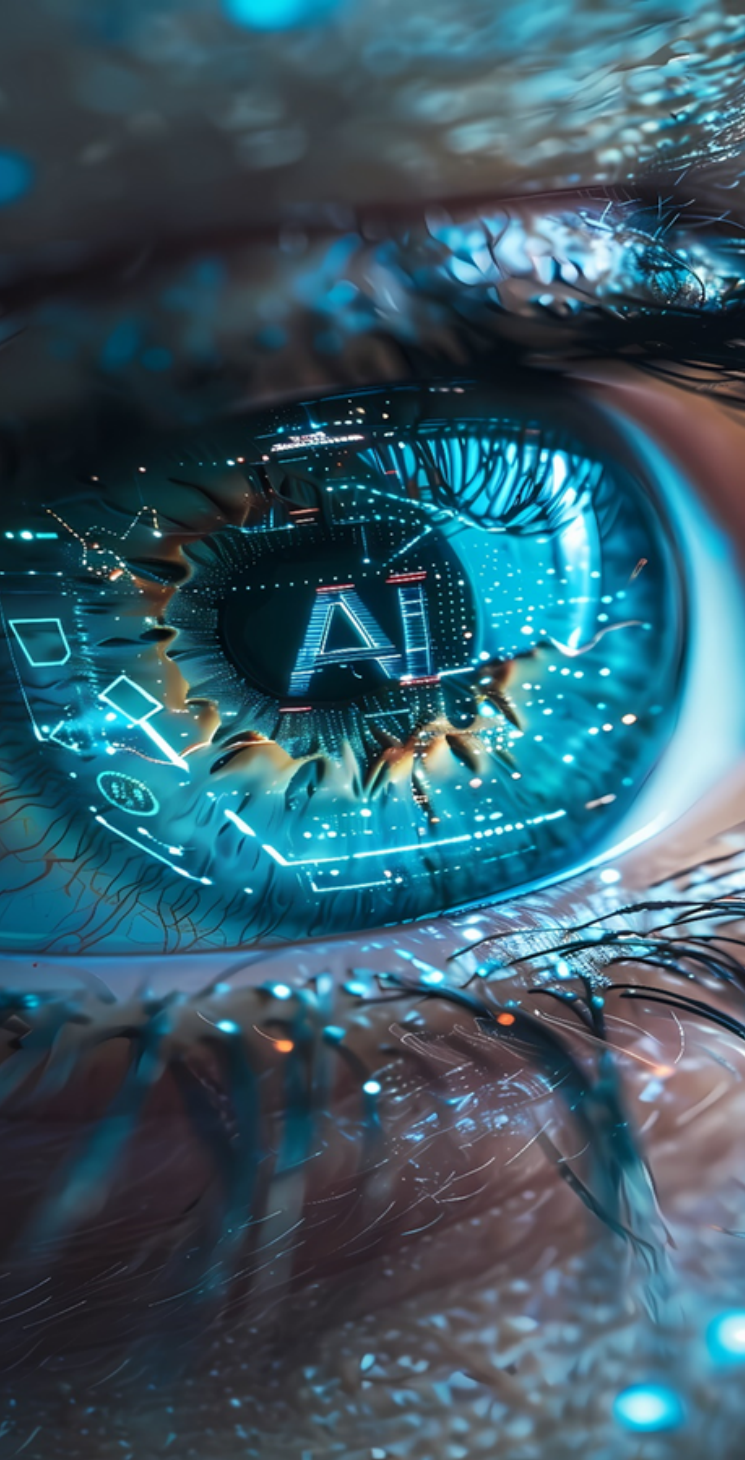




## Transforming Quality Control with AI Vision

**PixiQ, DAI's cutting-edge AI-powered visual inspection platform, is revolutionizing how industries approach quality control.**

PixiQ leverages advanced AI and ML models for real-time visual data analysis, moving beyond the limitations of human vision.

[www.dhvaniAI.com](http://www.dhvaniAI.com)

# PixlQ 2D Edge

## Leveraging AI for Manufacturing

### Key Capabilities

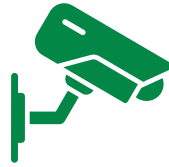
- Robust Edge Controller with built-in AI models
- Real-time quality and compliance analysis
- Plug & Play integration with Cameras and PLCs
- Customizable to specific parts/procedures.

### Applications

- **Surface Defect Detection:** Identify scratches, dents, discoloration, and surface imperfections with precision.
- **Dimensional Analysis:** Measure and verify component dimensions, tolerances, and geometric specifications.
- **Packaging Inspection:** Verify labels, seals, fill levels, and packaging integrity before shipment

### Minimum Defect Size Tested

- Surface Defect: 50 microns.
- MPI: 1 mm crack size.



