Mech-MSR
3D Measurement and Inspection Software

For high-precision measurement and inspection

Easy-to-Use GUI Design

Create measurement solutions with an intuitive interface and configuration tools in a fast and easy way, even for those without expert 3D vision knowledge and experience.

Robust Measurement Algorithms

Utilize our built-in algorithms for efficient 3D measurement applications, including dimensional measurement, defect detection, object counting, and more.

Versatile Functions for Efficient Deployment

Experience seamless end-to-end deployment using Mech-MSR, encompassing scanning, alignment, measurement, result evaluation, and easy communication with factory networks and devices.

With Mech-MSR you can

Scan
Easily connect to and run on the Mech-Eye LNX 3D sensors for easy setup and real-time data collection.

Align
Align objects for quick positioning and ensure all are at the reference position for accurate and efficient measurement.

Process
Pretreat and optimize depth images, 3D data, and other image data to create the best point clouds.

Measure
Solve complex 3D inspection applications, driven by robust measurement algorithms and tools.
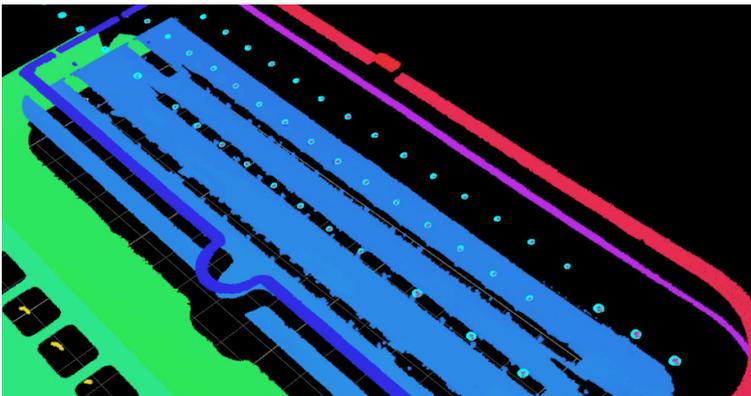
Evaluate
Use single-index or comprehensive evaluation methods to meet various product quality standards.
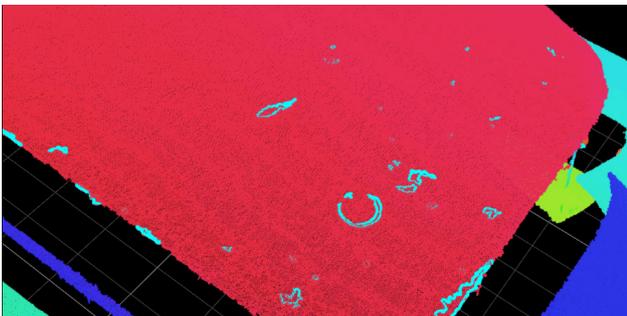
Communicate
Connect PLCs and factory devices using ASCII for real-time data transmission.
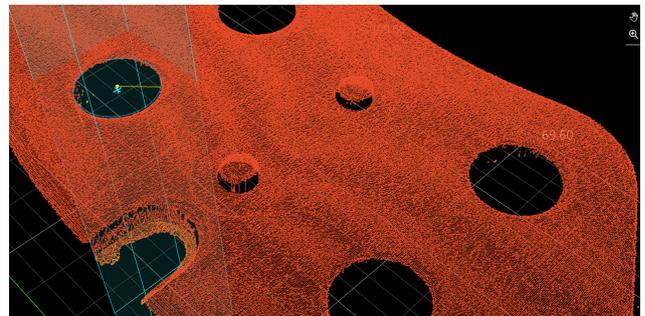
How Mech-MSR makes production smart

