



PLµ CP Series Control of Production Optical Profilers



Large sample size: Up to 610 x 610 mm Fast and reliable Non-contact 3D inspection Fully automated acquisition and analysis Highest throughput for in-line process control



Optical Profiler Control of Production Series



Control of production $PL\mu$ series have been specially designed for fast characterization of large samples like panels containing PCBs, vias, flip-chip and traces analysis. Based on the well proven Sensofar's optical profiling technology, you can now profile any surface with Interferometry techniques ($PL\mu$ 4300 CP) or the combination of both Confocal and Interferometry techniques ($PL\mu$ 2300 CP).

Non-Contact 3D Profiling

Confocal. Highest lateral resolution $(0.1\mu m)$ and highest local slopes (up to 70°) ideal for wall angle analysis. **PSI and VSI**. Provides the highest vertical resolution (subnanometer resolution) and the fastest acquisition time. **Spectroscopic reflectometer**. Integrated technology that can be the perfect option for thickness of transparent materials with sub-nanometer resolution.



IC Packaging module

The PL μ CP Series are flexible tools tailored to the IC Packaging industry. Accurate measurements of BGA bumps, vias, copper traces, solder resistance and anchor regions are provided to help you improve your production process.



BGA

- · Number of balls
- · Position, height and diameter for each ball
- · Flip-Chip coplanarity



Via and SR/Open

- \cdot Top and bottom diameter
- \cdot Via elipticity and height
- \cdot Top surface and bottom via/SR roughness



Traces · Trace height

- Trace and space width
- Trace and space roughness



Others

Copper and Anchor

Distributor

New stage design

Based on a gantry granite platform, the stage is able to accommodate up to 610x610mm samples. Multiple fixture and holder types offer wide range of possibilities to inspect different samples: from large panels (like PCBs) to several flip-chips, allowing the system to inspect and automatically report Via, Anchor, S/R and Trace dimensions.



Data acquisition and analysis

The well-known and established Sensofar's software SensoSCAN[®], allows the inspection of the surface, data acquisition and analysis. Fully integrated recipes for data acquisition on multiple places, autofocus, auto lighting and auto referencing functions!

SensoPRO[®] analysis software is used to fully automate the production sequence. Loading, executing an acquisition recipe and performing online data analysis thus providing fast and reliable statistics on the quality of the production process.

Specifications¹

Measurement Capability:	Image, 3D-Topograpy, Profiles, Coordinate, Thickness, Zoom function, Filters, etc
Stage XY:	610 x 610 mm
Vertical Resolution:	< 0.1 nm
Step Height Accuracy:	0.8 %
Step Height Repeatability:	< 0.1 %
Footprint:	WxDxH: 106 x 139 x 135 cm
Weight:	2500 kg

¹ Based on PLµ 4300 CP

SENSOFAR.

Sensofar-Tech, S.L. Ctra. N-150, km. 14,5 Mòdul TR20 - IPCT E-08227 Terrassa T: +34 93 739 89 45 F: +34 93 786 01 16 info@sensofar.com www.sensofar.com