Inspection



Check both  
Tyre Sides



Data Analysis &  
Traceability

## OCR

OCR based on Deep  
Learning Technology



Flexibility &  
Small Footprint



Cost Effective &  
Low Maintenance



## | Technical Concept

At the core of the AutoDOT Reader's technology is **high-resolution imaging** combined with **Optical Character Recognition based on deep learning**.



The AutoDOT Reader brings a new level of innovation to tire inspection, offering a hassle-free solution that ensures every tire on your production line is thoroughly checked in **real-time**, without slowing down the process.

What's more, it doesn't just check the top of the tire — **it inspects both sides**, using a clever design with either a translucent conveyor or by adjusting the rollers so cameras can see underneath.

The system is also capable of validating tire symbols if required. Feedback on the inspection is immediate, and displayed in a visual way.

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DOT : 12XAB 2B H0  
Week: 3  
Year: 2024



DOT Reader Hand- Held Device

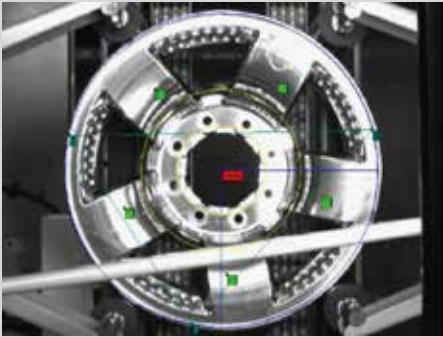


## Other Wheel & Tire Solutions

### | 3D Robot Guidance

We adapt our Robot Guidance solution to reach the highest precision in assembly.

- Valve Insertion
- RIM Loading
- and much more...



### | Parts Identification

The solution is based on years of tire and wheel inspection installations at multiple customer sites around the world.

- RIM Identification System
- Part Identification During Balancing
- RIM Load

### | Error Proofing

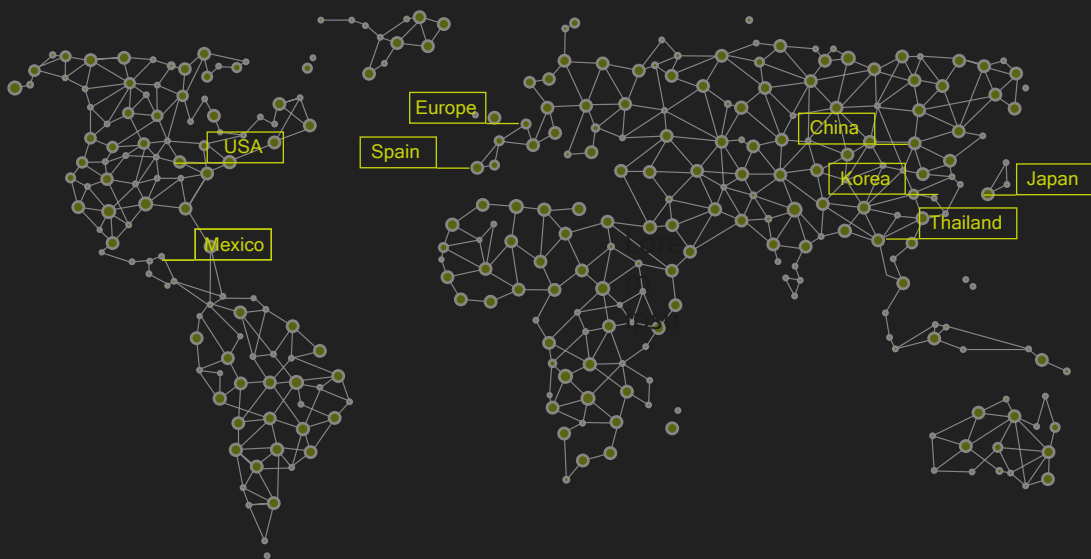
The system can check absence and presence of different components such as spare label confirmation.

Thanks to Artificial Vision, any new component to check can be configured at any moment.



### | Digitalization: Feedback and Reporting

All our systems provides real-time feedback, offering immediate visual data after each inspection. This instant reporting allows for quick corrective actions and ensures that any defects are addressed before the tire leaves the production line.



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