Object Counting
Count objects in the production line. Adapt to different sizes and shapes.
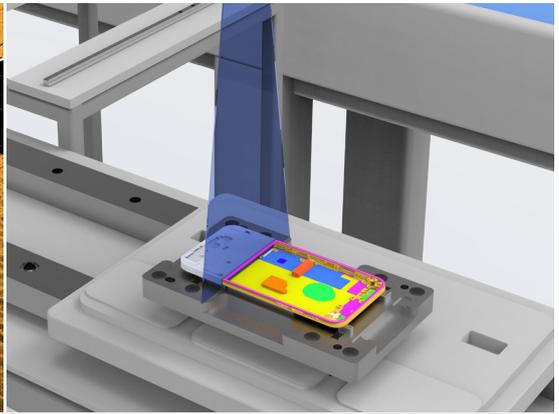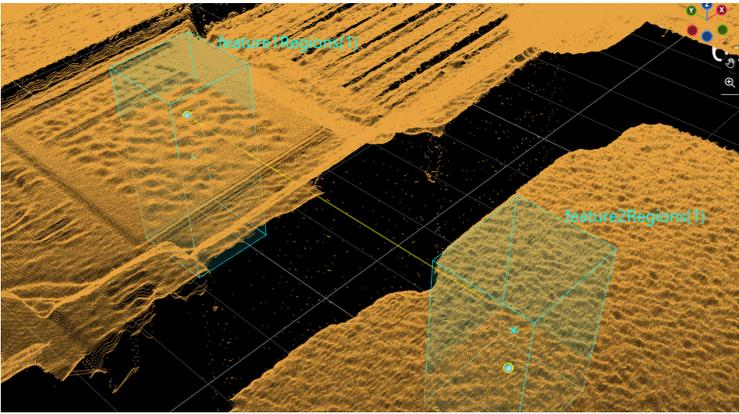

Defect Detection
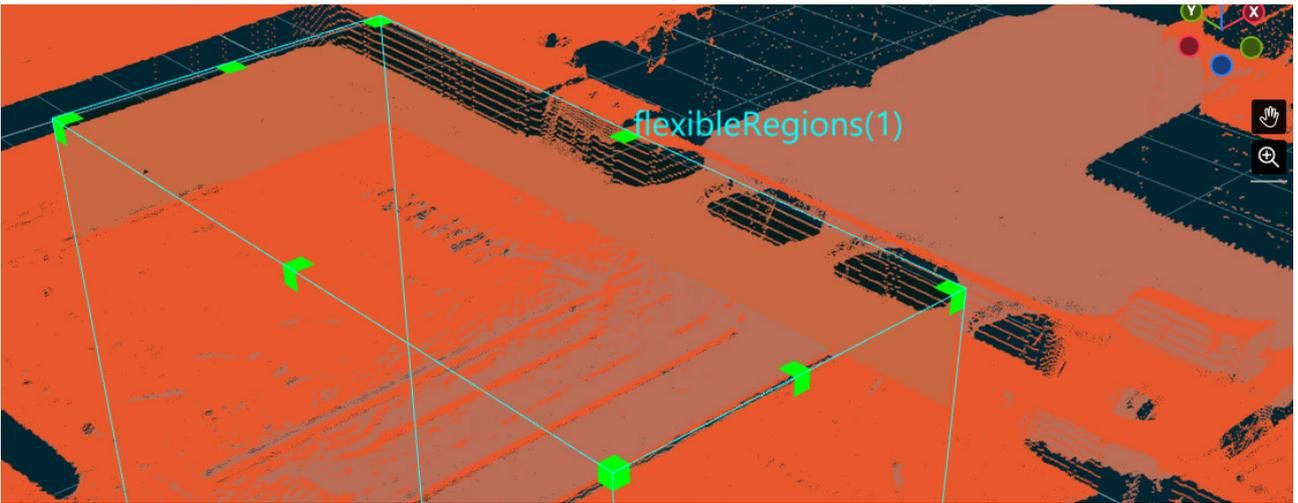Detect common surface defects based on the depth image, such as dents and protrusions.

Hole Locating
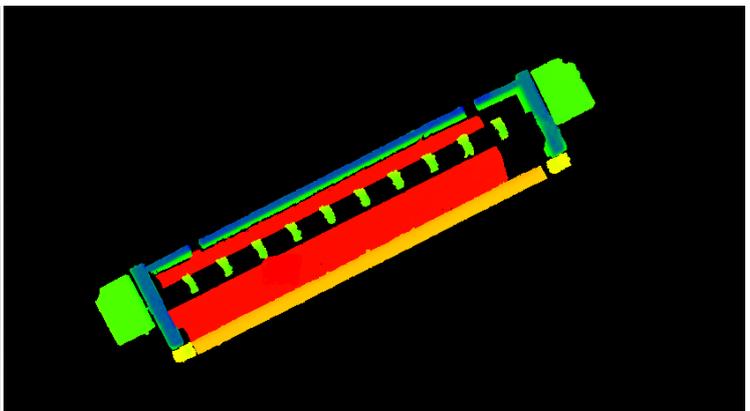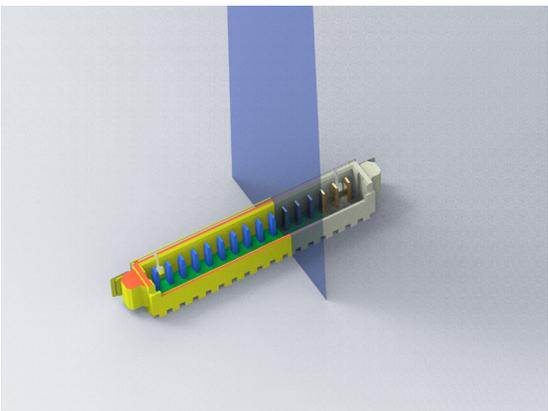Locate the target holes and measure the diameters.

