

# 3D MEASUREMENT SYSTEM 100% AUTOMATIC SOLUTIONS FOR QUALITY CONTROL



We have developed a **very high speed (4 to 12m/s) robotized confocal measurement system allowing in-line quality control of 100% of the production.**

In glass applications, this system allows us to measure both sides of the same glass at the same time, and to detect air gap defects in laminated glass.

The objective is to **analyze the dimensional, geometrical and shape conformity of all types of industrial products** at high production rates.

It is a **turnkey system**, fast, accurate, customizable, easily integrated into any industrial environment, delivered with a dedicated HMI to guarantee improved inspection times.

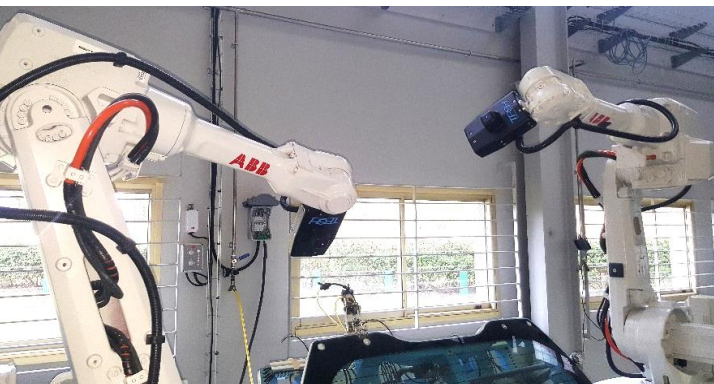
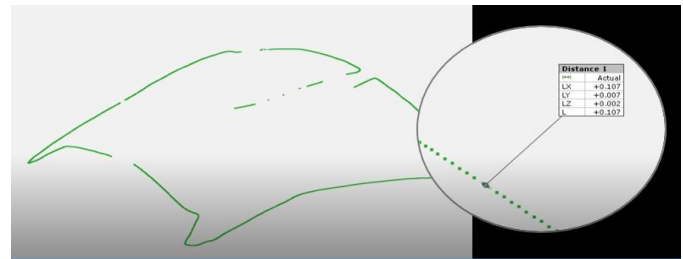
## Measuring speed up to 12m/s and the following features:

- ☑ Robots with SIEMENS 840D rack + point sensors
- ☑ Robot position sent every 3 to 4ms
- ☑ Confocal sensor resolution : 200nm
- ☑ Measuring depth of field 24 mm
- ☑ Working distance 50mm
- ☑ Global repeatability of the measurement chain (robot+ sensor) +/-50µm
- ☑ Development of a calibration principle applicable to robots industrialists
- ☑ Real-time robot ABB, KUKA, Staubli + confocal point sensor (glass, plastic, composite, bare and painted sheet metal, all types of metals, etc.)



## Very high speed 3D control and other advantages:

- ☑ Thickness measurement on transparent form
- ☑ On-line measurement of 100% of the production in line rate
- ☑ High density of measuring points at high speed
- ☑ Automated inspection report for each measurement



## Traceability of results on 100% of products is one of the benefits of this technology:

- ☑ 100% production control
- ☑ On-line control at production rate
- ☑ Optimization of human resources
- ☑ Quick results by point cloud and key figure
- ☑ Custom definition of the selected precision (XYZ axes)