

## IN-SIGHT ViDi DETECT TOOL

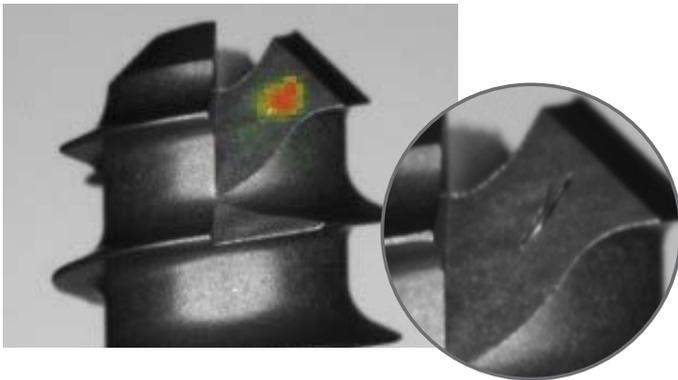
### Deep learning-based solution for defect detection

In-Sight® ViDi™ is a powerful deep learning software platform designed specifically for factory automation. Combining artificial intelligence (AI) with the power of In-Sight, In-Sight ViDi solves applications that are too difficult, complex, or expensive for traditional machine vision systems.

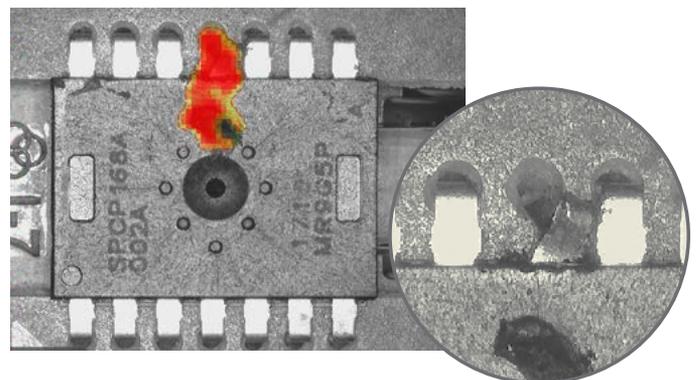
The ViDi Detect tool is used to detect anomalies and defects on a variety of complicated surfaces and backgrounds. It works by using a sample set of good images and learning the normal variation of the part. This allows the tool to detect a wide range of defects that do not need to be pre-defined at the time of training. This training technique is valuable in situations where it is difficult to collect images of defects, or if the failure modes are yet unknown.

In-Sight ViDi Detect can also be used to segment specific areas of an image. By teaching ViDi the regions of interest across the sample set, the tool learns to identify and highlight these areas. This can be used as a dynamic region of interest or mask, providing a unique method to simplify the vision solution.

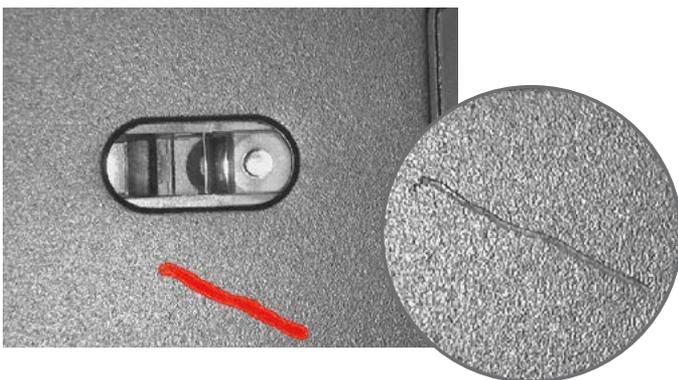
#### Detects imperfections on medical screws



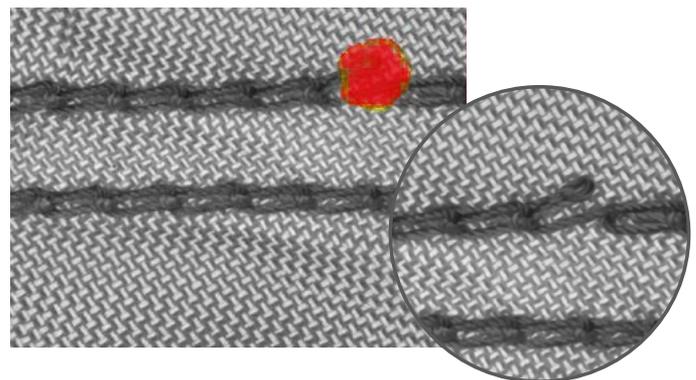
#### Identifies improper assemblies and solders



#### Detects scratches on final assemblies



#### Isolates weaving problems in textiles



# In-Sight D900 Vision System

The In-Sight ViDi Detect tool can be deployed on the In-Sight D900 vision system that is optimized to run deep learning applications without the need for a PC. This embedded solution helps factory automation customers easily solve challenging OCR, assembly verification, and defect detection projects that are often too difficult to program with traditional, rule-based machine vision tools. This deep learning solution also delivers reliable, fast, and consistent results not possible with human inspection.

## Powerful, modular smart camera

The In-Sight D900 is a highly-modular, IP67-rated vision system that includes field-changeable lighting, lenses, filters, and covers that can be customized to your exact application requirements. It also includes an embedded deep learning inference engine to solve complex applications at production line speeds.

## In-Sight spreadsheet guides application development

Deep learning applications are now accessible to non-programmers thanks to the intuitive In-Sight spreadsheet that simplifies application development and streamlines factory integration. It also provides easy access to machine vision and deep learning tools, combining the power of both traditional vision algorithms and artificial intelligence.



**In-Sight ViDi**

- Graphical User Interface
- Easy to Use
- All in One Solution

TRAIN →



**In-Sight ViDi**  
Training License

→ DEPLOY



**In-Sight D900**  
Vision System

**COGNEX**

Companies around the world rely on Cognex vision and barcode reading solutions to optimize quality, drive down costs and control traceability.

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