Dimensional Measurement

Measure the lengths, angles and geometrical properties of the target. Effectively tackle reflective surfaces.

Flatness Inspection

Acquire points on the surface to check whether all points lie in the same plane.

Height Measurement

Measure the distance between the base and the highest vertical point of the object. Accurately detect tiny height differences.
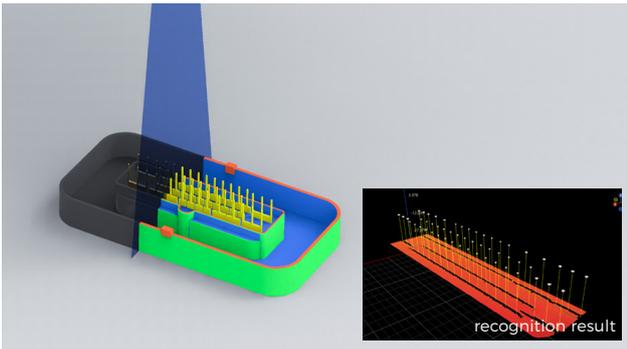
Work with Mech-Eye 3D Laser Profilers
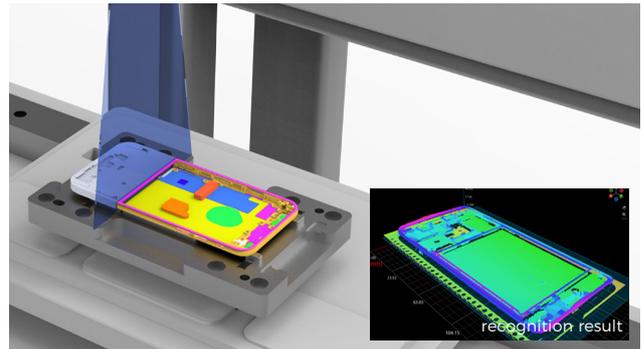
Ideal for inline inspection

- High resolution
- Flexible FOVs
- Fast scan rates
- Single-shot HDR capability

Mech-MSR, combined with Mech-Eye 3D sensors, is perfect for inline 3D measurement and inspection applications in consumer electronics, EV battery, home appliances, automotive, food & beverage and other industries.
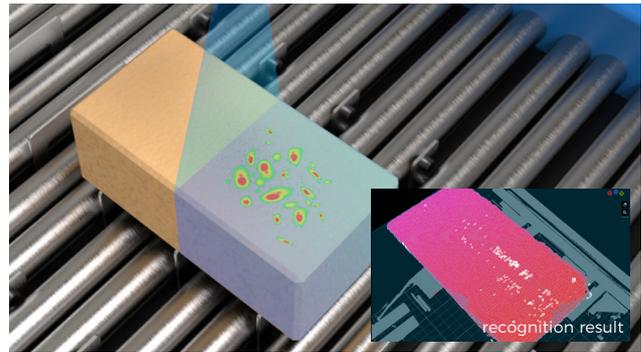

Height measurement (connector pin)

Flatness inspection (cellphone midplate)

Dimensional measurement (battery cell cap)

Defect detection (refractory brick)

3D VISION & AI FOR ROBOTS AND MORE

Get the most from Mech-Mind's 3D vision - get in touch with us!

Website: www.mech-mind.com
E-mail (business): info@mech-mind.net
E-mail (PR & marketing): marketing@mech-mind.net

Learning guidance to deploy your vision application STEP BY STEP, please visit

Documentation: docs.mech-mind.net
Online community: community.mech-mind.com