DESION

The DESION Company

DESION offers AI-based quality control systems for complex surfaces such as textiles. Our technology allows camera-based automation of quality assurance and sorting processes. Especially when the surfaces of the objects to be detected change highly dynamically. By evaluating images and image sequences our systems reliably detect materials, categories, defects and quality deviations. This results in a very fast and consistently high quality control. Our products are designed for immediate integration into your production and manufacturing processes and are designed according to the requirements of Industry 4.0 automation systems. We are specialized in camera-based, artificial intelligence detection of features such as: different material texture, cracks, holes or contamination. These are classified by our systems even at high speed to ensure maximum efficiency. DESION was founded in 2020 as a spin-off of Fraunhofer IGD based in Darmstadt.

Our Service

The DESION Inspection Systems reliably and precisely recognize properties of complex objects and different materials in your production. We develop custom systems for your specific use case following industrial standards.

Seperation → Detection → Sorting

On request we master the whole process within our network.

DESION GMBH
CAMERA BASED INSPECTION SYSTEMS
FOR COMPLEX OBJECTS

Our portfolio includes:

- Adaptation of our products to your production
- Consulting and feasibility studies
- Custom software and hardware development

CONTACT

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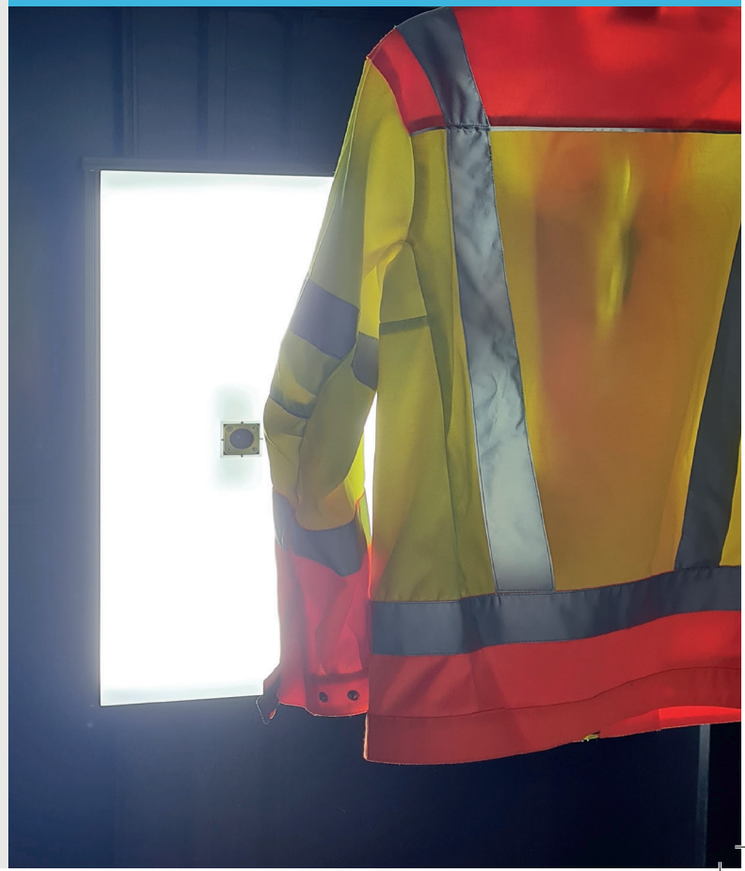
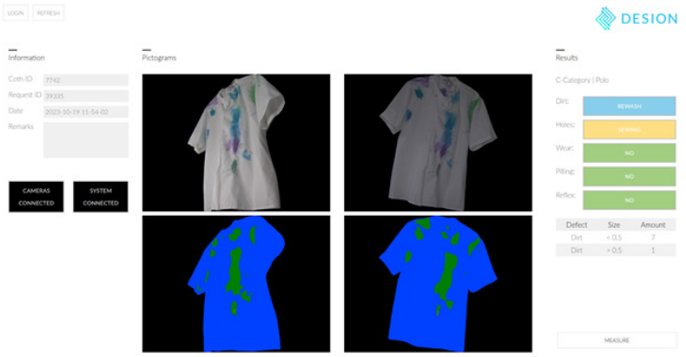
DESION NIPS

NORM INSPECTION SYSTEMS





NIPS defects detection

Workwear Inspection System

Quality control of workwear after washing plays a crucial role in ensuring customer satisfaction and safety. Our solution for automatic detection of textile defects makes it possible to fully automate this step. We thus offer consistent quality that meets the high standards of the market. The fully automated process control eliminates human errors and increases efficiency.

Integrated Optical Quality Control

Garments, after washing and finishing on individual hangers, pass through our recording station, where photos of the front and back are taken. After our software has analyzed the garment in real time, the result can be communicated directly to your control system, for example, and/or displayed on local screens for manual sorting. The results of the inspection are stored in the system – a valuable collection of data available to the customer to analyze and optimize the system, but also internal operations such as the washing process.

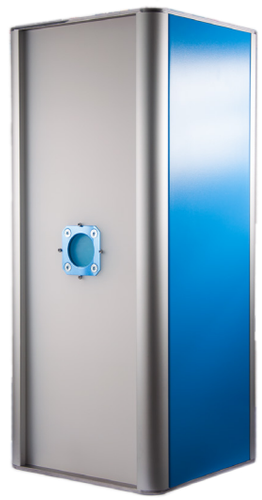
Defects Detection

Fiber defect

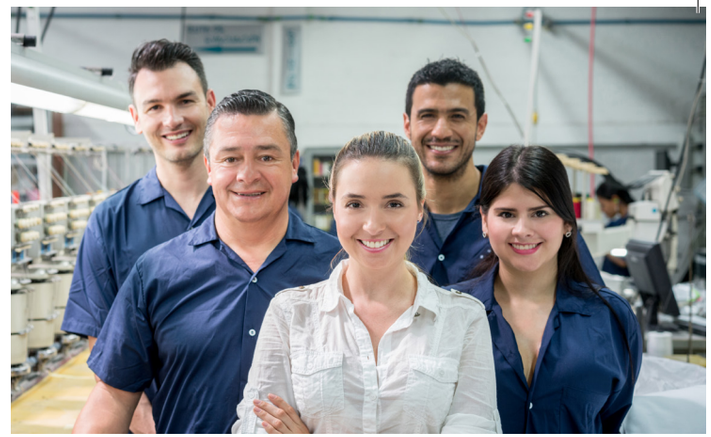
Holes & Tears

Stains

Pilling



Small footprint NIPS device



What Can it Detect?

Following characteristics can be detected by our system:

- Color deviation
- Reflective strips (including strip type & damages)
- Material types (e.g. different fibers, weaving)
- Clothing types
- Holes
- Different kind of stains
- Brightness deviation

What Can it Be applied for?

In addition to the washing textile industry, other industries can also benefit from our technology. NPS can be seamlessly embedded in existing systems and processes for advanced visual quality assurance.

Customized Hardware

NIPS is customized by us according to your specific requirements. Various equipment variants are available. Depending on your recording situation, we will put together a suitable system for you.