#### Acquisition

Videos & Images captured from cameras



#### PixlQ Edge Controller

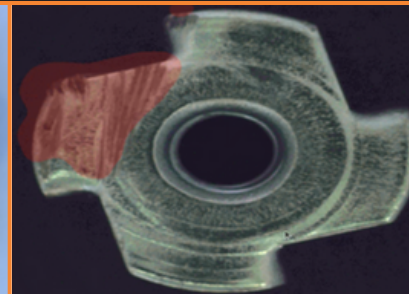
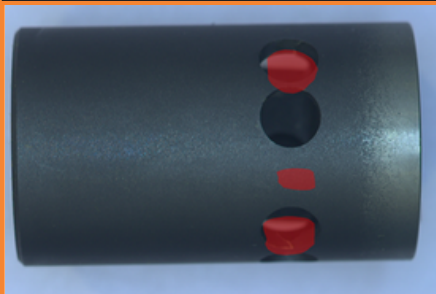
Images Analyzed by PixlQ controller



#### Reporting on PixlQ

Output shown on PixlQ UI software

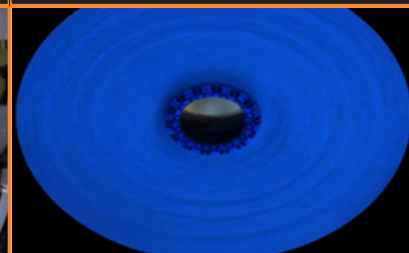
#### Surface defect detection on manufacturing parts



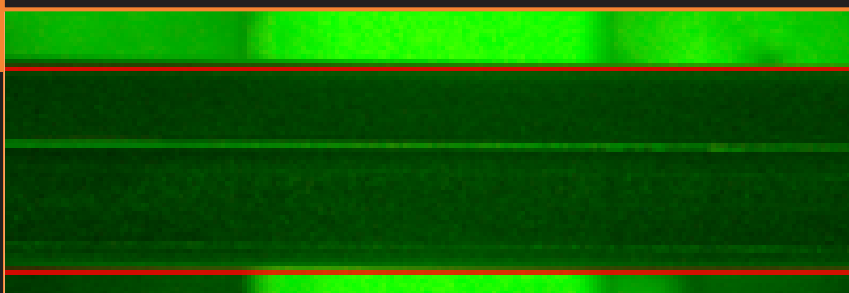
#### OCR Analysis of labels



#### Yarn corn analysis for defects

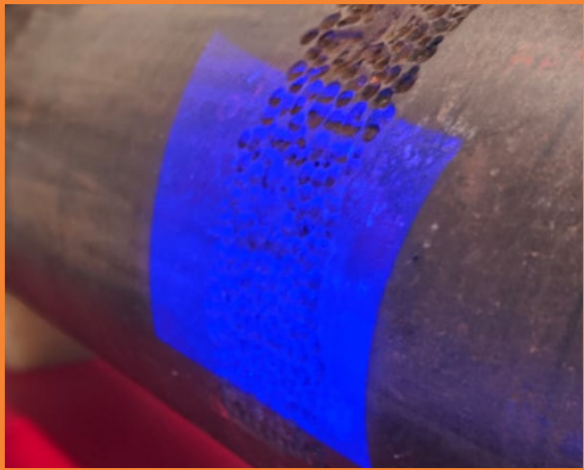


#### Crack detection in UV light from MPI



# PixlQ 3D Profiler

**Multi Dimensional Insights. Extract depth variations**



Provides full-area depth and profile mapping in one capture, eliminating the need for point-by-point laser scanning or placement of reference markers.

## Applications

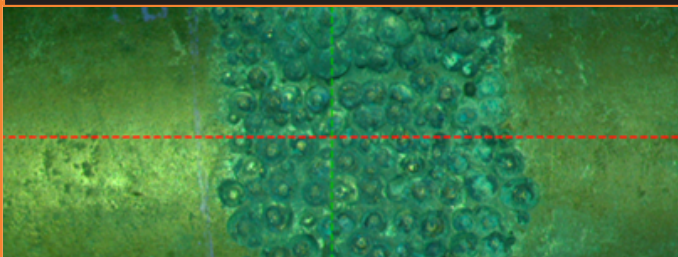
- Corrosion and pitting depth profile.
- Capture of dents and geometry variation.
- Reverse engineering a sample.

## PixlQ 3D Profiler Use Cases

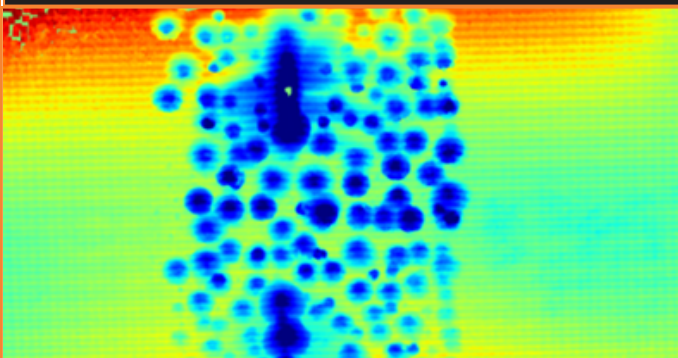
Sample with Pitting Corrosion



3D Point Cloud Data Captured by PixlQ 3D



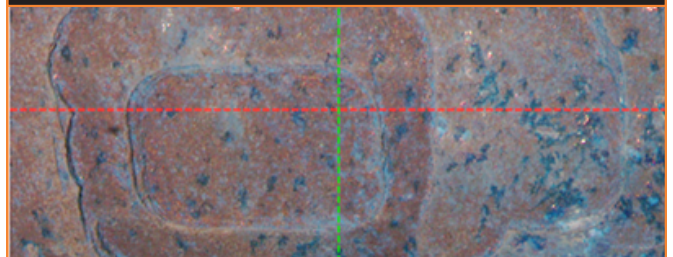
Depth variation from pitting calculated by PixlQ



Pipe Sample with Surface Corrosion



3D Point Cloud Data Captured by PixlQ 3D



Corrosion depth variation calculated by PixlQ

